

Airport Neighborhood Area

FUTURE LAND USE PLAN



**in conjunction with the
Rapid City Area Metropolitan Planning Organization
and the
South Dakota Department of Transportation
and the
U.S. Department of Transportation
Federal Highway Administration**

Airport Neighborhood Area

Future Land Use Plan

Executive Summary

The Future Land Use Plan is an indispensable tool for all sectors of the community. Local government can invest public infrastructure dollars more wisely if the location and magnitude of anticipated growth is identified. Private sector businesses can use the Plan to make more accurate growth projections and better position themselves to meet the needs of the future population. The Plan will provide developers and landowners with a clear idea of the location and type of development desired by the community thus saving time and money in assembling development plans. The Plan will enable individual citizens to be more aware of how the community and their specific neighborhoods will develop, assisting them in making more informed decisions about where to live and work.

The Airport Neighborhood Area Future Land Use Plan includes land within corporate city limits, the three-mile platting jurisdiction and the MPO planning jurisdiction. The Airport Neighborhood Area encompasses approximately 24,418 acres and is located in the eastern portion of the community. The following points summarize the intent of the Airport Neighborhood Area Future Land Use Plan.

- Residential growth patterns will increase, primarily as single family dwelling units
- Extension of infrastructure is identified to support the anticipated growth patterns
- Because South Dakota Highway 44 is an entryway corridor, General Commercial and Industrial uses have been identified along this corridor to accommodate and encourage business development.
- The Plan acknowledges the importance of the noise associated with both the Ellsworth Air Force Base and Rapid City Regional Airport flight paths.
- The Plan acknowledges the importance of protecting the Rapid City Regional Airport from encroachment by residential development.

TABLE OF CONTENTS

Executive Summary	i
Introduction	1
Corridor Profile	
Physical Characteristics	1
Residential Characteristics	
Non-Residential Characteristics	
Existing Land Use Profile	
Growth Profile	
Density	
Year 2025 Residential Growth Projections	
Year 2025 Non-Residential Growth Projections	
Residential Build Out	
Non-Residential Build Out	
Summary	

AIRPORT NEIGHBORHOOD AREA FUTURE LAND USE PLAN

Introduction

The Airport Neighborhood Area encompasses approximately 24,418 acres and is located in the eastern portion of the community. The northern limit of the Neighborhood Area is the first half section into Township 2 North. The western boundary is the western side of Sections 2, 11 and 14, Township 1 North, Range 8 East and Section 35, Township 2 North Range 8 East. The eastern boundary is the range line between Range 9 East and 10 East, which is one mile east of Caputa. The southern limit is South Dakota Highway 44. The Future Land Use Neighborhood Area Map included within this text identifies the Airport Neighborhood Area in geographic relation to the other neighborhoods in the Future Land Use Neighborhood Area.

The Airport Neighborhood Area encompasses the Rapid City Regional Airport and the southern end of the City of Box Elder. The property within the City of Box Elder corporate limits was excluded from the development of this future land use plan.

The Rapid City Area Future Land Use Plan Overview provides the background information used in preparing the calculations for the Airport Neighborhood Area Land Use Plan as well as describes the process in developing the Future Land Use Plan. A copy of the Plan Overview is available in the Rapid City Growth Management Department.

The Future Land Use Committee developed this Plan through significant public input in the form of Public Open Houses and private meetings with property owners of 40 acres or more. The larger land owners have the potential to dramatically affect the manner in which the Neighborhood develops, whereas owners of smaller parcels do not have as much direct influence. The Plan also reflects incorporation of portions of the Pennington County Comprehensive Plan.

Neighborhood Profile

Physical Characteristics

The Airport Neighborhood Area includes a wide variety of topography ranging from approximately 3,400 feet above mean sea level in the northwest corner of the Neighborhood area to approximately 2,925 feet in the southeast corner of the Neighborhood area near Caputa.

The Airport Neighborhood Area is significantly different than all of the other Rapid City Neighborhoods in that the Rapid City Regional Airport significantly impacts the potential

development of the surrounding property. Although a majority of the nearly 1,750 acres within the Regional Airport boundary has a future land use designation of Public within this Plan, there are substantial amounts of industrial and office/service uses within this designation. The land uses within the Regional Airport boundary are shown and described within the *Airport Master Plan Update* adopted by the Rapid City Common Council in late 2004.

Residential Characteristics

Between 1990 and 1997, the number of dwelling units in the Airport Neighborhood Area increased by 17.1 percent. This 17.1 percent increase amounts to a 2.4 percent average annual increase in total dwelling units in the Airport Neighborhood Area, an increase of approximately 5.3 dwelling units per year.

Figure 1 below identifies the number of residential units in the US 16 Neighborhood Area. This information was taken from the 1990 U.S. Census and supplemented by approved building permits between 1990 and 1997.

Figure 1

***Airport Neighborhood Area
1990 – 2004 Residential Growth***

<u>Dwelling Units</u>	<u>1990 U.S. Census</u>	<u>1990- 1997 Increase</u>	<u>1997 Total</u>
Single Family	213	37	250
Multi-Family	4	0	4
Total	217	37	254
Percent of Total in Future Land Use Neighborhood Area	0.8%	1.3%	0.8%

Source: Rapid City Growth Management Department

Group homes are included in a category other than the single family homes and the multi-family units because there are not separate kitchen facilities in the group home units. Group home units are identified as assisted living facilities, dormitories, and jails. At 1997 year end, there were no group home units in the Airport Neighborhood Area.

The information provided in Figure 1 is presented to show that significant growth in the Airport Neighborhood Area occurred after the current *Rapid City Area Future Land Use Plan Overview* planning period.

Non-Residential Characteristics

In 1992, the Airport Neighborhood Area included no retail land uses including motels, a campground, and recreational facilities. During the five year period between 1992 and 1997, the retail land use gross square foot floor area in the Airport Neighborhood Area increased by zero square feet.

The office/service land uses in the Airport Neighborhood Area included the Rapid City Regional Airport Terminal and a repair shop outside of the Regional Airport boundary and had 84,610 gross square foot floor area in 1992, as outlined in the Plan Overview. The office/service land uses in the Area remained constant through 1997 and amounted to 2.1 percent of all total office/service land uses within the Future Land Use Neighborhood Area.

Figure 2 provides a comparison of the non-residential land uses in 1992 and 1997, as well as the Airport Neighborhood Area's percentage of the total gross square foot floor area in comparison to the Future Land Use Neighborhood Area. Figure 2 also identifies the percentage increases for the four non-residential land use categories.

Figure 2

**Airport Neighborhood Area
Non-Residential Land Use
1992 and 1997 Total Gross Square Foot Floor Area**

	1992		1997		1992-1997
	Gross Sq. Ft. Floor Area	Percent of Total	Gross Sq. Ft. Floor Area	Percent of Total	Percentage Change
Retail Land Uses	0	0.00%	0	0.00%	0.00%
Office/Service Land Uses	84,610	2.28%	84,610	2.12%	0.00%
Industrial Land Uses	192,256	3.85%	208,726	3.63%	8.57%
Public Land Uses	151,503	8.70%	151,503	8.07%	0.00%

Source: Rapid City Growth Management Department

Existing Land Use Profile

To identify future land uses, it is first essential to determine the existing land uses within a neighborhood area. There are eight (8) residential and six (6) non-residential categories of uses identified in this Neighborhood. Single family residential, multiple family residential, group homes, and mobile homes are evaluated based on the number of units. Retail, office/service, industrial and public uses are evaluated based on the gross square foot floor area.

Figure 3a below identifies the existing uses according to various land use categories for **platted property**. Figure 3b below identifies the existing uses according to various land use categories for **unplatted property**. Each category, i.e., residential use, commercial use, industrial use, and public use is further subcategorized to provide the basis for anticipated density information. These designations correspond to the future land use designations identified on Figure 4, the Airport Neighborhood Area Future Land Use Map.

Figure 3a

**Airport Neighborhood Area
Existing Land Use Compilation for PLATTED Property**

Area Wide Proposed Land Use	Existing OCCUPIED Platted Land					
	Existing Occupied Platted Parcels	Gross Sq Ft Floor Area	SF Dwell Units	MF Dwell Units	Group Homes	Mobile Homes
<u>Residential Uses</u>						
Low Density Residential	150.46	8,280	148	0	0	119
Medium Density Residential	5.33	0	3	0	0	0
High Density Residential	34.28	0	2	0	0	38
Planned Residential Development 1.5 du/ac	0.00	0	0	0	0	0
Planned Residential Development 1 du/ac	5.68	0	18	0	0	0
Planned Residential Development 1 du/3 ac	29.65	0	9	0	0	3
Planned Residential Development 1 du/10 ac	201.55	280	3	0	0	18
Rural Reserve (1 du/40 ac Maximum)	104.90	0	7	0	0	0
<u>Commercial Uses</u>						
Business Park	0.00	0	0	0	0	0
Light Industrial	0.00	0	0	0	0	0
Neighborhood Commercial	0.00	0	0	0	0	0
Office Commercial	0.00	0	0	0	0	0
General Commercial with Planned Commercial Development	4.21	0	2	4	0	16
<u>Other Uses</u>						
Public	98.72	4,800	0	0	0	0
Public/Airport	3.47	84,610	0	0	0	0

Figure 3b

**Airport Neighborhood Area
Existing Land Use Compilation for UNPLATTED Property**

Area Wide Proposed Land Use	Existing Occupied Unplatted Land					
	Existing Occupied Unplatted Parcels	Gross SqFt Floor Area	SF Dwell Units	MF Dwell Units	Group Homes	Mobile Homes
<u>Residential Uses</u>						
Low Density Residential	1,124.76	0	24	0	0	16
Medium Density Residential	0.00	0	0	0	0	0
High Density Residential	0.00	0	0	0	0	0
Planned Residential Development 1.5 du/ac	40.54	0	1	0	0	0
Planned Residential Development 1 du/ac	159.94	0	2	0	0	1
Planned Residential Development 1 du/3 ac	285.49	0	1	0	0	1
Planned Residential Development 1 du/10 ac	618.3	0	7	0	0	8
Rural Reserve (1 du/40 ac Maximum)	2,027.00	0	20	0	0	17
<u>Commercial Uses</u>						
Business Park	0.00	0	0	0	0	0
Light Industrial	157.15	0	1	0	0	0
Neighborhood Commercial	0.00	0	0	0	0	0
Office Commercial	0.00	0	0	0	0	0
General Commercial with Planned Commercial Development	49.87	0	2	0	0	2
<u>Other Uses</u>						
Public	0	0	0	0	0	0
Public/Airport	779.51	341,510	0	0	0	0

Land use map

Growth Profile

The Future Land Use Study Committee has identified thirteen categories within this Plan for planning purposes, which include low density residential, medium density residential, high density residential, planned residential developments, neighborhood commercial, general commercial, office commercial, business park, public, and rural reserve. These categories provide the basis of the residential, commercial, and public uses described above. *It is essential to note that the commercial and industrial categories identified in Figures 3a and 3b vary from the types of land use.* For example, the General Commercial category allows all four land uses (retail, office/service, industrial, and public).

Low density residential designations include only single family homes, typically with only one family per unit. Land areas designated for current and future residential use should be located close to City services such as fire protection, schools, and parks. Low density residential designations should have some type of buffer from commercial and/or industrial land use activities. This land designation should also have access to an adequate local road system.

Medium density residential designations include all town homes, condominiums, and apartment complexes. Land areas designated for current and future multiple residential uses should also be located close to City services and near collector or arterial streets to address neighborhood traffic safety concerns and provide a buffer between non-residential uses and single family residential uses.

Planned developments provide flexibility in land development to encourage imaginative urban design. Planned developments allow a mix of land uses that are compatible and well integrated. Planned developments provide the opportunity for an adequate review procedure to promote the proper development of those areas that may be environmentally sensitive because of steep slopes and/or unusual topography. A planned development also promotes compatibility with adjacent land use and available public facilities in terms of such factors as intensity of use, density and traffic circulation.

There are four planned residential developments within the Airport Neighborhood Area, each with a different density specification. Each planned development was identified to specifically address issues relative to the property. These four planned residential developments are identified in Figures 3a and 3b as:

- 1) Planned Residential Development 1 incorporates an anticipated density of 1.5 dwelling units per acre;
- 2) Planned Residential Development 2 includes an anticipated density of 1 dwelling units per acre;
- 3) Planned Residential Development 3 includes an anticipated density of 1 dwelling units per 3 acres;
- 4) Planned Residential Development 4 incorporates an anticipated density of 1 dwelling units per 10 acres;

Each area's density designation addresses the physical constraints of the property including steep slopes, unusual topography, access issues, water pressure concerns, land use mix and adjacent land use compatibility, and to encourage unique development potential.

There are four commercial designations within the Airport Neighborhood Area. These designations also provide flexibility in addressing slope stability, site entrances, traffic safety concerns, access issues, and commercial development diversity.

Infrastructure. The Rapid City Area Major Street Plan identifies several north/south and east/west arterial and collector streets. These roadways will enhance the existing road network and provide road connections, which will adequately move traffic to the major roadways. It is anticipated that utility infrastructure, including water and sanitary sewer lines, will be extended along these roadways to provide services for existing and proposed subdivisions.

School Sites. There are no existing public schools that lie within the Airport Neighborhood Area.

Parks. The Airport Neighborhood Area includes a variety of potential park sites which will provide a range of recreational opportunities. The principal criteria for future park sites include size and proximity of population to be served, access, topography, and presence of environmental factors such as drainage ways. The parks have been classified according to National Recreation and Park Association standards based on function, size and service area.

Neighborhood parks generally range in size from 5-20 acres and typically have play equipment and picnic areas, and may have playfields, depending upon need and the suitability of the land. They are often combined with other public uses such as schools. Two public areas are proposed for the Airport Neighborhood Area, one contains a road crossing of a major drainage, which could serve as a stormwater detention facility integrated into a centrally located park area. Another area is located along the west boundary of the Airport Neighborhood Area and will serve as a nice park area. Establishing park space in these areas is contingent upon mutual agreement between the landowner and the government authority purchasing the land.

Public Facilities. Currently, there is only a small portion of the Airport Neighborhood Area that is served by public utilities. The Rapid Valley Fire Department fire station is located approximately ¼-mile west of the Airport Neighborhood Area boundary along Highway 44. The Rapid City Regional Airport is located in the eastern half of the Airport Neighborhood Area just north of US Highway 44.

Truck Traffic. Truck traffic is expected to remain on US Highway 44. The Committee anticipates a significant amount of additional truck traffic along US Highway 44 when the Heartland Expressway is completed in 2005. The Heartland Expressway connects

Interstate 90 to SD Highway 79 south to Denver. With anticipated future increases in airline cargo, the Rapid City Regional Airport is expected to contribute to increased truck traffic along US Highway 44. At some point in the future, a direct connection to Interstate 90 Exit 67 is anticipated. No preferred route has been defined, but two alternate Interstate 90 access routes are shown on the Airport Neighborhood Area Future Land Use Map. Access to truck routes is a significant factor in identifying parcels with potential industrial uses.

Safety. Pedestrian, bicyclist, and children's safety are a key concern of the Future Land Use Study Committee. The Committee's desire with the development of this Plan is to locate high traffic generating businesses out of the residential areas and along collector streets and arterial streets. Keeping the truck traffic off local roads also addresses many neighborhood safety concerns.

Capacity. The Future Land Use Study Committee is also cognizant of neighborhood concerns regarding the capacity of the road system and the perception that many of the existing roads already carry more traffic than the roads can handle. The Committee has addressed these concerns by identifying additional collector and arterial streets to handle the traffic flows and proposing those land uses that generate more traffic along those collector and arterial routes as described earlier.

Density. To arrive at the anticipated development density of the Airport Neighborhood Area, the Committee compared the existing density of the various uses to the maximum density allowed by the Rapid City Municipal Zoning Code. The Committee also considered gross density in surrounding and adjacent neighborhood areas for additional comparison. Figure 5 below provides the options used in determining the anticipated development densities. The anticipated density value for dwelling units or square footage per acre is used as a multiplier to determine the total number of dwelling units or total square footage for the undeveloped property within the Airport Neighborhood Area.

The anticipated densities under each type of land use are influenced by the topography, the cost effectiveness in providing municipal water and sewer, and compatibility with surrounding development. A variety of residential land use classifications are used to accommodate housing demand, provide housing choices, and protect existing residential neighborhoods. Additionally, several non-residential uses were also identified to provide development flexibility in addressing the area's commercial and industrial growth needs.

Figure 5

**Airport Neighborhood Area
Land Use Density Comparisons**

	Option A Existing Density	Option B Maximum Density	Option C Anticipated Density
<u>Residential Uses</u>			
Low Density Residential	0.13 du/ac	6.7 du/ac	2.4 du/ac
Medium Density Residential	0.03 du/ac	25 du/ac	15 du/ac
High Density Residential	0.99 du/ac	68 du/ac	30 du/ac
Planned Residential Development 1.5 du/ac	0.00 du/ac	1.5 du/ac	1.5 du/ac
Planned Residential Development 1 du/ac	0.07 du/ac	1 du/ac	1 du/ac
Planned Residential Development 1du/3 ac	0.09 du/ac	1 du/3 ac	1 du/3 ac
Planned Residential Development 1 du/10 ac	0.20 du/ac	1 du/10 ac	1 du/10 ac
Rural Reserve	0.07 du/ac	1 du/40 ac	1 du/40 ac
<u>Commercial Uses</u>			
Business Park	0.00 sf/ac	7,000 sf/ac	3,200 sf/ac
Neighborhood Commercial	0.00 sf/ac	5,445 sf/ac	2,600 sf/ac
Office Commercial	0.00 sf/ac	6,353 sf/ac	3,000 sf/ac
General Commercial with Planned Commercial Development	0.00 sf/ac	13,613 sf/ac	9,800 sf/ac
<u>Other Uses</u>			
Public	48.62 sf/ac	21,780 sf/ac	9,000 sf/ac
Public/Airport	54.08 sf/ac	21,780 sf/ac	400 sf/ac

Source: Rapid City Growth Management Department

The non-residential land use densities are based upon existing development. However, because of the large quantities of undeveloped land in the Airport Neighborhood Area, for many land uses, there is no existing land development of the same type. In these cases representative density numbers were sampled from other areas in Rapid City.

Year 2025 Residential Growth Projections

The year 2025 projections indicate how much of the total build out will be achieved in twenty years. The projections provide the basis for planning many public services, including sewer and water, storm drainage, and road networks. The Future Land Use Study Committee determined the Future Land Use Study Area Year 2025 population to be 103,000 based on numerous methodologies. Both the Rapid City Planning Commission and Rapid City Council have adopted this population projection as well. This population projection was then allocated over all of the neighborhood areas based on the assumption that residential growth will continue in a pattern similar to the 1990-1997 residential growth. The individual neighborhood area growth projections were determined by dividing the 103,000 population estimate by 2.55 which is the average number of persons per household within the Neighborhood Area. This calculation provides the total number of dwelling units in the Year 2025, or 40,392 total dwelling

units in the Future Land Use Neighborhood Area. The total number of dwelling units was then allocated to the type of dwelling unit according to the historical patterns within each neighborhood area, i.e., single family units or multi-family units.

During the period from 1990-1997, 1.88 percent of residential building permits for the entire Future Land Use Neighborhood Area occurred in the Airport Neighborhood Area. As shown in Figure 1 above, the Airport Neighborhood Area had 254 dwelling units in 1997, with 98.4 percent single family units and 1.6 percent multi-family units.

In the Year 2025, the Committee anticipates an increase of 623 new dwelling units in the Airport Neighborhood Area, 547 which will be new single family units and 76 will be multi-family dwelling units. The total dwelling units anticipated in the Airport Neighborhood Area is expected to reach 869 by the Year 2025. Figure 6 identifies the breakdown of dwelling unit increases for the years 1998 to 2025 and a total dwelling unit projection by dwelling unit type for the year 2025.

Figure 6

***Future Land Use Neighborhood Area
Year 2025 Dwelling Unit Projections***

<u>Dwelling Unit Type</u>	<u>1998-2025 Increase</u>	<u>Total Year 2025*</u>
Single Family	547	789
Multi-Family	<u>76</u>	<u>80</u>
Total	623	869
Percent of Total in Future Future Land Use Neighborhood Area	6.47%	2.2%

**2025 dwelling unit values obtained from Rapid City Area Future Land Use Plan Overview.*

The Committee anticipates new single family residential development extending northerly from generally 500 feet north of US Highway 44 to the northern boundary of the Airport Neighborhood Area. Four (4) planned residential developments of varying degrees of density have been anticipated within the Neighborhood:

- 1) One area of Planned Residential Development 1 dwelling unit per acre (PRD 1 du/ac) is anticipated in and around the community of Caputa,
- 2) An area of Planned Residential Development 1.5 dwelling units per acre (PRD 1.5 du/ac) is anticipated north of Twilight Drive and west of Radar Hill Road,
- 3) One area of Planned Residential Development 1 dwelling unit per 3 acres (PRD 1 du/ac) is anticipated in the first half mile east of Radar Hill Road and south of Longview Road, and
- 4) Two areas of Planned Residential Development of 1 dwelling unit per 10 acres (PRD 1 du/10 ac) are anticipated in the Airport Neighborhood to incorporate existing land uses and to limit encroachment into the Regional Airport flight path:

- a. east of Radar Hill Road and north of Longview Road north of Runway 14/32; and
- b. in the east half of Section 18, T1N, R9E and the north half of Section 19, T1N, R9E, which is west of Runway 5/23 to incorporate existing land uses and to limit encroachment into the Regional Airport flight path.

In addition, Low Density Residential is anticipated, in general, north of Highway 44 east of Radar Hill Road and south of Twilight Drive. This area includes the Valley View Estates and Valley Heights Estates. This type of development is anticipated in order to match the currently recognized land use and development density. This designation will also encourage residential infill in the areas that have yet to be developed to their potential. The Committee anticipates that the Mesa View Estates area will redevelop into High Density Residential at some point in the future.

Since development of areas east of Airport Road is limited by the availability of City utilities and transportation infrastructure, the Committee anticipates that a Rural Reserve designation is best utilized for the foreseeable future. This designation allows a maximum development density of one dwelling unit per 40 acres, which is equivalent to the Pennington County General Agriculture designation. By using the Rural Reserve designation, development will remain limited, but during future updates of this Plan, it is possible that this Rural Reserve designation will be modified to reflect a greater allowable density. However, it is unlikely greater densities will be allowed until public sanitary and water facilities can economically be extended to the Regional Airport and beyond.

Some multi-family developments are identified near non-residential areas to provide a buffer between the non-residential developments adjacent to collector and arterial streets and the single family residential developments.

Year 2025 Non-Residential Growth Projections

The Airport Neighborhood Area non-residential gross square foot floor area is anticipated to increase within the next twenty-eight years. Figure 7 below identifies the projected gross square foot floor area by the four land use categories.

Figure 7

***Airport Neighborhood Area
Year 2025 Non-Residential Projected Increases in
Gross Square Foot Floor Area***

<u>Land Use Category</u>	<u>Gross Square Foot Floor Area</u>	<u>Percent of Total Increase</u>
Retail Use	48,586	1.0%
Office/Service Use	19,270	1.0%
Industrial	89,331	2.1%
Public	14,465	2.0%

**All values presented were taken from the Rapid City Area Future Land Use Plan Overview.*

The rate of growth for commercial and industrial land use is based upon the Plan Overview square foot percentage as compared to the total gross square foot floor area for the entire Future Land Use Neighborhood Area. Growth projections for neighborhood area commercial and industrial uses are then extrapolated based upon twenty-eight year projections for the entire Future Land Use Study Area. Because there is basically no non-residential development within the Airport Neighborhood outside of the Regional Airport boundary, it is difficult to determine any more realistic 2025 projection than that provided in the Plan Overview.

Figure 8 identifies the remaining Airport Neighborhood Area Land Use Compilation totals. This land use compilation provides a summary of all anticipated land uses as identified on the Airport Neighborhood Area Future Land Use Map.

Figure 8

**Airport Neighborhood Area
Vacant and Redeveloped Land Use Compilation Totals**

Area Wide	Vacant Platted Land			Redeveloped Platted Land			Unplatted Vacant Land		
	Vacant Platted Parcels (ac)	Antic. DU or Gross SF	Projected DU or Gross SF	Redev. Parcel Area (ac)	Antic. DU or Gross SF	Projected DU or Gross SF	Vacant Unplatted Parcels (ac)	Antic. DU or Gross SF	Projected DU or Gross SF
Residential Uses									
HDR	6.15	30	16	0	30	0	0	30	0
LDR	292.18	2.4	445	145.75	2.4	331	1,544.51	2.4	3,690
MDR	35.77	15	448	20.17	15	300	48.7	15	728
PRD 1.5 du/ac	1.71	1.5	0	0	1.5	0	1,174.15	1.5	1,757
PRD 1 du/ac	88.65	1	55	2.48	1	2	165.05	1	164
PRD 1 du/3 ac	47.90	0.33	11	93.1	0.33	31	285.49	0.33	93
PRD 1du/10 ac	175.58	0.1	9	0	0.1	0	930.73	0.1	83
RR	792.76	0.025	13	0	0.025	0	15,097.55	0.025	340
Commercial Uses									
BP	64.23	3,200	173,728	0	3,200	0	0	3,200	0
GC w/ PCD	142.29	9,800	916,202	37.97	9,800	372,106	136.99	9,800	1,342,502
NC	14.39	2,600	28,106	0	2,600	0	21.60	2,600	56,160
OC	13.56	3,000	36,810	128.05	3,000	384,150	104.74	3,000	341,220
Industrial Uses									
LI	20.87	2,500	200	30.94	2,500	77,350	554.54	2,500	1,386,350
Other Uses									
Public	4.66	9,000	16,380	0	9,000	0	91.36	9,000	822,240
Public/Airport	730.92	400	284,188	0	400	0	830.14	400	332,056

Residential Build Out

Build out is when all developable land parcels have reached anticipated density. The Airport Neighborhood Area build out scenario as proposed under this Plan is based on an analysis of existing patterns of development, physical constraints, access to municipal water and sewer, and existing plans for the area.

Figure 9 below identifies the anticipated total dwelling units at build out categorized by the various proposed residential land use categories within the Airport Neighborhood Area.

Between 1990 and 1997, the Airport Neighborhood Area has grown by approximately 37 single family dwelling units and 0 multi-family dwelling units per year. If history repeats itself, the Airport Neighborhood Area will have the anticipated maximum single family dwelling units of 7,024 by the Year 2288.

Figure 9

***Airport Neighborhood Area
Build Out Projected Dwelling Units at Anticipated Densities***

Proposed Land Use	Gross Neighborhood Acres	Anticipated Density per Acres	Total Dwelling Unit
<u>Residential Uses</u>			
Low Density Residential	2,132.90	2.4	4,466 DU
Planned Residential Development 1	456.14	3	135 DU
Planned Residential Development 2	1,175.86	1.5	1,757 DU
Planned Residential Development 3	261.86	1	221 DU
Planned Residential Development 4	1,307.86	0.1	92 DU
Rural Reserve	15,995.22	0.025	353 DU
Total Single Family Units			7,024 DU
High Density Residential	40.43	30	16 DU
Medium Density Residential	109.97	15	1,476 DU
Total Residential Dwelling Units			8,516 DU

Source: Rapid City Growth Management Department

However, the Future Land Use Study Area must be considered in its entirety. The anticipated 28 year projections (based on population growth patterns) identify the construction of an average of 47 single family dwelling units per year and 31 multi-family dwelling units per year within the Airport Neighborhood Area. Using these estimates, the land area specifically identified for single family residential land use areas in the Airport Neighborhood Area will be built out by the Year 2153 with an anticipated 7,024 single family dwelling units; the multi-family residential land use areas will be built out by the Year 2052 with an anticipated 1,492 multi-family dwelling units.

Non-Residential Build Out

The Airport Neighborhood Area gross square foot floor area build out expectations at anticipated densities are identified in Figure 10. The size of the parcels significantly impacts the total amount of acreage available for development.

Figure 10

***Airport Neighborhood Area
Non-Residential Gross Square Foot Floor Area
Build Out Projections at Anticipated Densities***

	Gross Neighborhood Area	Anticipated Density per Acre	Gross Sq. Ft. Floor Area
<u>Commercial Uses</u>			
Neighborhood Commercial	35.99	2,600	84,266
Office Commercial	246.35	3,000	735,180
General Commercial with Planned Commercial Development	321.46	9,800	<u>2,630,810</u>
Total Commercial Uses			<u>3,450,256</u>
<u>Industrial Uses</u>			
Light Industrial	606.35	2,500	<u>1,463,700</u>
Total Industrial Uses			<u>1,463,700</u>
<u>Other Uses</u>			
Public	98.72	9,000	838,620
Public/Airport	1,564.53	400	<u>616,244</u>
Total Public Uses			<u>1,454,864</u>

Summary

The Airport Neighborhood Area Future Land Use Plan anticipates that the residential growth patterns will continue, primarily as single family units. Additionally, the Plan identifies extension of the infrastructure to support the anticipated growth patterns. There is a need for additional parks and recreational opportunities in the Neighborhood Area and the Future Land Use Plan has identified areas where those sites would be appropriate.