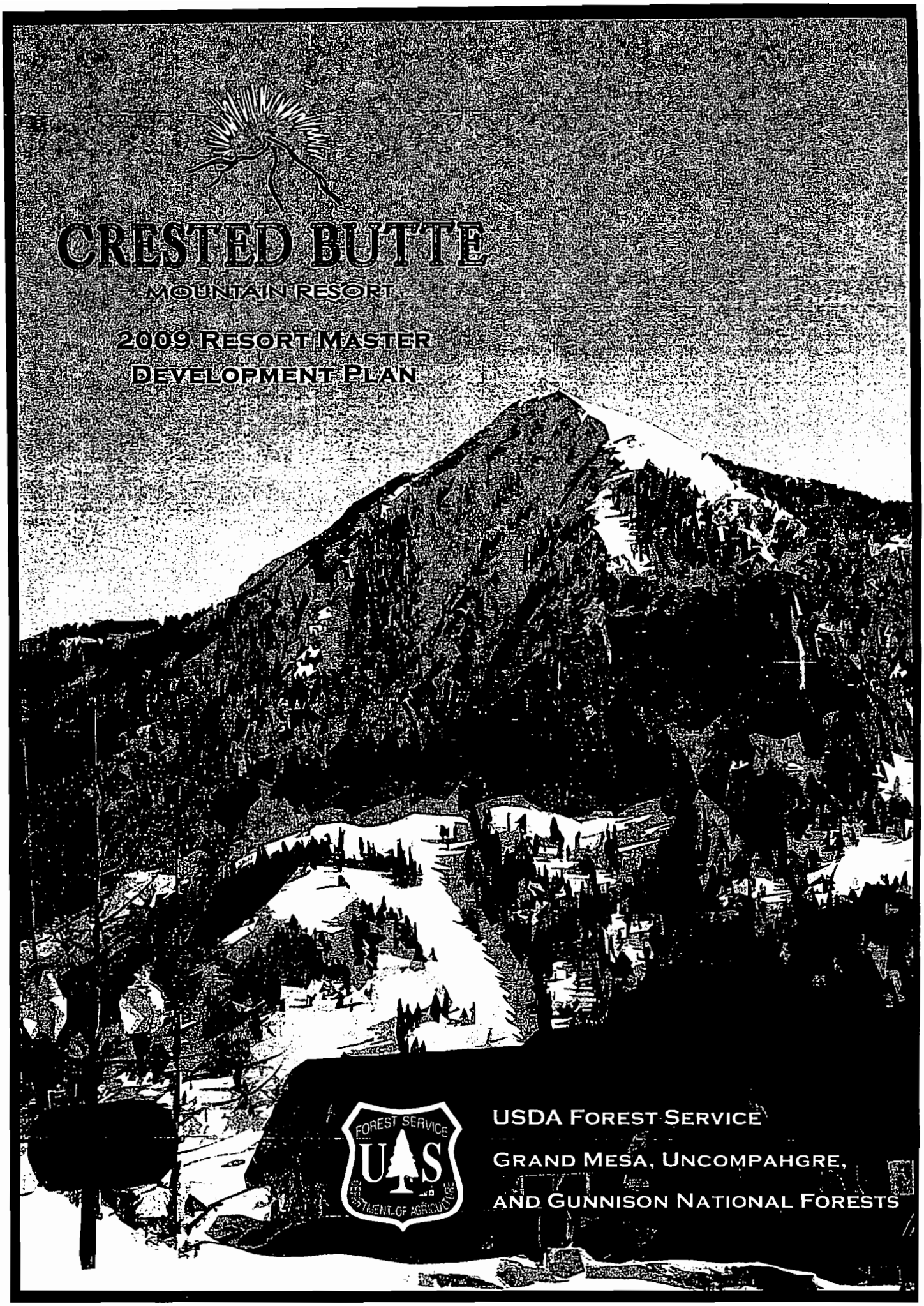
CRESTED BUTTE
MOUNTAIN RESORT
2009 RESORT MASTER
DEVELOPMENT PLAN
FOREST SERVICE
USDA FOREST SERVICE
GRAND MESA, UNCOMPAHGRE,
AND GUNNISON NATIONAL FORESTS

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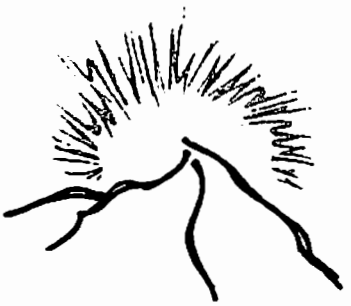

CRESTED BUTTE

MOUNTAIN RESORT

2009 RESORT MASTER DEVELOPMENT PLAN

ACCEPTED BY: _____

CHARLIE RICHMOND
FOREST SUPERVISOR
GRAND MESA, UNCOMPAHGRE &
GUNNISON NATIONAL FORESTS

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2009 RESORT MASTER DEVELOPMENT PLAN

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

A. OVERVIEW

This Resort Master Development Plan (MDP) provides a vision for the future of Crested Butte Mountain Resort (CBMR), as reflected in its management philosophies, which are further defined in Chapter 1. It incorporates previous approvals at the Main Mountain with private land development projects and new projects at Snodgrass Mountain, culminating in a comprehensive plan for a balanced, cohesive resort. The ultimate goal is to create a recreational experience which is appealing to guests of all ability levels, thereby attracting and retaining destination skiers for longer durations.

Prepared in compliance with the terms of CBMR's Forest Service-issued Special Use Permit (SUP), this Resort MDP provides four main functions:

1. Provide a thorough assessment of existing operations and facilities (including constraints and opportunities) at the Main Mountain.

2. Summarize previously-approved projects at the Main Mountain.

3. Plan the future development of Snodgrass Mountain with lifts, trails, and skier services.

4. Comprehensively plan the operational and recreational functionality of CBMR, accounting for all existing, previously-approved and upgrading projects at the Main Mountain and Snodgrass Mountain.

B. GOALS & OBJECTIVES OF THE RESORT MDP

In indentifying the Goals and Objectives of this Resort MDP, CBMR and mountain planners carefully considered the things that make Crested Butte a unique ski area (i.e., strengths). Constraints that impede CBMR from reaching its potential in the regional and national destination market were then identified. Finally, opportunities that exist within CBMR's SUP area for addressing identified constraints were studied. This exercise allowed CBMR and mountain planners to focus on what is critical in terms of revitalizing it as a regional/national destination resort. As a result, two key issues emerged that define the Goals and Objective of this Resort MDP: 1) terrain variety/diversity, and 2) the amount of Intermediate terrain at CBMR. In short, due to its reputation as an "Experts Only" mountain, its deficit of Intermediate terrain, and its remote location, CBMR has had an increasingly difficult time attracting and retaining destination guests.

The CBMR upgrading plan (detailed in Chapter 6) is dedicated to offering opportunities for all individuals to enjoy public lands through a unique style of ski product offered at few North American ski areas. In an effort to complement the Main Mountain, to diversify and provide a quality destination winter recreation experience, and to establish the long-term viability of the ski area, CBMR believes that the development of Alpine skiing facilities on Snodgrass Mountain represents an opportunity to enhance and balance its winter ski product.

1. Terrain Diversity & Variety

In terms of a resort's ability to retain guests, both for longer durations of visitation and for repeat business, one of the more important factors has proven to be variation in terrain. This means having developed runs of all ability levels, some groomed on a regular basis and some not, as well as mogul runs, bowl skiing, tree skiing, in-bounds backcountry style (hike-to) skiing, and terrain parks and pipes.

CBMR is well-known for its off-piste, "Extreme Limits" terrain, and therefore, it is easy to discount the importance of its developed (i.e., maintained) trail network. These runs represent the baseline of the terrain at any resort, as they are where the majority of guests ski, and they are usually the only place to ski during the early season, periods of poor or undesirable snow conditions, avalanche closures, and certain weather conditions. Typically, terrain outside of the developed network is primarily used by Advanced and Expert level skiers, during periods when snow is most desirable (e.g., fresh powder, spring corn, etc.). As such, the developed terrain network represents a true reflection of acreage used by the average skier on a consistent basis, as well as the terrain used by virtually all skiers during the aforementioned conditions. Therefore, the total acreage of the developed terrain network and the ability level breakdown must be sufficient to accommodate the full skier capacity of the resort.

A terrain distribution analysis conducted for CBMR's developed terrain reveals that it has a significant abundance of Low Intermediate terrain, relatively balanced Novice and Advanced terrain, a deficit of Beginner, and a notable deficit of Intermediate terrain. Additionally, there is a deficit of developed Expert terrain – a fact that is often overlooked due to the quantity and quality of "Extreme Limits" terrain; however, during periods of low snow or poor snow conditions, it is important to have sufficient developed terrain for the Expert guests.

2. Intermediate Terrain

Analysis of the existing conditions at CBMR identified a shortage of quality Intermediate ski terrain in diverse settings when CBMR is compared to its competitors. This detracts from the guest experience, and puts CBMR at a competitive disadvantage. Providing a more diverse selection of terrain, with a focus on intermediate terrain, is critical to CBMR's ability to effectively address the needs of its core customers, reverse the severe erosion in its visitation and competitive position, and strengthen its long-term ability to compete and survive in the destination marketplace.

C. Upgrading Plan

A number of enhancements will be made to the developed trail network. On the Main Mountain, previously approved trail widening/grading and several new runs will help with circulation and provide additional terrain. In addition, several glading projects will increase the quantity of available tree skiing and improve terrain variety. The Snodgrass Mountain upgrading plan includes an entirely new lift and trail system. CBMR's total developed terrain network will increase by 305 acres - from 585 to 890 acres - or an increase of around 52 percent.

Fundamental to meeting CBMR's operational goal is upgrading the resort lift network. New chairlifts will improve skier comfort and enhance service to terrain and overall skier circulation. Both new and upgraded lifts will improve access to terrain of all ability levels. Several lift realignments will

improve mountain circulation. These additions and improvements will increase uphill capacity, distribute skiers more evenly throughout the ski area, and increase the overall capacity of the area.

Upon completion of all the upgrading projects, CBMR's comfortable carrying capacity (CCC) will increase from 5,940 skiers to 9,570 – an increase of 3,630 skiers (a 61 percent increase).

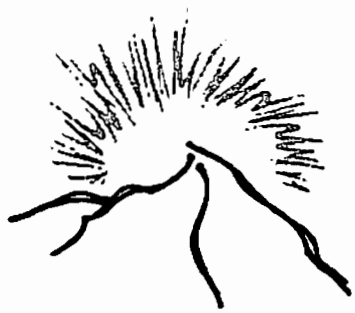
An important feature of CBMR's upgrading plan is development of skier services. The 1998 and 2008 Decision Notices approved new and upgraded facilities at the existing Main Mountain (see Chapter 5). The Snodgrass Mountain upgrading plan includes two restaurant facilities, a mid-mountain facility and a mountain top facility that will provide skier services in addition to expansive views of the surrounding area.

The upgrading plan is designed to increase utilization while enhancing the quality of the guest's experience. The mountain master planning process emphasizes the importance of balancing recreational facility development; skier service functions are designed in accordance with the CCC of the mountain.

A summary of the upgrading plan for Snodgrass Mountain includes:

- Four new lifts (including two high-speed lifts, a fixed-grip lift, and a surface lift)
- Approximately 276 acres of developed terrain, and a significant amount of alternate style terrain
- Two on-mountain restaurants
- A ski patrol outpost
- Snowmaking on approximately 102 acres

Chapter 6 includes a detailed discussion of the upgrading plan within the Snodgrass Mountain portion of CBMR's SUP area.



CRESTED BUTTE

MOUNTAIN RESORT

2009 RESORT MASTER DEVELOPMENT PLAN

CHAPTER 1. INTRODUCTION

1. INTRODUCTION

This resort-wide Master Development Plan (Resort MDP) has been prepared to comply with the terms of Crested Butte Mountain Resort's Special Use Permit (SUP), which is administered by the Grand Mesa, Uncompahgre and Gunnison (GMUG) National Forests. This document reflects CBMR's corporate philosophies, as defined in Section B, page 5.

This document provides four main functions:

1. Provide a thorough assessment of existing operations and facilities (including opportunities and constraints) at the Main Mountain.

2. Summarize previously-approved projects at the Main Mountain.

3. Plan the future development of Snodgrass Mountain with lifts, trails, and skier services.

4. Comprehensively define the operational and recreational functionality of CBMR, accounting for all existing and previously-approved projects at the Main Mountain as well as the Snodgrass Mountain upgrading plan.

With the exception of private lands in the base area and Prospect, the entirety of CBMR's existing lift, trail and infrastructural network is operated on public lands that are administered under special use permit from the GMUG National Forests. Consistent with the terms of CBMR's SUP, this Resort MDP establishes direction and priorities for the physical improvement of National Forest System lands within CBMR's SUP area over an *approximate* ten-year planning horizon. This document will serve as a "road map" for future on-mountain improvements that will be completed in conjunction with various base area and private land projects. Completion of on-mountain and base area/private land projects will culminate in a balanced recreational experience at CBMR, with the ultimate goal of creating a recreational experience that is appealing to guests of all ability levels, with a particular emphasis on families. *The Resort MDP is intended to be a dynamic document which may be amended periodically in response to (among other things) changes in CBMR's market, internal priorities, the evolution of the ski industry, and technological innovations.*

It is important to note that implementation of any of the projects identified in this Resort MDP is contingent upon site-specific environmental review and approval per the National Environmental Policy Act (NEPA). Forest Service "acceptance" of this programmatic planning document implies that projects included herein have been considered in light of the goals and objectives for which they are designed to address. In addition, individual projects have been compared against GMUG Land and Resource Management Plan direction for the SUP area. Thus, "acceptance" of this MDP does not convey "approval" or authorization to implement any of the projects contained in the upgrading plan defined in Chapter 6. ("Previously-approved" projects on the Main Mountain were approved by the 1998 and 2008 Decision Notices and will be implemented accordingly). See Chapter 5 for a summary of previously-approved projects on the Main Mountain. Following acceptance of this Resort MDP by the GMUG, a site-specific NEPA analysis will be performed to document potential direct, indirect, and cumulative impacts of any projects that are proposed for implementation and not previously approved.

It is important to note that this Resort MDP was prepared using recently acquired high resolution/accuracy digital mapping and orthorectified photography. As a part of this planning process, all capacities, acreages, and terrain specification were reassessed and recalculated in order to create the most accurate plan possible reflecting the newest data. As a result, some variations in numbers (e.g., acreages, capacities, etc.) can be expected between this Resort MDP and previous planning and/or approval documents.

A. BACKGROUND

1. Location

CBMR is located in Gunnison County, Colorado on the west side of the Continental Divide. CBMR's SUP area encompasses two mountains (separated by privately owned lands): approximately 2,890 acres on Crested Butte Mountain (also referred to as the Main Mountain) and approximately 1,460 acres of undeveloped terrain on Snodgrass Mountain (which borders the Town of Mt. Crested Butte on the northwest) – for a total of 4,350 acres. The Main Mountain is located at the Town of Mt. Crested Butte, which is approximately 4 miles northwest of the historic Town of Crested Butte, and 30 miles north-northwest of the City of Gunnison on the southwest flank of the Elk Mountain Range. Snodgrass Mountain is located approximately 1 mile northwest of the existing Main Mountain. The reader is referred to Figures 1.0A and 1.0B for more information on the location of CBMR in a regional context.

2. History of Crested Butte and CBMR

To understand CBMR today, it is important to gain a historical perspective of the settlement of the East River Valley and the town of Crested Butte.

a. 1860 – 1950s

From the 1860s until 1952, when the Big Mine closed, mining was the economic driver of the East River Valley and the reason why Crested Butte was settled. Thousands of people lived in Crested Butte and the surrounding mountains and valleys when precious metals and then coal where being mined. Due to dwindling demand, the coal mines closed in the 1950s resulting in economic failure and a rapid decline in the population of the town – to approximately 200 people.

While mining faded, the natural beauty of Crested Butte and the surrounding mountains and valleys never diminished. In 1958 Hubert Smith opened a Law/Science Academy in Crested Butte bringing in doctors and lawyers each summer and it was not long before word spread of the beauty of the East River Valley. A new era of economic growth was born.

b. 1960s and 1970s

In December 1960 – two years after Hubert Smith opened his Law/Science Academy – Fred Rice and Dick Eflin purchased the Malensek Ranch on Mt. Crested Butte. Crested Butte Limited submitted a SUP application to the United States Forest Service for establishment of developed skiing on Crested Butte Mountain. A SUP was issued the following year, which covers what is now the Main Mountain. With that, developed skiing began at Crested Butte.

The new ski area struggled during its first decade and was purchased in 1970 by the Callaway and Walton families. The new owners installed new lifts and expanded ski terrain within the SUP area.

They also marketed the ski area nationally and as the resort grew, other improvements followed with the construction of a new day lodge, overnight accommodations, and conference facilities. Other service businesses in the area grew along with the resort, including a new golf course south of town. By this time, tourism had firmly taken root as a driver of the local economy.

When mining attempted to come back to the valley in the 1970s, townspeople had decided that any economic benefits of mining were outweighed by negative consequences. "In the late 1970s, Crested Butte made a definitive statement when it opposed a plan by Amex, Inc. to put a massive molybdenum mine on Mt. Emmons...Tourism had clearly supplanted mining as the economy of choice for most of the townspeople."[1]

c. *1980s & 1990s*

By 1980 the ski area had eight lifts and further potential for skier facilities. That year a new master plan was submitted and a subsequent NEPA analysis approved an additional six lifts, three new base lodges, parking, and 25 new trails (219 acres). In 1981 a snowmaking system was installed, providing approximately 200 acres of coverage.

In 1982 CBMR submitted a Mountain Expansion Plan (MEP) application to the Forest Service. Following the subsequent NEPA analysis, Snodgrass Mountain was incorporated into CBMR's SUP area, and lift-serviced Alpine skiing was approved on Snodgrass Mountain.[2] The MEP approval included eleven lifts, 417 acres of skiing, and snowmaking on 162 acres. However, approved projects on Snodgrass Mountain were never implemented beyond the construction of a service road to the summit of the mountain.

Between 1980 and 1996, various projects were implemented on the Main Mountain. These improvements included installation of Painter Boy and Gold Link lifts (1983), the North Face Lift (1987), 152 acres of terrain, additional snowmaking (1990), and installation of a lift to access the Headwall area (1991). Silver Queen was upgraded to a detachable quad in 1992, Paradise Lift was upgraded to a detachable quad in 1994. In 1997 the East River Lift was upgraded to a fixed-grip triple and the Red Lady Lift (formerly Keystone) was replaced with a high-speed quad, and in 2006 The East River Lift was once again upgraded – this time to a high-speed quad.

Concurrent with Main Mountain upgrades, in 1994 CBMR submitted a new MEP to the Forest Service for lift-serviced Alpine skiing on Snodgrass Mountain. This new MEP was essentially the same plan as was approved in 1982, with the changes primarily being in the types of lift upgrades on Snodgrass Mountain. Because of the passage of time since the 1982 MEP, the Forest Service required a new environmental analysis on the proposal. However, CBMR ultimately withdrew its plans for Snodgrass Mountain pending additional financial and logistical considerations. Today, Snodgrass Mountain remains an undeveloped portion of CBMR's Forest Service-administered SUP area.

In November 1996 CBMR submitted a proposal to the Forest Service for further upgrades, improvements and additions to facilities and terrain for ski area operations on the Main Mountain.

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[1] Crested Butte The Edge of Paradise; Nathan Bilow & Sandy Fails, 1989; at 166-167

[2] While Snodgrass Mountain was formally incorporated into CBMR's SUP area in 1982, it has been identified as suitable for developed winter recreation by the GMUG (per its Land and Resource Management Plan[s]) dating back to 1978.

An Environmental Assessment (EA) was prepared to document the potential environmental effects of the proposal and alternatives to it. In May 1998 GMUG Forest Supervisor Robert L. Storch signed a Decision Notice and Finding of No Significant Impact for proposed ski area improvements at the Main Mountain. This decision approved new lifts, upgrades to existing lifts, new terrain, additional snowmaking and new and improved visitor facilities on the Main Mountain.

Also, Regional Forester Lyle Laverty signed the 1998 Decision Notice that expanded the private lands surrounding the Main Mountain base area of the existing ski resort through a Federal land exchange. The land exchange resulted in the Forest Service acquiring a total of 5,774 acres of state and private lands in exchange for 558 acres of Federal lands, of which CBMR received 418 acres, with 140 acres going to another private entity. Of the 418 acres transferred to CBMR, 398 acres are located in the Gold Link area (this exchange parcel is known as the East Trade Parcel or Prospect). The remaining 20 acres are located within the Snodgrass Mountain portion of the SUP area (known as the West Trade Parcel).

d. 2000s

Following a record 550,000 skier visits during the 1997/98 season, CBMR continued with minor facility improvements. However, annual attendance continued to decline after this record season and by the 2003/04 season, annual attendance was at 330,000 skier visits – down some 35 percent from the record 1997/98 season. Due to this major decline in skier visitation and the continued financial situation of the ownership, no major mountain upgrades were pursued.

Tim and Diane Mueller – owners of Triple Peaks, LLC – purchased CBMR from the Callaway and Walton families in March 2004. Triple Peaks undertook an initial round of improvements at the Main Mountain in the 2004/05 season on projects such as remodeling base area buildings and signage, expanding snowmaking and slope grooming capabilities, and constructing a superpipe and an improved terrain park. Lift improvements, including upgrading the North Face Lift to a T-Bar and installing the Prospect Lift in 2004, upgrading the base area T-Bar (Westwall Lift) to a fixed grip quad occurred in 2005, and the East River lift was upgraded to a high-speed quad in 2006.

Most recently, in January 2008, GMUG National Forest Supervisor Charles Richmond signed a Finding of No Significant Impact and Decision Notice approving projects identified in CBMR's July 2005 Mountain Improvements Plan (2005 MIP). Approved projects on National Forest System land which were components of the 2005 MIP include new lifts, realignments and replacements; additional snowmaking; glading; new trails; and restaurant additions. An overview of the projects approved in the 2005 MIP is provided in Chapter 5.

The Muellers sold the ski area assets, but not the developable real estate, to CNL Lifestyle Properties in December 2008. However, the Muellers continue to operate the ski area under a long term lease and management agreement with CNL.

Today, CBMR is the economic engine of the East River Valley, with hundreds of people employed by the resort and hundreds more employed by area businesses that are directly dependent upon its growth and success. The ski area exists today because of the desire and commitment of Crested Butte townspeople in the late 1950s and early 1960s to stay in the place they called home. With mining gone, but the need to make a living always present, tourism became the logical new economic driver given the beauty and proximity of the surrounding mountains and valleys.

B. CBMR Corporate Philosophy

1. Vision and Direction

Tim and Diane Mueller purchased CBMR in March 2004. Upon their purchase of CBMR, the Muellers articulated their vision and direction for the resort. Although the Muellers have since sold the ski area assets to CNL Lifestyle Properties, they have a long term lease and management agreement with CNL. Five years later, their vision and direction for CBMR has not changed:

1. We want to have a vibrant sustainable mountain resort with experiences that exceed the expectation of our guests. It is important that what we do and who we are reflect Crested Butte's unique character and brand.

2. We want to preserve what is unique to our valley.

3. We want to provide a great working environment and experience for all staff so they can lead fulfilling lives.

4. We want to design buildings that reflect contextual architecture and construct facilities and lodging that meets our quality standards. Landscaping should also compliment our natural surroundings.

5. We want to support and create a "sense of place" so our valley is a place we can all enjoy, both residents and guests."

2. Guiding Principles

CBMR has adopted a set of guiding principles which articulate the resort's direction as a company. This Resort MDP was designed in response to those guiding principles. It is in line with the core purpose, values, and operational goals and objectives, as discussed here.

a. Core Purpose

The original core purpose of the ski area could be considered as revitalizing the economy of the East River Valley. Today the success of the ski area has a positive, direct and significant impact to the local economy; however, the core purpose is better expressed in terms of why guests come to the resort and how the resort impacts their experience. As a private business that has evolved over the past four decades into a multifaceted regional, national and international destination resort, the core purpose of the resort has evolved as well. The resort views its core purpose as providing meaningful and rewarding experiences for its guests, as expressed in CBMR's mission statement:

> *We inspire a passion for adventure by creating "The Crested Butte Difference" for our guests and each other.*

The resort delivers a meaningful and rewarding experience to its guests by inspiring a passion for adventure whether that adventure is through winter sports or summer activities. "The Crested Butte Difference" is the delivery of a unique experience. Because CBMR operates on both private and National Forest System lands, this Resort MDP serves as a vision for operations on both.

b. Core Values

- Safety. We promote an accident free and healthy environment for our guests and our staff.
- Guest Service. We exceed guest expectations by making genuine connections and giving our "extra one percent."
- Product. We consistently deliver a distinctive experience of superior value – "The Crested Butte Difference."
- Profitability. We operate efficiently and effectively to assure the future of the resort.
- Teamwork. Our team members are our greatest asset.
- Environment. We are good stewards of the land and protect the environment.
- Community. We improve the quality of life in our local communities.

c. Goals and Objectives

The goals and objectives of the resort build upon the vision statements above. The vision sets forth the direction the resort will follow and the goals and objectives create the groundwork and rationale for the physical improvements needed to achieve the vision.

The principal operational goals for CBMR are:

> *Establish the resort as a unique, year-round destination resort that offers integrated facilities to local, regional, national and international guests; and to provide quality recreational opportunities to the public, in an outdoor, natural setting on National Forest System lands.*

In support of these operational goals, this Resort MDP specifically addresses the following objectives:

- Upgrade and expand resort facilities and infrastructure that will provide for optimum use of National Forest System lands and will provide a quality mountain resort experience and continued financial growth.
- Ensure that any development on National Forest lands is consistent with the GMUG Land and Resource Management Plan, policy directives, and objectives.
- Maintain and improve, where possible, public access to National Forest System lands.
- Develop facilities that meet the demands and needs of the marketplace so that the resort remains competitive with other Rocky Mountain destination resorts.
- Provide a balanced offering of developed terrain, and in a sufficient quantity, to meet the demand of the destination marketplace.
- Develop in a manner that allows the resort to regain market share which in turn provides economic stability and sustainability to the resort and therefore the local community.

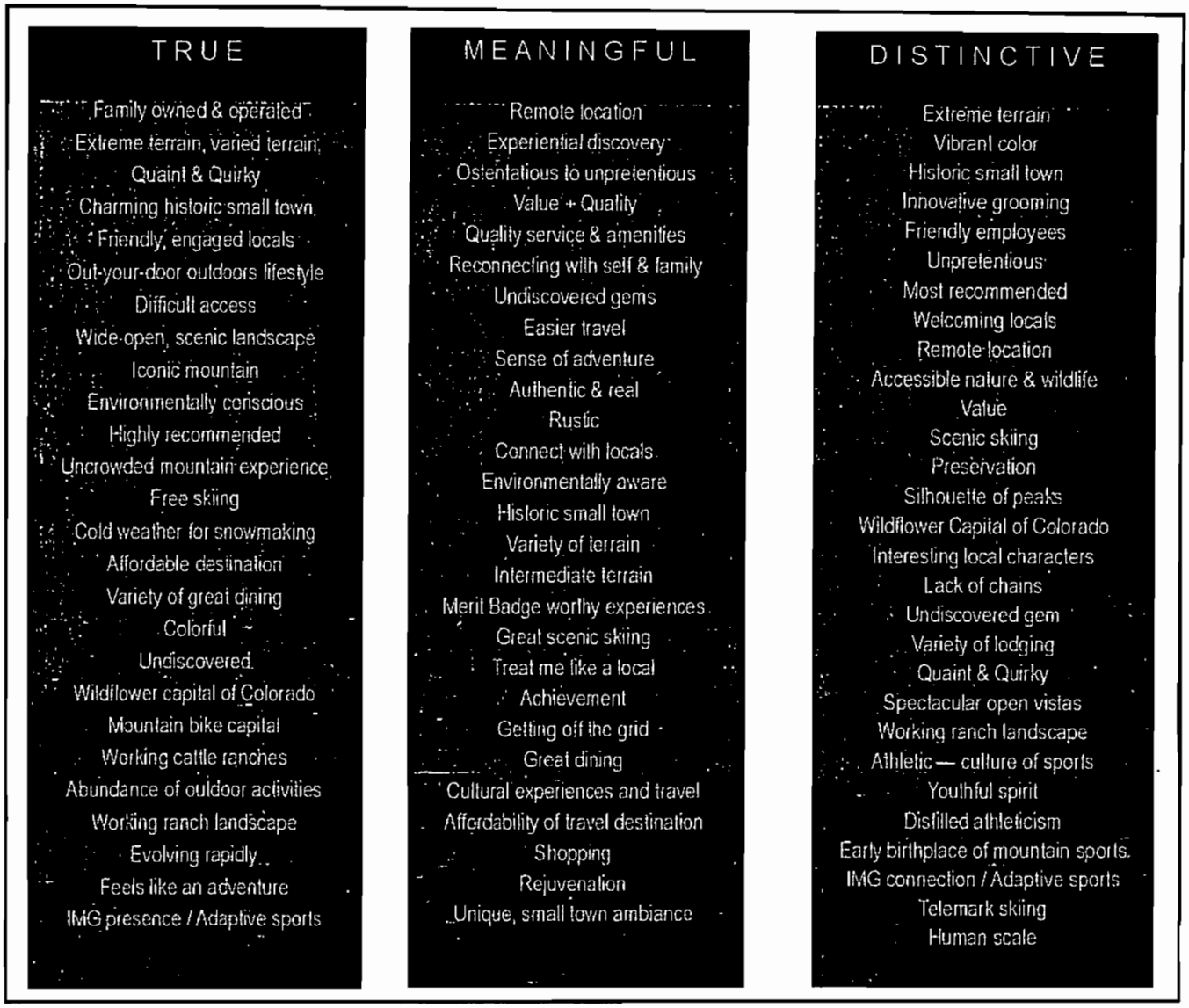
- Improve existing, and design future, resort infrastructure, trails, lifts and facilities in a manner that promotes a safe and healthy environment.
- Improve the skier experience without overcrowding terrain and compromising the unique character of the resort.
- Maintain low density skiing on the high quality snow conditions for which CBMR is known.
- Design buildings with architecture reflecting the heritage of Crested Butte and the Rocky Mountains.
- Create a quality working environment for staff.

3. Theme

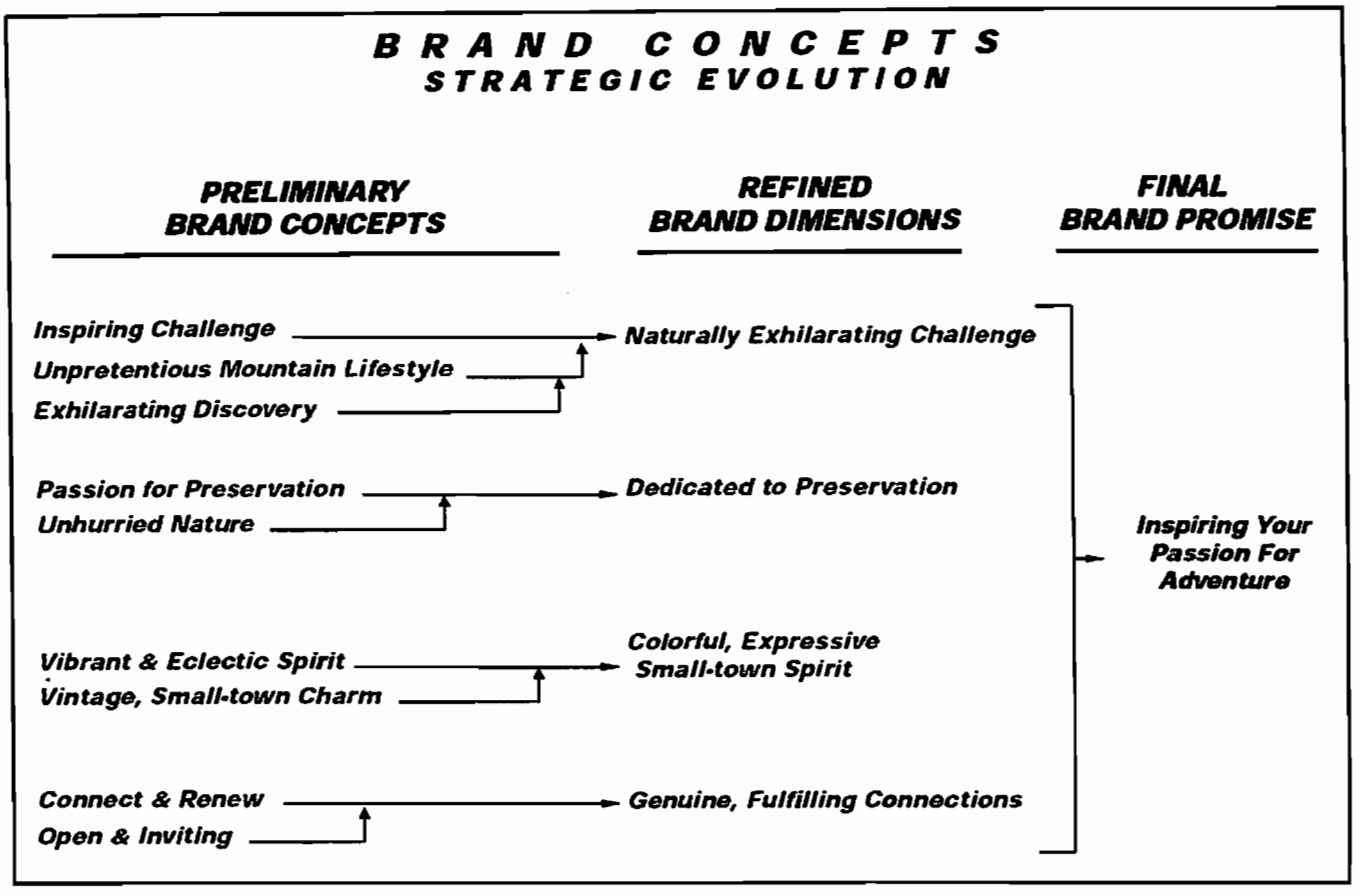
In an effort to complement the Main Mountain, to diversify and provide a quality destination winter recreation experience and to establish the long-term viability of the ski area, CBMR believes that the development of Alpine skiing facilities on Snodgrass Mountain represents an opportunity to progressively achieve the previously-defined goals and help redefine its winter ski product. The CBMR upgrading plan (detailed in Chapter 6) is dedicated to offering opportunities for all individuals to enjoy public lands through a unique style of ski product offered at few North American ski areas.

The upgrading plan contained within this Resort MDP is intended to address the deficiencies at the resort and to enhance the recreational opportunities on public lands within the GMUG National Forests. *However*, it is also important that the resort differentiate itself from its competition.

Recently, CBMR owners and management, outside consultants, and other key members of the Crested Butte community met to identify current and aspirational perceptions that connect emotionally with guests and define what is true to Crested Butte, meaningful to guests and distinctive from the competition. The graphic below depicts the most often cited examples of what participants in the study said were true, meaningful and distinctive about Crested Butte.



The results of this disciplined, multi-phase process focuses the Crested Butte brand around a promise and four brand dimensions to target customers and differentiate the resort from its competition. Below are the preliminary brand concepts, refined brand dimensions and the final brand promise that were created for the resort and are the foundation for everything the resort will do going forward, including project development.



The brand dimensions and promise are the foundation for future direction of the resort; including the looks of uniforms, signs, architectural style, advertising, and guest service.

The Sensory Positioning Matrix below depicts how each brand dimension will come through in various categories that impact the looks of the items listed above.

SENSORY POSITIONING MATRIX

Category	Naturally Exhilarating Challenge	Dedicated to Preservation	Colorful, Expressive Small-Town Spirit	Genuine, Fulfilling Connections	Key Signals
Content and Tone	Joy and zest for life Real people leading exciting lives Exciting interaction with nature Engaging challenging activities Risk taking and adventurous	Sense of heritage Undisturbed pristine environments Warm and approachable Authentic materials Natural warm lighting Sepia tones	Genuine and approachable Environments that are inviting Real people warmly interacting Bonding with town and people Memorable experience	Authentic people Spirited and welcoming Genuine closeness Spontaneous interactions Natural lighting	Joy and zest for life Sense of heritage Genuine and approachable Authentic people Undisturbed pristine environments Spontaneous interactions Natural lighting
Architecture & Environments	Finely crafted / natural Contrast of combination of materials Unique to surroundings Sense of discovery Expansive grand views Dramatic scale difference	Dramatic surroundings few structures Distinctive and authentic Undisturbed / serene scenes Time honored Blending environment & heritage structures	Natural expression Highly detailed Unique style & character Variety of colors and multiple shapes Personal touches	Harmonious interaction with nature Enclosed & protected Impact Custom & unique Indoor & outdoor living together	Contrast of materials Blending environment & heritage structures Unique style & character Dramatic surroundings Harmonious interaction with nature Dramatic scale difference
Composition	Involving angles or perspective Actively breaks boundaries Energy and motion Experiencing Photo dominant / little text	Naturally aged materials Produced by hand Harmonious element interaction Handwritten type Distinctive and genuine	Hand done Freeform Many elements working together Personalized journal style Uniquely expressive	Layering of elements Use of natural materials One of a kind Combination of images / elements Elegantly simple	Involving angles or perspective Use of naturally aged materials Produced by hand Layering of elements Handwritten type Uniquely expressive Distinctive and genuine
Type and Symbol	Energy and dynamism Spontaneous strokes Sense of upward movement Organic Rough edges	Old woodcut style Man made & nature depictions Roughen type / placard Containment shape Natural feel	Hand crafted & organic Personally expressive Playful & fun Unique element interactions Freeform	Man and nature depictions Unique element integration Distinctive Individualized Sense of growth	Energy and dynamism Old woodcut style Hand crafted & organic Man and nature depictions Unique element integration Individualized and personalized Timeless
Color and/or Texture	N/A	Tactile Layering / weaving of materials Aged has a patina Handcrafted Rich detailing	Naturally vibrant Unique combinations Dramatic Invigorating & refreshing Cool and Warm Natural edge	Naturally radiating warmth Glowing Harmonious blends Earth toned Rich & saturated	Naturally radiating warmth Glowing Vibrant Unique combinations Harmonious blends Tactile Aged has a patina Rich detailing

C. CBMR'S MARKET NICHE

CBMR is a destination resort that draws from a regional and national market. It has a relatively regional, drive-oriented overnight visitor profile (coming from the Mountain Census Division states of Colorado, New Mexico, Utah, and Arizona), and has a significant dependence on the West South Central States (including Texas, Oklahoma, Arkansas, Louisiana). CBMR draws disproportionately from the West South Central and Mountain Census Division states relative to the overall Rocky Mountain destination visitor profile.

While CBMR serves a niche for challenging and extreme terrain, this segment of the market is fairly limited. The largest single ability group among overnight visitors to Rocky Mountain Region resorts is Intermediate (52 percent of skiers), and Intermediates account for the largest share of CBMR's overnight visitors (approximately 50 percent). In addition, CBMR depends on visitation from Arkansas, Louisiana, Texas and Oklahoma which contain a particularly high proportion of Intermediate, and lower, level skiers. Relative to the overall Rocky Mountain destination visitor

profile, CBMR is less effective in drawing Intermediate skiers and families from more distant, typically fly-oriented destination markets. Furthermore, CBMR lags in repeat visitors – 54 percent compared to 80 percent at competing resorts in Aspen and Vail.

As illustrated below in Table 1-1, CBMR has experienced a dramatic decline in skier visits and skier visit market share since the 1997/98 season.

Table 1-1:
CBMR Skier Visits and Market Share Measures:
Peak Period (1991/92-1997/98) vs. Recent Seasons (2000/01-2007/08)

	1991/92-1997/98 Period	2000/01-2007/08 Period
CBMR skier visits	485,000-550,000 visits	330,000-415,000 visits
CBMR share of Colorado resorts skier visits	4.4-4.8%	2.9-3.3%
CBMR share of Rocky Mountain resort skier visits	2.6-3.0%	1.8-2.0%
CBMR share of US resort skier visits	0.9-1.0%	0.6-0.7%

Source: CBMR; Colorado Ski Country USA; NSAA

The serious and sustained declines in skier visits and skier visit market share described in Table 1-1 are a clear indicator that CBMR has experienced significant erosion in its competitive position in the ski industry since 1997/98. A comparative lack of Intermediate terrain and a failure to keep pace with competitors' expansions have contributed to this loss of competitive position.

It should be noted that CBMR has experienced significant declines in visitation, market share, and (importantly) paid lift tickets even after adjusting for the impact of the "Ski Free," a free lift ticket promotion which ran in the early season (and sometimes in the late season) between 1991/92 and 1999/00, and again in the early part of the 2007/08 season. CBMR experienced a sharp (25 percent) drop-off in skier visits between 1997/98 and 1999/00, a period throughout which Ski Free was underway. Additionally, the resumption of Ski Free in 2007/08 produced only a modest increase in skier visits that season.

Destination skiers have a higher impact on the local economy than local resident skiers. Destination skiers spend far more than local skiers on a per-visit basis, due to spending on lodging and much greater trip-related spending on such items as lift tickets, rentals, ski school, retail goods, etc. CBMR staff has conservatively estimated that destination visitors who arrive by air spend approximately $145 per person per day on ancillary items other than lodging and lift tickets in the local area.[3] (Note that lodging and lift ticket expenditures are additionally highly significant in terms of economic benefit to the community, and rank among visitors' top expenditure items).

More importantly, destination skiers bring outside dollars into the local economy, money which gets disseminated through the community through skiers' direct purchases as well as multiplier effects associated with supply linkages and employee wage spending. Tourism is estimated to account for 37 percent of Gunnison County's "basic" jobs – i.e., jobs associated with the importation of outside dollars into the local economy, without which the local economy as a whole could not survive.[4] (By

[3] "Airline passengers bring in big dollars," Crested Butte News, 4/25/08.
[4] "Colorado 2007 Economic Base Analysis," Colorado State Demographer, http://dola.colorado.gov/demog_webapps/economic_base_analysis

contrast, local resident skier spending is both smaller in volume, and represents the recirculation of dollars already in the local economy, rather than a critical, "basic" influx of new dollars into the economy).

D. CBMR's Competitive Market

CBMR shares a competitive market with other regional and destination resorts in the southern/central Rocky Mountains. This market includes not only nearby, similarly-sized resorts, such as Telluride and Durango Mountain Resort, but extends to larger resorts in Aspen, Steamboat Springs, and Summit and Eagle counties. To some extent, each of these resorts competes for overlapping regional and destination visitors, particularly in the Intermediate classifications. To remain competitive with regional ski resorts, CBMR must ensure that the needs and expectations of their guests are met and adequate terrain is provided to create a satisfying, quality recreation experience.

In the context of its overall decline in destination visitation (defined below in "Industry Trends"), CBMR has experienced a disproportionately large loss in Intermediate destination visitation. In the past 15 seasons (since 1994/95), CBMR has only added approximately 35 acres of developed terrain (including the Prospector Lift and the terrain that it serves: *Prospector, Little Queen, Deer Pass*).[5] By contrast, over the past decade, many of CBMR's competitors have received Forest Service approval on projects that have substantially increased the net skiable acreage within their SUPs, many of which include Intermediate terrain. Some of these projects include:

- Vail Category III (Blue Sky Basin) – In August 1996 the Forest Service approved the expansion of Vail Ski Area into the "Category III" area south of the existing ski area. The approved expansion involved construction of four lifts and approximately 885 acres of trails. Vail's total skiable terrain encompasses 5,100 acres.

- Telluride's Prospect Bowl and Revelation Bowl – In 1999 following ten years of planning and environmental analysis, the Forest Service permitted Telluride Ski Area to expand into Prospect Bowl. In 2001 four lifts servicing 733 acres of mostly Intermediate and Beginner terrain were installed. In November 2008 Telluride expanded into the 50-acre Revelation Bowl, opening a single lift to service the new Advanced and Expert terrain. Telluride's total skiable terrain is approximately 2,000 acres.

- Keystone's Little Bowl/Erickson Bowl cat skiing – In 2003 a Decision Notice was signed authorizing Keystone Resort to conduct snowcat skiing in Little Bowl and Erickson Bowl. This approved a snowcat skiing and sightseeing operation on 311 acres of high-Alpine, Intermediate terrain within Keystone's SUP area, and enlarged the ski area's operational boundary to include this terrain. With the 2003 approval, an additional 266 acres of undeveloped forested terrain (below Little Bowl and Erickson bowls) also became accessible. Keystone's total skiable acreage is approximately 3,000 acres.

- Copper Mountain's Trails and Facilities Improvements Project - A Record of Decision signed in January 2006 on the Copper Mountain Trails and Facilities Improvements Final

[5] In addition to developed terrain, undeveloped Expert level terrain was added within the SUP area, including Teocalli Bowl, Teocalli 2, and Fourth Bowl.

EIS authorized construction of (among other things) a chairlift on Tucker Mountain serving approximately 240 acres of terrain within the ski area's SUP boundary. Tucker Mountain has historically been accessible only via hike-to skiing after traversing from the Mountain Chief lift, as well as by snowcats provided by the ski area on an occasional basis. Copper Mountain's total skiable acreage is 2,450.

- Breckenridge Peak 8 Summit Lift and 6 Chair Replacement - In April 2005 a Decision Notice was signed on the Peak 8 Summit Lift and 6 Chair Replacement Environmental Assessment at Breckenridge. The Decision Notice approved construction of a lift to serve the upper portions of Peak 8, which eliminates the need to hike Peaks 7, 8 and 9 to access a combined 399 acres – all of which were within Breckenridge's existing SUP area. Breckenridge's total skiable terrain is 2,358 acres.

- Arapahoe Basin's Montezuma Bowl - A 2006 Record of Decision approved (among other infrastructure projects) installation of a chairlift in Montezuma Bowl at Arapahoe Basin. This lift services approximately 347 acres of Intermediate and Expert terrain within A-Basin's existing SUP boundary. Arapahoe Basin's total skiable terrain is 811 acres.

- Durango Mountain Resort's Improvement Plan – A 2008 Record of Decision approved (among other infrastructure projects) 177 acres of new ski terrain. The improvement plan includes a slight decrease in Novice terrain, and a slight increase of Intermediate and Advanced terrain. After developing the new and upgraded trails, Durango's total skiable terrain will be 719 acres.

A historical analysis of CBMR and its peer resorts shows that ski resort terrain expansions and visitation growth are at a minimum correlated; and quite likely that terrain expansions have historically helped drive, or at least maintain, skier visits levels. By contrast, relatively stagnant terrain offerings are associated with (and have likely contributed to) visitation declines. Specifically:

- Out of a sample of ten Colorado/New Mexico destination resorts which increased their terrain by at least 15 percent over the 1994/95-2007/08 period, all experienced an increase or maintained their volume of skier visits over the same time period.

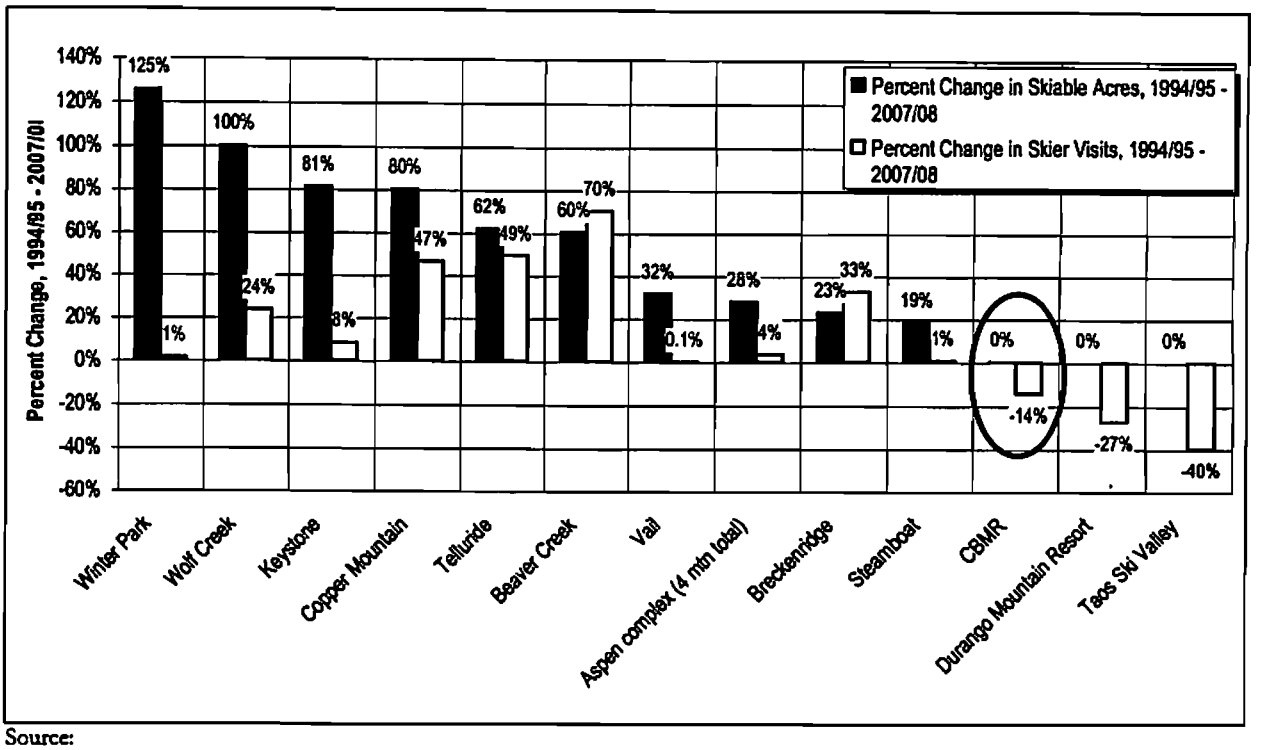
- Out of a sample of three Colorado/New Mexico destination resorts which had no or negligible change in their terrain between 1994/95 and 2007/08 (including CBMR), all experienced double-digit percentage decreases in skier visits over the same time period.

- Although not shown in the following chart, similar patterns are observed at several destination resorts in other Rocky Mountain states.

- The strength of these correlations implies a significant relationship between skier visits and terrain expansions.

- In addition to providing a direct competitive benefit on the attribute of terrain, terrain expansions also typically have other benefits which can boost visitation, including increased publicity/visibility, a "novelty factor" which may attract new and lapsed visitors, and motivation to extend length of stay.

Chart 1-1:
Percent Change in Skiable Acres and Skier Visits, 1994/95-2007/08:
CBMR vs. Selected Other Destination Resorts



Source:
Skiable Acres: "Your Guide to the Slopes," Rocky Mountain News, 11/20/1994; CSCUSA – Resort Statistics 2007/08; resort websites.
Skier visits: CSCUSA; Ski New Mexico.

At CBMR, the proportion of overnight guests who are Intermediates has declined from an average of approximately 65 percent between 1992/93 and 1997/98 peak seasons, to an average of roughly 50 percent between 2004/05 and 2008/09. Meanwhile, the proportion of overnight guests who are Advanced/experts has grown from an average of 27 percent to 38 percent between the same two periods. The loss of Intermediates has played a disproportionate role in CBMR's skier visit decline in recent years, insofar as Intermediates have accounted for a smaller share of a shrinking pie.

It is likely that CBMR's weakened competitive positioning (in part due to its relative lack of terrain expansion as compared to other resorts, as discussed previously) contributed to this decline in Intermediates.

E. INDUSTRY TRENDS

Nationally, the ski industry rebounded dramatically from the difficult 2006/07 season to set an all-time record in annual skier visits in 2007/08, with 60.1 million. This represents a 9.1 percent increase from 55.1 million visits recorded in 2006/07, and a 2.0 percent rise from the prior record of 58.9 million visits set in 2005/06. Over the last ten seasons (1998/88 – 2007/08), the average

number of visits recorded nationally was 56.2 million. The 2007/08 season, at 60.1 million visits, represents a 7.0 percent increase from this ten-year average.[6]

Exceeding the 60 million visit threshold is a milestone for the 2007/08 season. This extends an era of strong performance which the U.S. ski industry has exhibited since the 2000/01 season, in which visits have reached 57 to 60 million in good years and 54 to 55 million in poor years – both significantly above the levels recorded in previous decades.[7]

Over the last decade, as national and Colorado skier visitation increased, CBMR saw a 33 percent decrease in skier visits. CBMR skier visits dropped from 460,000-550,000 annual visits in the 1995/96 to 1998/99 timeframe, to 330,000-416,000 annual visits in the 2003/04 to 2007/08 period. See Table 1-2 for national, Colorado, and CBMR annual visitation.

Table 1-2:
Annual Skier Visitation at CBMR Compared to National and Colorado Visitation

Season	Annual National Skier Visits (in millions)	Annual Colorado Skier Visits	Total Annual CBMR Skier Visits	Total Annual CBMR "Destination" Skier Visits
2007/08	60.1	12,540,603	416,009	172,000
2006/07	55.1	12,566,299	366,765	178,856
2005/06	58.9	12,533,108	411,586	201,250
2004/05	56.9	11,816,193	375,936	194,576
2003/04	57.1	11,250,761	333,011	200,817
2002/03	57.6	11,605,777	342,416	211,058
2001/02	54.4	11,128,131	336,483	226,270
2000/01	57.3	11,666,672	367,263	227,383
1999/00	52.2	10,892,263	414,642	219,536
1998/99	52.1	11,389,561	462,408	238,076
1997/98	54.1	11,979,719	549,660	260,285
1996/97	52.5	11,844,523	519,250	253,609
1995/96	54.0	11,387,058	507,309	254,266

Source: Colorado Ski Country USA, 2007; USDA Forest Service, 2008

F. GOALS AND OBJECTIVES OF THE RESORT MDP

As a result of evolving expectations in the ski market, the ski industry has focused on raising service standards, improving the visitor's experience, and addressing shortcomings in their existing ski area design and operations. CBMR is no exception. To remain competitive in the destination ski market it too must continue to improve to meet the demands of the marketplace. CBMR has identified a variety of on mountain improvements it intends to implement in the coming years on the Main Mountain out of its approved 2005 Mountain Improvement Plan. However, even with these improvements, there will be a shortage of diversified quality Intermediate ski terrain on the Main Mountain to meet the demands of the skiing public.

[6] Kottke National End of Season Survey 2007/08 - Preliminary Report. National Ski Areas Association. May 2008
[7] Ibid.

In an effort to complement the Main Mountain, to diversify and provide a quality destination winter recreation experience and to establish the long-term viability of the ski area, CBMR believes that the development of Alpine skiing facilities on Snodgrass Mountain represents an opportunity to significantly enhance and balance its winter ski product. The CBMR upgrading plan (detailed in Chapter 6) is dedicated to offering opportunities for all individuals to enjoy public lands through a unique style of ski product offered at few North American ski areas.

1. Terrain Variety/Diversity

In surveys, destination skiers routinely identify terrain variety and quality as one of their preeminent trip decision factors. For example, in Ski Magazine's Reader Resort Ratings, "terrain variety" is ranked as the second most important criterion (among 17 attributes) in readers' choice of a ski destination, behind only snow quality, and ahead of such other considerations as weather, lifts, value, accessibility, scenery, lodging, resort service, and others. Furthermore, when asked to identify "which improvement at CBMR would be most important to you," the largest share of CBMR visitors in 2008/09 on-mountain intercept survey research identified "add new terrain" (35 percent).

Consistent with this fact, ski resorts commonly highlight their terrain offerings, particularly when their terrain may plausibly provide a competitive advantage, and the ski press typically focuses heavily on terrain as well. Because terrain variety and quality is such a fundamentally important factor to a wide cross-section of participants, adequate terrain is typically an essential prerequisite for a resort to be considered, particularly for an overnight trip.

While CBMR has programs in place for first time skiers/riders and has developed products to convert these visitors into core members, it continues to lack the type of terrain to keep them coming back year after year. Therefore, CBMR aims to better compete for, and retain, destination visitors.

To the extent that terrain variety is a key driver of skiers' trip decisions, expanding its terrain offerings will help CBMR increase its competitiveness in broader geographic markets, and thus expand and diversify its visitor base. In particular, in light of its remote location far from major metropolitan population centers and a hub airport, and its relatively limited air service, CBMR needs to offer a draw sufficiently compelling to destination skiers to overcome the access challenges. A competitive ski product, including attractive and diverse terrain, is a necessary component of such a draw.

Incorporating Snodgrass Mountain into CBMR's developed terrain network will contribute to the creation of a well-diversified skiing and riding experience by providing expanded and varied Beginner, Advanced, and Expert terrain in addition to the new Intermediate terrain.

2. Intermediate Terrain

The largest single ability group among overnight visitors to Rocky Mountain region resorts is Intermediates (52 percent of skier visits). Similarly, Intermediates account for the largest share of CBMR's overnight visitors (50 percent). It is also important to note that 64 percent of West South Central Division visitors to CBMR (and 59 percent of all West South Central visitors to the Rockies) are Intermediates – underscoring the need for CBMR to offer attractive Intermediate terrain in order to compete in that critical market, whose significant drive accessibility helps mitigate against

dependence on air service. Thus, Intermediate terrain directly serves the largest ability segment of the destination market at CBMR and in the Rockies, generally.

A terrain distribution analysis conducted specifically for this Resort MDP (see Chapter 4) identified a shortage of quality Intermediate ski terrain in diverse settings when CBMR is compared to its competitors. This detracts from the guest experience, and puts CBMR at a competitive disadvantage. The analysis shows a deficiency in Intermediate capacity of 8 percent. The key factor to consider is the amount of terrain that would be required to make up that deficiency. With approximately 165 acres of developed Intermediate terrain, an increase of approximately 90 acres (over a 50 percent increase) of additional terrain would be required to make up that existing shortfall. It is this deficiency of total developed terrain, with a particular emphasis on the Intermediate level, that is the shortcoming of CBMR's ski terrain. For example, virtually all of the Colorado ski resorts mentioned above (with the exception of the smaller resorts) have more total acreage of developed Intermediate skiing than CBMR.

Therefore, to meet the expectations of the skiing public, CBMR needs additional and diversified quality Intermediate terrain. Developing lift-served skiing on Snodgrass Mountain is thus a direct response to evolving consumer demands and the highly competitive ski industry. Providing a more diverse selection of terrain, with a focus on Intermediate terrain, is critical to CBMR's ability to effectively address the needs of its core customers, halt and reverse the severe erosion in its visitation and competitive position, and strengthen its long-term ability to compete and survive in the marketplace.

The destination skier market is aging; the age profile of adult destination visitors to Rocky Mountain ski resorts has shifted dramatically older over the past 12 seasons, with steady, significant gains in the 45 to 54, 55 to 64, and 65+ age groups. This trend, and particularly the growth of visitors aged 55+, is expected to continue for several more years, as the large Baby Boomer cohort continues to age. As this trend occurs, an important success factor for most destination resorts will be their ability to meet the needs of older guests. At the same time, resorts will continue to need to appeal to younger-generation visitors, including the "Echo Boomers" who have begun replacing the front edge of the boomers, as the skier market becomes more age-diversified overall.

Intermediate terrain is important to meeting the needs of older guests. Destination skiers aged 65+ are the most likely of any age group to be Intermediates (55 percent of them are Intermediates); and older skiers of even Advanced ability tend to ski less aggressively and use a mix of terrain.

Also of interest is the finding that destination visitors 14 and under are especially likely to be Intermediates, having recently graduated from Beginner ability, pointing to the Intermediate terrain needs of younger visitors as well. Once again, it is noteworthy that the largest segment of destination skiers of all ages is made up of Intermediates. This speaks to the breadth of the Intermediate market and the likelihood that parties of all ages will contain one or more Intermediates.

Finally, it is notable that women are especially likely to be Intermediates (57 percent as compared to 44 percent of men). The differential is pronounced within all age groups, and, as previously discussed, kids and older participants tend to be more Intermediate. The results again speak to the importance of Intermediate terrain as essential for meeting the needs of both genders and all age groups, and diverse travel parties.

In addition to serving the direct skiing needs of the largest segment of the destination visitor market, Intermediate terrain also serves other important purposes, including providing a "common experience factor" for parties with diverse ability levels, and serving other important groups and needs:

- Intermediate terrain commonly serves Advanced-ability participants (particularly those who are destination skiers), who often choose to ski Intermediate terrain part of the day – e.g., for variety, to ski with less advanced party members, as a means to acclimate to high elevation, to regain "ski legs" after a gap between ski trips, to ease stress on joints (particularly among older visitors), etc.

- Intermediate terrain also commonly serves the needs of first-timers and beginners, who may "graduate" to Intermediate terrain as they learn and improve over the course of a multi-day visit.

- The vast majority of overnight skiers visit with other people (94 percent at CBMR, 95 percent at Rocky Mountain resorts overall), including family members, friends, business associates, ski club members, and/or others, who typically have a diverse range of ability levels. A variety of terrain is typically needed to satisfy the needs of all party members.

- It is important for resorts to provide terrain that party members can enjoy skiing/boarding together at least part of the trip, with Intermediate terrain typically serving as this "common denominator."

- Certain key groups are more likely to be Intermediates than others, such as women and early learners (often children). Additionally, older participants (a critical and growing segment), even if skilled, tend to ski more conservatively and take less risks. Intermediate terrain thus helps ensure that ski areas can serve women and younger/older age groups which are prevalent in many ski parties, as well as providing terrain appropriate to a full lifecycle of participation in snowsports.

- Intermediate terrain is particularly appropriate for CBMR's existing core out of state markets, which skew Intermediate (particularly in the South) as compared to the national average.

- Many destination visitors who come to CBMR make only one ski trip per year. This relatively low skiing frequency, along with other physical or psychological factors, often prevents them from reaching more advanced ability levels. Intermediate terrain is needed to continue to serve such skiers.

In summary, providing an adequate quantity and quality of Intermediate terrain is critical for a ski resort in CBMR's market. The lack of total terrain acreage and variety is currently limiting CBMR in terms of skier visits and utilization. There is an existing deficit of Intermediate terrain that is limiting the resort even further. As discussed in Chapter 4, this factor could be limiting the resort's capacity by as much as 15 percent below existing levels. The key to bringing visitation rates back to historic levels, and then increasing those rates through longer lengths of stay, will be providing enough terrain across all ability levels to hold skiers' interest for longer periods of time. The expanded

terrain must meet the appropriate ratios of ability levels, with an overabundance of Intermediate terrain to help make up for the existing deficit. The upgrade plan will focus on increasing the quantity and variety of ski terrain, with an emphasis on the Intermediate level.

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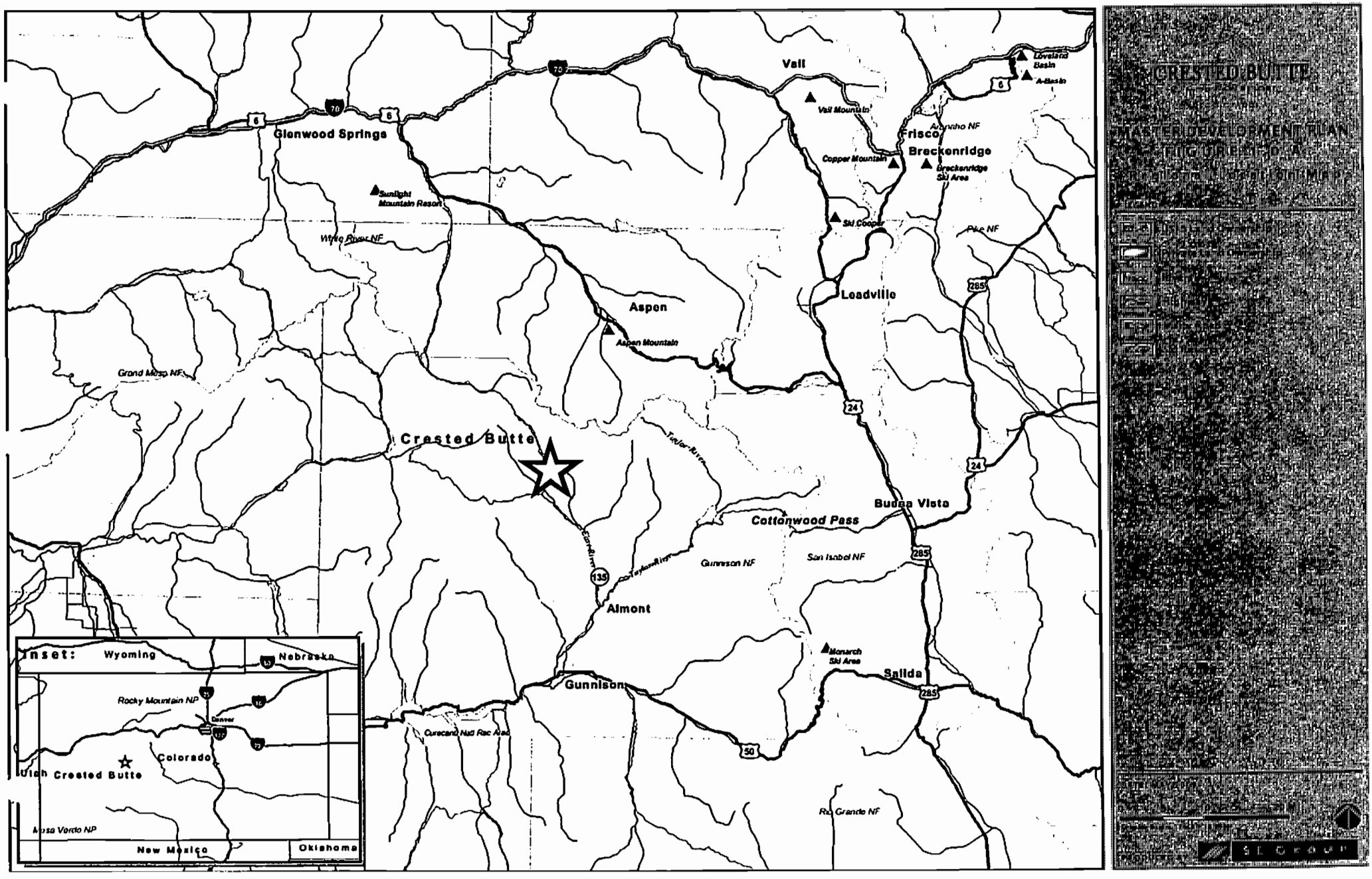
Vail
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Aspen
Leadville
Crested Butte
Buena Vista
Cottonwood Pass
Almont
Gunnison
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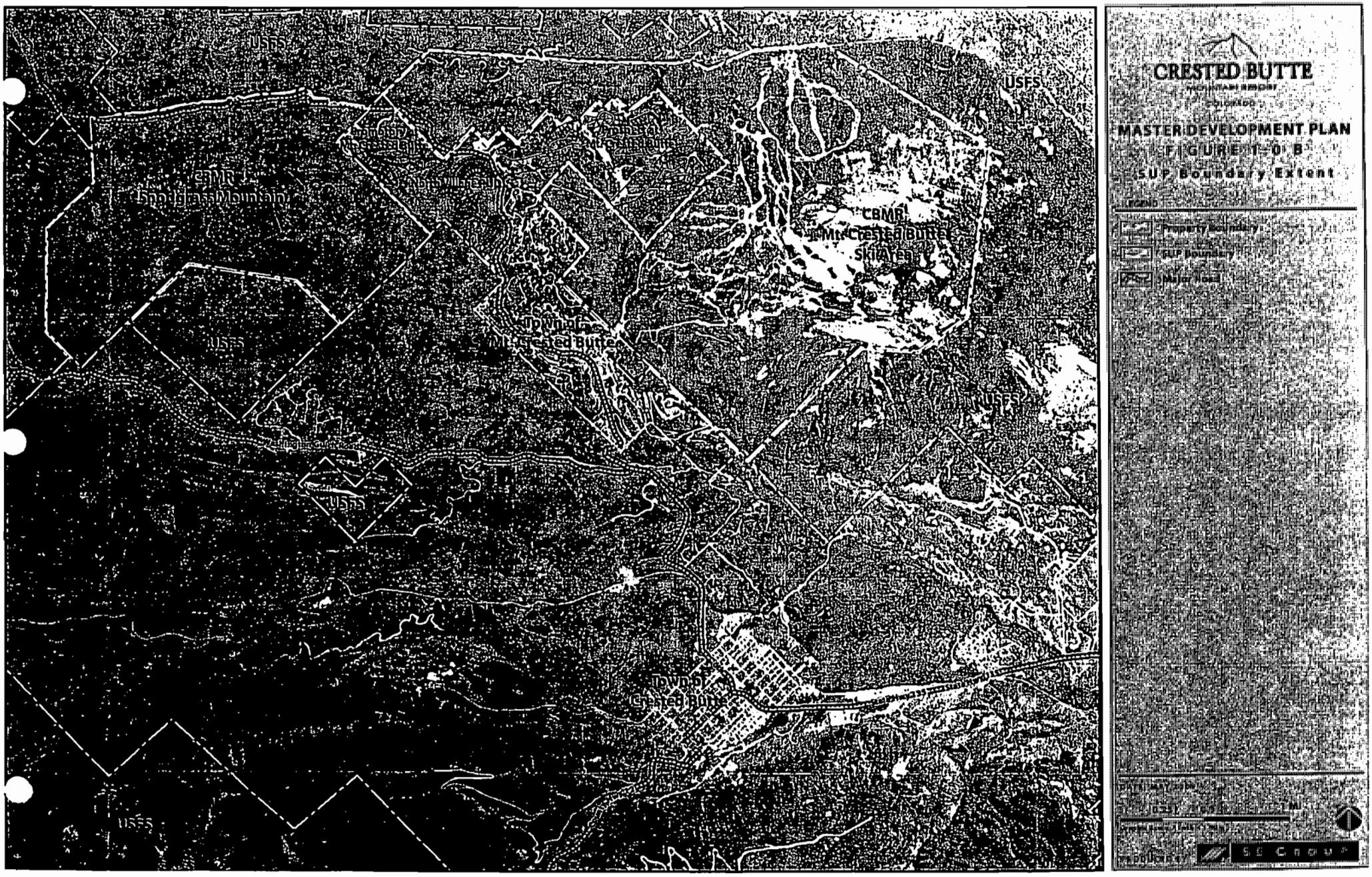
Monarch Ski Area
Sunlight Mountain Resort
Copper Mountain
Ski Cooper
Aspen Mountain
Vail Mountain
Arapaho NF
White River NF
Grand Mesa NF
Gunnison NF
San Isabel NF
Rio Grande NF
Curecanti Natl Rec Area
Taylor River
Inset:
Wyoming
Nebraska
Rocky Mountain NP
Denver
Colorado
Utah
Crested Butte
Mesa Verde NP
New Mexico
Oklahoma


CRESTED BUTTE
MASTER DEVELOPMENT PLAN
FIGURE 1-0: B
SUP Boundary Extent
Property Boundary
SUP Boundary
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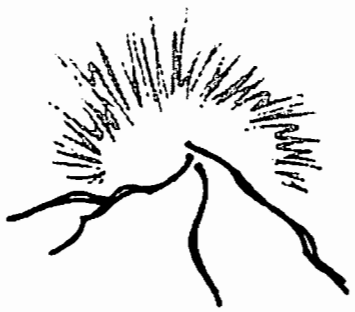

CRESTED BUTTE

MOUNTAIN RESORT

2009 RESORT MASTER DEVELOPMENT PLAN

CHAPTER 2: DESIGN CRITERIA

2. DESIGN CRITERIA

A variety of facility design criteria contribute to the recreational experience and influence four-season resort upgrades and improvements. A destination resort must offer a multitude of services, amenities, and experiences designed to accommodate a range of guests and meet their needs and expectations. Design parameters that guide the development of everything from the pedestrian-oriented social environment to the Alpine experience, all contribute to the success of a destination resort.

As discussed in Chapter 1, while CBMR serves a niche for challenging and extreme terrain, this segment of the market is fairly limited. Therefore, CBMR needs to expand its offerings and cater to the industry's largest ability level – Intermediates. Chapter 2 discusses the general design criteria to foster a gratifying recreational experience and, therefore, a successful destination resort.

A. REGIONAL & DESTINATION RESORTS

1. Regional Destination Resorts

Regional destination resorts largely cater to a "drive" market (i.e., people who can access the resort in a reasonable driving time to accommodate daily or weekend attendance). While day-use guests contribute to CBMR's visitation, the regional destination resort also appeals to vacationers. Where the regional destination resort has evolved from within, or adjacent to an existing community, services are often supplied by proprietors in the existing community. Even though a portion of services offered within the town of Crested Butte cater directly to guests of the resort or summer vacationers to the Crested Butte area, proprietors within the Town also supply services to locals, which helps maintain the balanced lifestyle that permanent residents and second home owners have come to depend upon.

2. National and International Destination Resorts

National and international destination resorts appeal and cater to a significant "fly-in" market. In CBMR's case, this is due to a combination of the unique character and level of services offered by a combination of the mountain facilities, the base village, and the towns of Crested Butte and Mount Crested Butte. CBMR's guests expect abundant opportunities to participate in a variety of vacation experiences. This guest mindset stems from the expectation that their destination vacation will likely represent the apex of their skiing season, and hence the appetite for varied experiences will be great. In addition to an extended visit, guests may also hope to engage in the resort and community on a more regular or permanent basis (through a variety of real estate ownership options and part-time residency).

More mature mountain destination resorts are witnessing a trend toward non-skiing and riding wintertime guests accounting for a substantial percentage of the overall guest population. Furthermore, many of the guests who do ski and ride will not use the mountain facilities every day of their visit.

National and international destination resorts, including CBMR and the towns of Crested Butte and Mt. Crested Butte, offer a wide variety of lodging types, including hostels, motels, hotels, inns, bed and breakfast inns, townhomes, condominiums, and single family chalets. Visitor participation in the

real estate market has diversified substantially in the last two decades and includes ownership – either whole or fractional – as well as "usage," such as timeshare and club participation. Typically, where the mountain facility is a primary driver for visitation, lodging is clustered at or near the mountain's base area. Amenities usually include a wide variety of restaurants, lounges, shops, conference facilities, and perhaps theatres or concert venues, recreation centers (e.g., swimming, fitness equipment, and indoor courts), etc. Aside from Alpine skiing, recreational activities may include snow tubing, Nordic skiing, snowshoeing, sleigh rides, snowmobiling, mountain and road biking, walking, golf, tennis, horseback riding, angling, swimming, spa treatments, etc.

A mountain resort that evolves at the edge of an existing community, particularly one that has a tourism-based economy (such as Crested Butte) typically benefits from the significant infrastructure already in place (i.e., there is less need for a resort to develop infrastructure and create services at the base of the mountain). Some mountain facilities have evolved immediately adjacent to the town and hence have developed virtually none of their own destination services. However, the town of Mt. Crested Butte has indicated a desire for CBMR to develop additional services, and the resort intends to do so.

Destination skiers spend far more than local skiers on a per-visit basis, due to spending on lodging, and much greater trip-related spending on such items as lift tickets, rentals, ski school, and retail goods, etc. CBMR staff has conservatively estimated that destination visitors who arrive by air spend approximately $145 per person per day on ancillary items other than lodging and lift tickets in the local area.[8] Lodging and lift ticket expenditures are also significant in terms of economic benefit to the community, and rank among visitors' top expenditure categories.

B. Base Area Design

1. Overall Layout

Design of the base lands for a destination mountain resort involves establishing appropriate sizes and locations for the various elements that make up the development program. The complexion and interrelationship of these elements varies considerably depending on the type of resort and its intended character.

2. Architectural Theme

Resort architecture will continue to be influenced by the resort branding study commissioned by CBMR in August 2007. The built environment has a significant and immediate influence on how people perceive a resort and contributes to their overall experience. Resort architecture, therefore, must deliver on the resort's "brand dimensions" and "brand promise" (refer to Chapter 1, Section B for more information). CBMR's brand dimensions are: *Naturally Exhilarating Discovery, Dedicated to Preservation, Colorful, Expressive Small-town Spirit,* and *Genuine, Fulfilling Connections*; its brand promise is *Inspiring Your Passion for Adventure.*

Appendix A provides information on how the resort will use its branding study to guide future planning and architectural design and includes a Sensory Positioning Matrix and Exterior Architectural Sensory Mapping guide.

[8] "Airline passengers bring in big dollars," Crested Butte News, 4/25/08

C. MOUNTAIN DESIGN

1. Trail Design

a. *Slope Gradients and Terrain Breakdown*

Terrain ability level designations are based on slope gradients and terrain features associated with the varying ability terrain unique to each mountain. Ability level designations for this analysis are based on the maximum sustained gradient calculated for each trail. Short sections of a trail can be more or less steep without affecting the overall run designation, but a sustained steeper pitch may cause the trail to be classified with a higher difficulty rating. It is important to note that regardless of the slope gradient for a particular trail, if it feeds into a trail that is rated higher in difficulty, its ability level must be rated accordingly(e.g., *Kubler*, *Peanut*, and *Ruby Road*). Conversely, if a trail is fed only by trails of a higher ability level than the maximum slope of the trail would dictate, it also must be rated accordingly (e.g., *Yellow Brick Road* and *Silver Queen Road*). This explains some of the trail ratings in Table 4-2, in which some trails appear to be rated higher in ability level than their maximum grades indicate. The following slope gradients classify the skier difficulty level of mountain terrain.

- **0 to 8 percent (0 to 5 degrees):** too flat for skiing, but ideal for base area accommodations, and other support facility development.
- **8 to 25 percent (5 to 15 degrees):** ideal for Beginner to Novice skiers, and typically can support some types of development.
- **25 to 45 percent (15 to 25 degrees):** ideal for Intermediate skiers, and typically are too steep for development.
- **45 to 70 percent (25 to 35 degrees):** ideal for Advanced and Expert skiers, and pose intermittent avalanche hazards.
- **> 70 percent (>35 degrees):** too steep for all but the highest level of skiing. Areas of this high slope are typically allocated as Expert only and are closely managed by the ski area operator for avalanche control.

The distribution of terrain by skier ability level and slope gradient is compared with the market demand for each ability level. It is desirable for the available ski terrain to be capable of accommodating the full range of ability levels reasonably consistent with market demand. The market breakdown for the Rocky Mountain skier market is shown in Table 2-1, illustrating that Intermediate skiers comprise the bulk of market demand.

Table 2-1:
Rocky Mountain Skier Ability Breakdown

	Skier Ability	Percent of Skier Market
●	Beginner	5%
●	Novice	15%
■	Low Intermediate	25%
■	Intermediate	35%
◆	Advanced	15%
◆	Expert	5%

b. *Fall-Line*

Consistency of fall-line provides the best recreational skiing experience with the least amount of environmental disruption due to minimal earthwork required during trail construction. This analysis looks at the natural flow of skiers and skier routes that will service various skier ability levels from the top of the mountain to the base on a consistent basis.

c. *Trail Density*

The calculation of capacity for a ski area is based in part on the target number of skiers that can be accommodated, on average, on a typical acre of ski terrain at any one given time. The criteria for the range of trail densities for North American ski areas are listed below in Table 2-2.

Table 2-2:
Skier Density per Acre

Skier Ability	Trail Density
Beginner	25-40 skiers/acre
Novice	12-30 skiers/acre
Low Intermediate	8-25 skiers/acre
Intermediate	6-20 skiers/acre
Advanced	4-15 skiers/acre
Expert	2-10 skiers/acre
Alpine Bowls	0.5 skier/acre

These density figures account for the skiers and riders that are actually populating the trails and do not account for other guests who are either waiting in lift lines, riding the lifts, using the milling areas or using other support facilities. On an average day, approximately 40 percent of the total number of skiers and riders at the resort can be expected to be on the trails at any given time. Additionally, there are some areas on the mountain such as merge zones, convergence areas, lift milling areas, major circulation routes, and egress routes, which experience higher densities periodically during the ski day.

Recent trends in trail density design criteria tend to provide for a less crowded skiing experience. This is discussed in the following text.

d. *Developed Trail System*

A primary goal for the developed trail system design is to provide a broad variety of terrain to accommodate a resort's niche. Each trail should provide an interesting and challenging experience for skiers and riders within the ability level for which the trail is designed. Optimum trail widths vary depending upon topographic conditions and the caliber of the skier or rider being served. The trail network should provide the full range of ability levels consistent with each level's respective market demand.

A resort's developed (or formalized) terrain network consists of its named, defined, lift-serviced, maintained (groomed) runs at the resort. These runs represent the baseline of the terrain at any resort, as they are where the majority of guests ski, and they are usually the only place to ski during the early season, periods of poor or undesirable snow conditions, avalanche closures, and certain weather conditions. Typically, terrain outside of the developed network is primarily used by Advanced and Expert level skiers during periods of fresh powder, spring corn, and other desirable snow and weather conditions. As such, the developed terrain network represents a true reflection of acreage used by the average skier on a consistent basis, as well as the terrain used by virtually all skiers during the aforementioned conditions. Therefore, the total acreage of the terrain and the ability level breakdown must be sufficient to accommodate the full skier capacity of the resort.

Developed trail design has evolved from the style of ski trails that were built in the 1970s and 80s. Trails then were largely cut to consistent widths and graded heavily to provide uniform gradient both across the trail and down the fall-line. Skiing on these types of trails tends to become a repetitive feeling after a few runs. Modern ski trail design focuses more on working with the natural topography to incorporate variations in width and gradient throughout the length of the trail. Variations in gradient from one side of the trail to another are also important to create trails that feel different depending on where and how they are skied. Additionally, tree islands of varying size are left throughout the trails to make them more interesting and visually appealing. However, minimum spacing is always left between tree islands and the edges of runs to allow for grooming machines. It is the ability to be groomed that largely dictates whether or not a trail is considered to be "developed."

e. *Terrain Variety/Alternate Terrain*

Despite the importance of a diverse, interesting, and well-designed developed trail system, one of the more important factors in terms of a resort's ability to retain guests, both for longer durations of visitation and for repeat business, has proven to be variation in terrain. This means having developed runs of all ability levels –some groomed on a regular basis and some not– but also having a wide variety of alternate style terrain, such as mogul runs, bowl skiing, tree skiing, open park skiing, in-bounds backcountry style (hike-to) skiing, and terrain parks and pipes. At ski areas across the state and nation, there is a growing trend favoring these more natural, unstructured, "semi-backcountry" types of terrain – commonly referred to as off-piste.[9]

Demand is increasing for Alpine open bowls, glades, and other similar types of terrain. Skier and rider densities per acre are not necessarily applicable to these types of terrain, particularly as there

[9] "Piste" is a term commonly borrowed from French vernacular which refers to a groomed, maintained, defined ski trail. "Off-Piste" therefore refers to the ungroomed, less defined natural style of skiing commonly found in high Alpine areas and bowls.

often is not a defined edge to these areas like on a traditional trail. However, skiers and riders are attracted to these areas for the uncrowded feel, and the experience and challenge that it affords. In general, planning and design should provide these types of areas wherever topography allows. To provide the highest quality guest experience, resorts should offer some level of all of these terrain types to the extent practical. Even though some of these types of terrain only provide ski opportunities when conditions warrant, as stated, terrain variety is increasingly becoming a crucial factor in guests' decisions of ski destinations.

These types of experiences have inherently lower densities, and this is the type of terrain that CBMR is known for. CBMR is in an enviable and virtually unique position in the ski industry; where the natural topography within the SUP area favors this "off-piste" type of terrain over developed, formalized terrain. Whereas most ski areas struggle to identify in-bounds "off-piste" terrain to satisfy evolving expectations of Advanced and Expert skiers/riders, CBMR finds itself doing just the opposite – looking for more traditional terrain to offer its Intermediate and Advanced guests.

In summary, a broad range of terrain satisfies skiers and riders from Beginner through Expert ability levels within the natural topographic characteristics of the resort. This contributes to the appeal, and therefore, the ultimate success and viability of a destination resort.

f. Terrain Parks

Terrain parks are now considered a staple at day-use and destination resorts across the country. Regarding terrain park design, cross traffic should be minimized with good visibility provided in merge zones. Signage should clearly and simply delineate the difficulty of the various parks and features. This helps ensure that users are directed to the feature size most appropriate to their ability. Quality and diversity of features over quantity should be a goal.

2. Lift Design

The goal for lift design is to serve terrain in an efficient manner. A myriad of factors are taken into consideration in lift design and alignment, including: wind conditions, visual impacts, natural resources (e.g., wetlands), round-trip skiing, access needs, inter-connectability between other lifts and trails, and the need for circulation space at the lower and upper terminal sites. The vertical rise and length of a resort's lift network are important measures of its overall attractiveness and marketability.

3. Capacity Analysis and Design

The guest capacity of a mountain can be defined by a number of terms, including Comfortable Carrying Capacity (CCC), Skier Carrying Capacity (SCC) and/or Skiers-At-One-Time (SAOT). Whether CCC, SCC, or SAOT is used, it generally defines the capacity of the mountain's lift and trail system, representing the number of skiers the entire resort can comfortably accommodate on a daily basis and still guarantee a high-quality recreation experience. The capacity figure utilizes a complex formula based on a combination of the hourly uphill capacity of the resort's lift system, lift system load efficiency, rate of return skier utilization, and the total amount of time guests spend waiting in the lift line, riding the lift, and the vertical transport feet (VTF) demand of the skiers (as determined by trail acreage, slope percentage, and acceptable skier densities).[10] As discussed below,

[10] CBMR Mountain Improvements Plan, International Alpine Design, March 2006

the accurate estimation of the capacity of a mountain is a complex issue and is the single most important planning criterion for the resort.

The capacity of the portion of the resort that represents the skiing (i.e., the lift and terrain network) can be accurately calculated. This calculated capacity represents the optimum number of people the resort can carry per day, and as such, is the number to which the remainder of the resort should be balanced. All other aspects of the resort should be balanced to that capacity, including: skier service facilities, restaurant space and seating capacity, on-mountain facilities, parking capacity, utility infrastructure including wastewater and domestic water supply capacities, access to the resort (roads, shuttles, lodging, etc.), and all other components. All too often, the capacity of one or more of these components is lower than the capacity of the mountain (CCC). In this situation, that specific component effectively acts as a limiting factor and usually ends up restricting the overall resort from reaching its optimal utilization. Analysis of the overall resort balance will identify these limiting factors. Conversely, if one or more of these support components has a capacity that is significantly higher than the CCC, which can indicate an inefficiency in the resort operation.

Note that it is expected that a resort will experience peak day visitation up to 25 percent above its capacity. These peak days typically occur during holiday periods, when there is a general expectation of crowded-feeling situations. It is not recommended to exceed the CCC threshold on a regular basis, as that will cause a decline in the guest experience and almost invariably will result in a decline in visitation.

D. Balance of Facilities

The mountain master planning process emphasizes the importance of balancing recreational facility development. The sizes of the various skier service functions are designed to match the guest capacity of the mountain. The future development of a ski area should be designed and coordinated to maintain a balance between accommodating skier/rider needs, capacity (lifts and trails), and the supporting equipment and facilities (e.g., grooming machines, day lodge services and facilities, utility infrastructure, access, and parking).

E. CBMR's Environmental & Sustainable Practices

As a member of the National Ski Area Association (NSAA) Sustainable Slopes Charter, Triple Peaks has purchased Renewable Energy Credits (REC's) in the past, offsetting 100 percent of its ski operations for all three ski areas: CBMR, Okemo Mountain Resort and Mount Sunapee Resort. Recently, CBMR has been participating in a valley-wide Energy Action Plan to establish goals to reduce the overall carbon footprint in the Gunnison Valley. CBMR is the largest private business contributor to the Office for Resource Efficiency (ORE) – a local non-profit dedicated to reducing energy use and conservation in the Gunnison Valley.

CBMR strives to continue upgrading and increasing energy and waste efficiency in existing facilities and operations. There is a focus on recycling within CBMR's operations, while facilitating partnerships with local municipalities and private businesses to make recycling successful for the entire Gunnison Valley. CBMR properties have recently gained certification as a "Green Eco-Leaf" program for sustainable practices in the Hotel Industry. CBMR is also the first ski area in the United States to purchase two electric shuttle vehicles for guests to transfer between the day-skier parking area to the base area.

CBMR recently completed six units of deed restricted affordable housing in Mt. Crested Butte. These buildings have been designed to exceed the town's energy code by 50 percent and incorporate solar thermal hot water, passive solar and high energy efficiency building standards. This is a concept that can be built upon and improved; with each new building that is constructed, CBMR can fine tune the design and building process with the intent of supporting new innovative local green businesses and contractors.

Energy efficiency is another priority for CBMR. This ranges from replacing incandescent light bulbs with compact fluorescent light bulbs (CFLs), to educating employees about energy efficiency in everyday operations and conducting internal energy audits of buildings and lifts. On a larger scale, CBMR is currently investigating a new energy-saving technology that can potentially reduce energy consumption in ski lifts by 15 to 25 percent. If successful, this could serve as a model for other ski areas to follow.

F. Applicable Forest Service Policy & Direction

The Forest Service nationally supports the recreational opportunities that private ski areas provide. The relationship between the Forest Service and ski industry is defined in a memorandum of understanding (MOU) that was reaffirmed in 2002 (and dating back to 1996).[11] Per the MOU, the Forest Service and NSAA work in partnership to achieve common goals of managing and promoting active participation in Alpine recreation and sports by all people.

When the Forest Service reissued CBMR's SUP on March 1, 2004, it retained Snodgrass Mountain within the permit area.[12] CBMR's SUP was issued under the National Forest Ski Area Permit Act of 1986, 16 U.S.C. § 497b. The Act authorizes the Forest Service to issue term ski area permits "...for the use and occupancy of suitable lands within the National Forest System for Nordic and Alpine skiing operations and purposes."[13] The Act states that a permit "shall encompass such acreage as the Secretary [of Agriculture] determines sufficient and appropriate to accommodate the permittee's needs for ski operations and appropriate ancillary facilities."[14]

The basis for determining the types of activities and facilities that are appropriate at winter sports resorts that are permitted to operate on NFS lands is contained in federal laws and Forest Service policy directives, and the GMUG Forest Plan. They also provide the Forest Service with authority and direction pertaining to ski area management on NFS lands.

CBMR and the Forest Service are connected through a committed long-term partnership to provide quality recreational opportunities on NFS lands. By satisfying its current and future visitors, CBMR will remain a healthy and competitive destination ski resort within its market niche. This, in turn, would help fulfill Forest Service policy, objectives, and direction for ski area management on the GMUG and the vitality of the local economy.

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[11] Master Service-Wide Memorandum of Understanding between the National Ski Areas Association and the USDA Forest Service. 02-SU-11132001-185

[12] Ski Area Term Special Use Permit for Crested Butte, Authorization ID: GUN155, Expiration Date: March 1, 2044

[13] 16 U.S.C. § 497b(b)

[14] 16 U.S.C. § 497b(b)(3)

1. Laws and Policy Directives

This Resort MDP provides for high quality recreation on NFS lands and contributes to the economic and operational viability of CBMR and the communities that depend on the resort. As such, this helps the Forest Service achieve the following legal and policy objectives:

- The Multiple-Use Sustained-Yield Act of 1960 mandates that the Forest Service manage National Forest System lands for "*outdoor recreation*, range, timber, watershed, and wildlife and fish purposes." 16 U.S.C. § 528 (emphasis added).

- The National Forest Management Act (NFMA) requires the Forest Service to develop Forest Plans that provide for multiple uses of forests, including "coordination of *outdoor recreation*, range, timber, watershed, wildlife and fish, and wilderness." 16 U.S.C. § 1604(e)(1) (emphasis added).

- The National Forest Ski Area Permit Act of 1986 specifically endorses developed winter recreation on National Forest System lands and authorizes the Forest Service to issue special use permits like that issued at CBMR that encompasses "such acreage" as the Forest Service "determines sufficient and appropriate to accommodate the permittee's needs for ski operations and appropriate ancillary facilities." 16 U.S.C. § 497b(b)(3).

- The Service-Wide Memorandum of Understanding Between National Ski Areas Association and United States Department of Agriculture, Forest Service, FS Agreement No. 07-SU-11132424-246, recognizes "that ski areas can help meet increased demand for recreational opportunities in a managed setting." The Forest Service stated its commitment to "evaluate four season recreation at ski areas to improve economic stability and enhance outdoor recreation opportunities during policy formation, master development planning, and project plans."

2. GMUG Land and Resource Management Plan

a. 1983 GMUG Land and Resource Management Plan

The GMUG Land and Resource Management Plan (Forest Plan) was approved in 1983 and amended in 1991. The 1983 Forest Plan provides current direction for activities across the GMUG by setting forth management goals, objectives, and standards and guidelines that are general requirements for the administration of NFS lands.

The general objectives of the 1983 Forest Plan are to provide for multiple use and sustained yield of products, services, and goods in a way that maximizes long-term net public benefits in an environmentally sound manner. CBMR's Resort MDP is consistent with these management objectives.

The 1983 Forest Plan classifies NFS lands into management areas and provides the basic framework for the management of these lands and resources. The 1983 Forest Plan designates the CBMR SUP area (including Snodgrass Mountain) as Management Area (MA) 1B. The management emphasis of MA 1B provides for downhill skiing on existing sites and maintains selected inventoried sites for future downhill skiing recreation opportunities. Ski area development and use is integrated with

other resource management to provide healthy tree stands, vegetative diversity, forage production for wildlife and livestock, and opportunities for non-motorized recreation.

NFS lands allocated to Management Area 1B make up approximately 1 percent, or 37,000 acres in total, of the 2,967,000 acres across the GMUG.[15] CBMR's 4,350-acre SUP area comprises approximately 0.0015 percent of the GMUG.

Historically, downhill skiing has been a recreation opportunity provided to the general public on National Forest System lands through the administration of Special Use Permits. Expansion of existing ski areas is appropriate and consistent with the concepts of multiple-use management and recreational objectives of the GMUG.[16] Although it is now 26 years old, the following references from the 1983 Forest Plan reinforce that CBMR plays a positive role in providing recreational opportunities on the GMUG:

> *The Crested Butte Human Resource Unit ...was revived in 1964 with the development of a downhill ski area. This has established a new economic base for the HRU. By the early 1970's it brought new prosperity to Crested Butte. The resort community of Mount Crested Butte has formed at the Crested Butte Ski Area.*[17]
>
> *Lifestyle: Ranching and tourism are dependent of National Forest System land. Summer recreation emphasized fishing, boating, picnicking, and camping. Four wheel-drives are popular. Downhill skiing is centered at Crested Butte....The water resource is important for irrigation, snowmaking, and domestic use.*[18]
>
> *Social Organization: The Crested Butte HRU is a rural unit centered around the ski area.*[19]

The 1983 Forest Plan states that the Forest Service should meet the need and demand for additional downhill skiing opportunities at CBMR, including through expansion onto Snodgrass Mountain:

> *Recreation. Recreation is a major Forest use. An estimated 2.2 million recreation visitor days (RVD's) were recorded in 1980. This has increased to 2.9 MMRVD's by 1989. The 1981 Colorado Outdoor Recreation Plan (SCORP) identified three recreation activities that the Forest Service in the Region 10 Planning Area should provide additional opportunities for; they are picnicking, four-wheeling and downhill skiing.*[20]
>
> *Planning Question 1. There is a need for adequate up-to-date developed recreation facilities for winter and summer use.*[21]
>
> *Demand for downhill skiing opportunities can be met by expanding existing sites. Expansion will be permitted to meet demand. Crested Butte, Powderhorn, and Telluride have approved master plans. The Crested Butte master plan includes expansion onto Snodgrass.*[22]

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[15] Ibid. at Part B 22
[16] 1983 Forest Plan at II-22, II-75, IV-118, IV-120
[17] 1983 Forest Plan at II-14
[18] Ibid.
[19] Ibid.
[20] Ibid. at II-22
[21] Ibid. at II-74

Forest Direction, Goals. The following goals are concise statements describing a desired condition to be achieved sometime in the future.

Recreation: Meet demand for downhill skiing.[23]

The Forest Service prepared an environmental impact statement prior to adopting the 1983 Forest Plan. The alternatives identified in that environmental impact statement included expansion of CBMR onto Snodgrass Mountain.

Social Effects. The Forest has two destination ski areas, Crested Butte and Telluride and one day-use ski area, Powderhorn. Monarch ski area, located on the Pike and San Isabel National Forest, has potential for expansion onto the Forest. The two destination ski areas are orientated to tourism. The alternatives which increase or decrease grazing and logging would have minor effects on the overall economy of these areas. All alternatives allow existing ski areas to expand.[24]

Social Effects. All alternatives allow Crested Butte ski area expansion onto Snodgrass Mountain which is within the existing permit area.[25]

b. 2006 Revised GMUG Forest Plan

The National Forest Management Act of 1976 requires Forest Plans to be revised every 15 years so that Forest Plans are consistent with current science, as well as consider comments from the community. Therefore, the GMUG released a draft revised Forest Plan in July 2006. In 2007 Northern California U.S. District Court Judge Phyllis J. Hamilton ruled that the new forest planning regulations (the 2005 Planning Rule) violated the Administrative Procedures Act (APA), the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA). The Forest Service was enjoined from implementing the 2005 Planning Rule.

The USDA and its attorneys are reviewing the Court's injunction to determine how it affects the ongoing planning efforts for those national forests who are involved in forest plan revision.

Although, as of the release of this Resort MDP, the 1983 Forest Plan provides direction for activities within CBMR's SUP area; however, CBMR operations on NFS lands will need to be consistent with the management direction provided in the forthcoming Forest Plan Revision. Per the Draft Forest Plan Revision, CBMR's Main Mountain and Snodgrass Mountain are retained for developed skiing in Management Area 8 – Permanently Developed Areas (also referred to as "Theme 8").

The 2006 Forest Plan provides the following definition of Management Area 8:

Desired Conditions: Theme 8 areas comprise a very small portion of the Plan Area, at approximately one percent. Ecological conditions are likely to be permanently changed by human activities to the degree that landscape appearance and ecological processes are substantially altered. These areas are generally small in scale or linear in configuration. Ecological values are provided to

[22] Ibid. at II-75
[23] Ibid. at III-3
[24] Final EIS, 1983 Forest Plan at IV-118
[25] Ibid. at IV-120

the extent possible while protecting the public and meeting primary use objectives. Areas such as mine-related infrastructure, utility corridors, ski resorts, communication sites, and other concentrated uses are included in this Theme. The intensive uses of these small areas produces relatively large socioeconomic effects. Motorized transportation is common.

Management objective within these areas generally feature a single use or program, such as utility corridors, ski resorts (existing and potential), or mineral development (existing and potential).[26]

Per the Forest Plan Revision, downhill skiing is the third most participated in activity on the GMUG with a 27 percent participation rate. The GMUG is home to three ski areas – CBMR, Telluride Ski & Golf Resort and Powderhorn Resort. Although ski resorts make up well under 0.01 percent of land within the GMUG, downhill skiing contributes substantially to the socioeconomics of the GMUG and communities surrounding each of the three resorts on the Forest.

The 2006 Forest Plan describes the desired conditions for a ski area:

Ski areas are developed, maintained and operated by the private sector, in cooperation with the Forest Service, to provide opportunities for intensively managed outdoor recreation activities during all seasons of the year. Winter sports activities and other intensively managed outdoor recreation opportunities are provided for large numbers of regional, national and international visitors in developed settings. Areas are characterized by a vegetation mosaic that includes natural and manmade grassy openings intermixed with forested or partially forested areas and rocky outcroppings... Facilities are directly related to the operation and support of skiing activities... New trail developments are generally for non-motorized recreation uses.

The Forest Plan Revision more fully articulates the relationship between the management of the GMUG and the economic sustainability of the communities that are tied to it. Through the Resort MDP, CBMR will achieve the objective stated in the Forest Plan Revision of promoting economically sustainable uses of NFS lands. Section C.1. Community Cultures, Values, and Sense-of-Place provides the following:

Desired Conditions: The concept of sustainability provides that "consistent with MUSYA, the overall goal of managing the NFS is to sustain in perpetuity the productivity of the land and the multiple uses of its renewable resources in a manner that best meets the needs of the American people...the relationship among social, economic, and ecological sustainability is interrelated and interdependent (FR Vol. 70, No. 3, 1046, 01.05.2005)."[27]

GMUG officials recognize, support, and work to sustain the strong economic ties between the goods and services the Forest provides, and the vitality and stability of communities and local governments.[28]

Recreational uses on the GMUG play an important role in the sustainability of the economy in the East River Valley. With the shift from mining to tourism in the 1950s and 1960s, the economies of communities in the East River Valley rely upon a well run ski resort that provides for the demands

[26] 2006 Plan at Part B 29
[27] Ibid. at Part C 32
[28] Ibid. at Part C 33

and needs of the skiing public. It is the lands of the GMUG that provide the natural resources necessary to meet these demands and needs, and these lands support a sustainable recreation and tourism based economy. The upgrading plan includes integrating Snodgrass Mountain, and the diversity of terrain that it offers, into CBMR's developed lift and trail network. This would help promote economically sustainable uses of NFS lands and support the economic viability of CBMR and surrounding communities.

3. Visual Management System and the Built Environment Image Guide

a. *Visual Management System*

The goal of landscape management on all NFS lands is to manage for the highest possible visual quality, commensurate with other appropriate public uses, costs, and benefits. The Forest Service began operating under the guidance of the Visual Management System (VMS) for inventorying, evaluating, and managing scenic resources on NFS lands in the mid-1970s. The VMS is defined in National Forest Landscape Management, Volume 2.[29] The VMS provides a system for measuring the inherent scenic quality of any forest area, as well as a measurement of the degree of concern for that quality. It also establishes objectives for alteration of the visual resource.

In 1995 the Scenery Management System (SMS) was introduced to inventory and analyze aesthetic values on NFS lands – replacing the VMS as new forest plans are adopted across the National Forest System. However, the SMS has not been adopted by all national forests, and, until such time that it is, the VMS will continue to be used for inventorying, evaluating, and managing scenic resources on the GMUG.

Per the 1983 Forest Plan, in Management Prescription 1B:

> *Visual resources are managed so that the character is one of forested areas interspersed with openings of varying widths and shapes. Facilities may dominate, but harmonize and blend with the natural setting. Harvest methods in forested areas between ski runs is clearcutting in aspen, and lodgepole pine, shelterwood in interior ponderosa pine and mixed conifers, and group selection in Engelmann spruce-subalpine fir, or as specified in the permittee's site-specific Master Development Plan.*

Visual Quality Objectives

Per the VMS, NFS lands are assigned Visual Quality Objectives (VQOs) that define the degree of acceptable change to the visual resource from human created management activities. VQOs are based on the physical characteristics of the land and the sensitivity of the landscape setting as viewed by humans. They define how the landscape will be managed, the level of acceptable modification permitted in the area, and under what circumstances modification may be allowed. VQOs range from *Preservation* (untouched environment) to *Maximum Modification* (major disturbance).

General visual resource management in Management Area 1B is to "emphasize visually appealing landscapes (vista openings, rock outcroppings, diversity of vegetation, etc.). The standards and guidelines for visual resources include: "do not allow negative deviation from the adopted VQO of modification."

[29] USDA Forest Service, 1974

The Modification VQO is defined as:

> *Management activities may visually dominate the original characteristic landscape. However, activities of vegetation and land form alteration must borrow from naturally established form, line, color, or texture so completely and at such a scale that their visual characteristics are those of natural occurrences within the surrounding area of character type. Activities which are predominately introduction of facilities such as buildings, signs, roads, etc., should borrow naturally established form, line, color, and texture so completely and at such scale that its visual characteristics are compatible with the natural surroundings.*

b. Built Environment Image Guide

In concept, the Built Environment Image Guide (BEIG) is designed to ensure thoughtful design and management of the built environment, which includes: administrative and recreation structures, landscape structures, site furnishing, structures on roads and trails, and signs installed or operated by the Forest Service, its cooperators, and its permittees. It focuses on the image, appearance, and structural character of facilities. Three core contexts are stressed throughout the BEIG: (1) environmental; (2) cultural; and (3) economic.

The BEIG provides general guidance regarding the image, aesthetics, and overall quality of recreational and administrative structures on NFS lands, but it does not contain enforceable "standards" pertaining to aesthetic quality as would be found in a typical Forest Plan. As indicated on pages 250-252 of the BEIG, specific direction for the design of administrative and recreational facilities is found in the Forest Service Manual (FSM) and Forest Service Handbooks (FSH).

The environmental, cultural, and economic contexts with which the BEIG is based are important considerations in development of structural facilities (not including lift terminals) within the CBMR SUP area. Furthermore, there are some elements of the BEIG within the "Rocky Mountain Province" section (pages 159-178) that should be taken into account when designing and constructing facilities on NFS lands.

4. Recreation Opportunity Spectrum

The Recreation Opportunity Spectrum (ROS) provides a framework for stratifying and defining classes of outdoor recreation environments, activities, and experience opportunities. The settings, activities, and opportunities for obtaining experiences have been arranged along a continuum or spectrum divided into six classes:[30]

1. Primitive
2. Semi-Primitive Non-Motorized
3. Semi-Primitive Motorized
4. Roaded Natural
5. Rural
6. Urban

[30] USDA Forest Service, 1986 ROS Handbook

The 1983 Forest Plan identifies the 4,350-acre CBMR SUP area as having a ROS setting of Semi-Primitive Non-Motorized (SPNM). The SPNM setting characterization is described in the 1986 ROS Book as:

> *Area is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is not present.*

The revised GMUG Forest Plan indicates that the ROS for the CBMR SUP area will be Roaded Natural Non-Motorized. The setting characterization is:

> *Area is characterized by predominantly natural-appearing environments with moderate evidences of the sights and sounds of man. Such evidences usually harmonize with the natural environment. Interaction between users may be low to moderate, but with evidence of other user prevalent Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.*

5. Inventoried Roadless Areas

a. Roadless Regulation Framework

In 1972 the Forest Service began identifying roadless areas for Wilderness consideration through the Roadless Area Review and Evaluation (RARE I). In 1979 the agency completed RARE II, a more extensive national inventory of roadless areas. The RARE II study evaluated approximately 62 million acres and recommended 15 million acres for Wilderness designation, 12 million acres as potential Wilderness requiring further study, and 36 million acres for non-Wilderness uses.

Roadless area management has been one of the primary issues during the GMUG's Forest Plan revision process. There continues to be legal and regulatory uncertainty regarding this issue. As the GMUG proceeds through Forest Plan revision process, this issue will continue to be addressed so that roadless areas on the Forest are managed consistent with prevailing direction. Thus, the extent to which the upgrading plan presented in Chapter 6 of this Resort MDP is impacted by roadless issues will be determined through site-specific NEPA analysis according to the prevailing management direction.

b. Gothic Roadless Area

The Forest Service identified the Gothic Roadless Area in the GMUG as an inventoried roadless area in the environmental impact statement for the Agency's 2001 Roadless Area Regulations. The 6,200-acre Gothic Inventoried Roadless Area (IRA) is located four miles north of the town of Crested Butte and east of the Gothic Town site in Gunnison County. This area lies between Forest System Road (FSR) 317 (Scholfield Pass Road) to the east and FSR 811 (Washington Gulch) to the west. The area includes Gothic Mountain (12,625') and Snodgrass Mountain (11,145'). The Snodgrass Mountain portion of CBMR's SUP area is therefore within the IRA. This area is allocated to Management Area 1B in the GMUG Forest Plan. The IRA is separated from the nearest wilderness lands, the Maroon Bells/Snowmass Wilderness, by roads. The Snodgrass Mountain portion is dominated by mixed aspen, lodgepole pine, subalpine fir and Engelmann spruce. The Gothic Mountain and the northern end are primarily alpine habitat. Spruce forests dominate in the

land between Gothic Mountain and the alpine habitat. Riparian habitats occur in the East River drainage.

6. Accessibility to Public Lands

In June 2005 the Forest Service released the Accessibility Guidebook for Ski Areas Operating on Public Lands, 2005 Update. This guidebook provides information for ski areas authorized under SUPs to work with the Forest Service in providing equal opportunities for all people, including those with disabilities. CBMR will ensure consistency with this guidebook for future development projects occurring on public lands.

Ski areas operating under special-use authorization from the Forest Service are required to comply with both the Americans with Disabilities Act of 1990 (ADA) and Section 504 of the Rehabilitation Act of 1973 (Section 504). The ADA applies because CBMR operates as a "public accommodation;" moreover, CBMR is a business open to the public. Section 504 applies because CBMR operates under a SUP authorized by the Forest Service. Through the SUP, the ski area agrees to abide by these and all other laws, regulations, and policies of the federal government.

Significant legislation that preceded the ADA includes the Architectural Barriers Act (ABA) of 1968 and the Rehabilitation Act of 1973, as amended. ABA was the first measure passed by Congress to ensure access to facilities. The ABA requires that all facilities built, bought, or leased by or for a Federal agency be accessible. Section 504 of the Rehabilitation Act states: "No otherwise qualified individual with a disability in the United States shall, solely by reason of his disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance or under any program or activity conducted by any Executive Agency."

CBMR currently complies with this legislation through their active involvement in assisting disabled guests with skiing and other recreation activities. Through future site-specific NEPA and design development reviews, CBMR will work closely with the Forest Service to ensure accessibility measures are taken to provide equal opportunity to all users of public lands.

CRESTED BUTTE

MOUNTAIN RESORT

2009 RESORT MASTER DEVELOPMENT PLAN

3. SITE INVENTORY

A. PHYSICAL RESOURCES

1. Topography

a. *Main Mountain*

The Main Mountain elevation ranges from 9,127 feet at the base of the East River Lift area to 9,375 feet at the base area to 11,866 at the highest lift terminal (the High Lift) to 12,162 feet at the summit. CBMR currently offers 2,739 vertical feet of lift-served ski terrain and an additional 296 feet of hike-to ski terrain on the Main Mountain, for an overall vertical drop of 3,035 feet. Slope gradients change dramatically with changes in elevation. Lower portions of the mountain tend to offer lower slope gradient terrain, while the upper mountain consists of increasingly steeper terrain. The topographic character of the mountain provides a natural separation of ability level related slope gradients. The front face of the mountain, served by the Silver Queen, Twister and High lifts, is known for the extreme chutes (including *Banana Funnel* and *The Headwall*), open bowl skiing, tree skiing, and a number of challenging groomed runs. Moving eastward, lift-served terrain becomes gentler. At the lower elevations, terrain served by Red Lady Express is oriented toward Novice and Low Intermediate ability level skiers. Above and to the east of Red Lady Express the terrain is strongly oriented toward the Intermediate skier and is used as a "cruising" area. Along the far eastern portion of the SUP area, the terrain steepens radically, and via the North Face Lift, affords additional extreme limits terrain.

b. *Snodgrass Mountain*

The southeast/northwest orientation of the Snodgrass Mountain portion of the SUP area enables the topography of Snodgrass Mountain to be broken down into two geographical sections. The western portion (or backside) of Snodgrass Mountain has an elevation range between 9,400 feet at the base and 11,145 feet at the summit. The topography of this area is composed of a consistent slope, with minimal protruding ridges. The eastern face (or frontside) of the Snodgrass Mountain portion of the SUP area has an elevation range between 9,600 feet at the base to 11,145 feet at the summit. The topography of this area is defined by a shallow bowl shape with a protruding ridge running down the spine of the bowl area.

2. Slope Gradients

The Slope Analysis for the Main Mountain and Snodgrass Mountain is shown in Figure 3.0. The full range of slope gradients has been color-coded in order to depict the primary skill classifications for skiers. Chapter 2 discusses terrain classifications in relation to slope gradients.

3. Aspect

Slope aspect plays an important role in snow quality and retention at a developed ski area. A variety of exposures present opportunities for a range of slope aspects that can respond to the changes in sun angle, temperature, wind direction, and shadows throughout the day. Typical constraints in relation to the various angles of exposure are discussed in the following text. An Aspect Analysis is provided in Figure 3.1.

- **North-facing** - ideal for snow retention, minimal wind scour, minimal sun exposure
- **Northeast-facing** - ideal for snow retention, minimal wind scour, minimal sun exposure
- **East-facing** - good for snow retention, some wind scour, morning sun exposure
- **Southeast-facing** - fair for snow retention, moderate wind scour, morning and early afternoon sun exposure
- **South-facing** - at lower elevations, poor for snow retention, moderate wind scour, full sun exposure
- **Southwest-facing** - poor for snow retention, high wind scour, full sun exposure
- **West-facing** - fair for snow retention, high wind scour, late morning and afternoon sun exposure
- **Northwest-facing** - good for snow retention, some wind scour, afternoon sun exposure

B. Special Use Permit Boundary and Land Ownership

CBMR's SUP was re-established by the GMUG when the permit boundary was adjusted in 1998. In 2004 the multiple SUPs that covered CBMR's on-mountain operations (i.e., separate SUPs were issued for trails, lifts, and snowmaking) were formally consolidated upon the resort's change of ownership in 2004. The entire CBMR SUP boundary encompasses approximately 4,350 acres of public land on the GMUG National Forests. Of this, approximately 2,890 acres are allocated to the existing, developed Main Mountain, and approximately 1,460 acres are allocated to the undeveloped Snodgrass Mountain. The full extent of the existing SUP boundary is depicted on Figures 1.0B and 6.0.

Forest Service (i.e., administrative) and public access is provided to the Main Mountain via the Prospect Drive Road Easement. This Easement is a condition of the Upper Gunnison Basin Land Exchange Record of Decision signed by the Regional Forester on June 16, 1998.

CBMR plans on providing a similar easement to the Snodgrass Mountain portion of the SUP area for Forest Service and public access.

C. Environmental Reconnaissance at Snodgrass Mountain

Natural resources across the Main Mountain have been identified in numerous environmental analyses in the past. Most recently, the Crested Butte Main Mountain Improvements Plan Environmental Assessment (2007) analyzed the full range of resources, including: watershed, geology, aquatic habitat, wetlands, wildlife, vegetation, recreation and visual resources.

At Snodgrass Mountain, *preliminary* surveys have been conducted for numerous resources, including: geology, vegetation, wetlands, hydrology, and archaeology. These resource surveys are summarized in the following text. While the upgrade plan for Snodgrass Mountain took this information into consideration (specifically, geotechnical constraints), it is important to note that the purpose of these preliminary surveys was to gain a basic understanding of the natural resources on Snodgrass

Mountain. In regards to any proposed projects and their potential impacts on the biological and human environment, site-specific and detailed analyses for each resource will be conducted in the ensuing National Environmental Policy Act (NEPA) process.

1. Geology

In an effort to obtain the most comprehensive information and provide the best possible recreation experience, CBMR and the Forest Service commissioned numerous studies to better understand the geological characteristics of Snodgrass Mountain, and the project area's ability to host lift-served skiing. Figure 3.2 includes information on geotechnical and avalanche hazards. Note: the geotechnical and avalanche hazard information presented in Figure 3.2 is not intended to be exhaustive. It is meant to convey some general information on Snodgrass Mountain that was used by CBMR, the GMUG, and mountain planners in identifying conceptual locations for lift and trail alignments. Additional information on geology is discussed in the following text, and will be included in a site-specific NEPA analysis at such time that the upgrading plan is formally proposed to the GMUG.

A study in 1995 by Resource Consultants and Engineers (RCE) concluded that development of Snodgrass Mountain for lift-served skiing, especially snowmaking operations, has the potential to reactivate currently inactive landslides on the southeast slope in the absence of adequate mitigation measures. A second study to verify RCE's findings took place in 1996 by R.J. Irish. This study found that although historic geologic landslides are evident on Snodgrass Mountain, none should preclude development of the project area as there is no evidence of recent landslide reactivation (i.e., no open ground cracks or fresh internal scarps) on the broad area RCE identifies as the southeast face of Snodgrass Mountain.

As a result of differing interpretations by RCE & R.J. Irish, the Forest Service commissioned a geologic hazards study by the U.S. Geological Survey (USGS) in 1996. The goal of this study was to review the previous reports and evaluate the stability of the southeast slope of Snodgrass Mountain.[31] The USGS was to consider the impact of water added to the southeast slope as a result of snowmaking operations, and assess the potential hazards caused by the implementation of ski area infrastructure as well as commercial and residential development at the foot of the mountain. The USGS concluded that, except for localized movement, the landslide areas identified on the southeast face of Snodgrass Mountain do not appear to be moving at the present time or to have moved in the past several decades.[32]

a. 2006 Technical Report: Snodgrass Mountain Geologic Hazards and Assessment of Potential Effects of Ski Area Development on Slope Stability

In 2006 the Snodgrass Mountain Geologic Hazards and Assessment of Potential Effects of Ski Area Development on Slope Stability was completed internally by the Forest Service. The purpose of this Technical Report was to classify Snodgrass Mountain according to Geologic Hazard Units (GHU's) having generally similar characteristics, to assess the potential effects of typical ski area activities on slope stability, and to offer possible mitigation measures to minimize these impacts. The intent of this report was to present information that will be useful to the GMUG in deciding whether to

[31] Baum, 1996 p. 1
[32] Ibid.

proceed with an environmental analysis of development of Snodgrass Mountain for lift-served skiing and riding.

b. *2008 Technical Report: Geology and Slope Stability of the Snodgrass Mountain Ski Area*

In the interest of creating a ski area design that would not cause further movement of the mountain, CBMR commissioned Geo-Haz Consulting, Inc. (Geo-Haz) to inspect the areas of potential geologic concern documented in the Forest Service study and map landslides in sufficient detail. The purpose of this study was to make quantitative calculations of the current and future slope stability of the landslide areas on Snodgrass Mountain, within and adjacent to the SUP area. To accomplish this, Geo-Haz analyzed computer slope stability models of seven selected landslides in the areas of intensive development on the southeastern flank landslide complex.

In their report, Geology and Slope Stability of the Snodgrass Mountain Ski Area, Geo-Haz concluded that analyzed landslides on the southeast side of Snodgrass Mountain would not be reactivated by the development actions; however, some mitigation would be necessary. Landslides on low to moderate slope angles show considerable stability and would not require mitigation. Landslides on steeper slopes (greater than 17°) and in the East Slide would continue to exhibit positive stability; however, reactivation values would decrease closer to the minimum threshold of 1.0. A variety of mitigation measures were recommended on steep slopes and the East Slide to increase slope stability as ski area infrastructure is developed. Recommended mitigation measures included horizontal drains to decrease groundwater pressure, surface water management through water bars/ditches, and groundwater management through drains. The Geo-Haz report further concluded that changes made to trail and snowmaking layout conformed to mountain wide mitigation measures recommended by USFS that, no "structures, roads, buried utilities, and lift terminals [will be sited] on active (class 1) landslides." In addition, the Snodgrass Mountain design was considered by Geo-Haz to have additional hazard avoidance that goes three levels beyond the USFS mountain-wide mitigation measures.

c. *2009 Review of Recent Slope Stability Studies at Snodgrass Mountain, Colorado*

At the request of the Forest Service, the USGS reviewed the 2006 and 2008 geotechnical reports for adequacy in identifying and characterizing existing and potential slope stability on Snodgrass Mountain. This report concludes that there is potential for reactivation of certain landslides on Snodgrass Mountain. Additionally, the USGS questions whether the mitigation measures contained in the 2008 report are adequate for improving slope stability at the site. Depending on the Forest Service threshold for a "small landslide with minor chance of injury or moderate chance of resource damage," further calculations and field tests are suggested to measure future slope stability.

Based on this review the Forest Supervisor identified two areas (identified on Figure 3.2 as Geologic Hazard Avoidance Areas) not suitable for ski area development because the geologic hazards in those areas "exceeded [the Forest Service] tolerance for risk" and because of the uncertainty of the

success of mitigation measures. Mitigation measures for other areas of geologic concern would be required.[33] This concept is discussed in the upgrading plan in Chapter 6.

d. Project Design Criteria

The two slope stability analyses performed by the Forest Service and Geo-Haz Consulting identified site specific project design criteria (PDCs) that are designed to reduce impacts to geologic resources on Snodgrass Mountain. Relevant PDCs are listed here; the Forest Service and Geo-Haz reports contain additional, detailed information.

- Horizontal drains, approximately 350 feet long should be utilized in the Western Cross-Section to decrease groundwater pore pressures on the steep slope band.
- A ditch should be constructed to carrying snowmelt runoff from Chicken Bone meadow to Snodgrass Road.
- A low debris flow deflection berm should be constructed at the base of the steep slope band if lift terminals are to be located below the Old Earthflow.
- Utilize an array of drains drilled northward from the base of the steep slope band in earthflows with low estimated Factors of Safety.
- Two arrays of horizontal drains, approximately 400 feet long, should be drilled northward from the base of the steep slope band.

2. Vegetation

Vegetation data was compiled based on information from the Forest Service, CBMR and other regional resources. Based on these resources, data indicates that the mountainous topography of the Crested Butte area, including Snodgrass Mountain, has contributed to producing diverse vegetation patterns. Vegetation within the Snodgrass Mountain project area is characterized in terms of natural and managed communities, both of which are influenced by natural events, such as climate, temperature, and precipitation, as well as human-caused events such as recreation and fire suppression. As such, the natural vegetation is varied and characterized as Woodlands and Grasslands of Sub-Alpine Areas. Vegetation or habitat cover types within the SUP area include mixed conifer, spruce/fir, lodgepole pine, aspen; meadow; shrubs/grasslands; scree/talus/rocky outcrops; and willow/riparian.

3. Wetlands

Snodgrass Mountain's hydrology is significantly influenced by local geology. Due to high rates of infiltration the upper portion of the mountain does not sustain perennial streams. Similarly, wetland communities are generally not found above the 10,100-foot elevation. Below this elevation the availability of near surface and perennial surface water increases and supports stable wetland communities. Previous studies indicate that there are approximately 139 acres of wetlands on Snodgrass Mountain. These wetland habitats are generally concentrated on the southeast and northwest flanks of the mountain. The plant communities that comprise wetlands on Snodgrass

[33] While the redesign of ski area development on Snodgrass Mountain aims to avoid geologic hazards, activities which would occur within geologic hazards would likely require mitigation and engineering.

Mountain generally include a mix of shrub and herbaceous species. Shrub species are generally characterized as woody vegetation less than 20 feet tall (e.g., willows). Herbaceous emergent vegetation includes grass and sedge species and are fostered by wet meadows and hillside seeps.

Wetlands are a common resource to consider in mountain planning, and a wetland delineation will be performed at Snodgrass Mountain during site-specific NEPA analysis. Lift terminals and buildings contained in the upgrading plan for Snodgrass Mountain avoid known wetlands. In most cases, upon specific lift engineering, lift towers can be designed to span any identified wetlands. Any wetland impacts that cannot be avoided will necessitate a 404 permit from the Army Corps of Engineers.

4. Hydrology

Snodgrass Mountain encompasses elevations between 9,350 to 11,145 feet above mean sea level and covers an area of approximately 2 square miles. This relatively small area is drained by numerous ephemeral and perennial first and second order streams. Each of these nascent stream channels drains either to the East River to the east or Washington Gulch to the west. Annual discharge patterns for streams draining Snodgrass Mountain are dominated by spring snowmelt and typical high elevation, montane climates. Based on field observations, there are no perennial streams or springs on the upper portion of Snodgrass Mountain, which is underlain by the Snodgrass laccolith (i.e., generally above an elevation of 10,100 feet). Several perennial streams have been observed below this geologic contact.

The existing surface hydrology at Snodgrass Mountain may be influenced by trail clearing and additional snow from snowmaking included in the upgrading plan. Modeling efforts indicate that developing Snodgrass Mountain may result in increased peak flow and runoff duration in streams draining the mountain. Generally, the hydraulic modeling indicated that local stream channels are expected to maintain their current, relatively stable condition after implementation of the Snodgrass Mountain upgrading plan.

5. Archaeology

As mandated by the National Historic Preservation Act of 1966 (NHPA), a cultural resource inventory must be performed for ground disturbing projects in order to take place on public lands. Over the past twenty years, Alpine Archaeological has completed several cultural resource inventories of the CBMR SUP area including inventories performed each year from 1990 to 1994. Although the 1990 through 1993 surveys primarily focused on projects taking place on the Main Mountain, the survey performed in 1994 includes large portions of Snodgrass Mountain.

In July 1994 Alpine Archaeological conducted a class III cultural resource inventory of approximately 671 acres within CBMR's existing SUP area. The goal of the inventory was to locate significant cultural resources, aid in the preservation of such resources and suggest appropriate mitigation measures when necessary. The remainder of the SUP area has either already been inventoried, or deemed too steep to likely posses any cultural resources. Of the 671 acres, approximately 618 acres were comprehensively inventoried in 1994. The remaining 53 acres were deemed unsurveyable due to extremely dense vegetation and marshy conditions. Cultural resource inventory methodology included a combination of literature research and field work. This research

revealed that a total of nine cultural resource surveys were previously conducted within the CBMR SUP area, all of which resulted in insignificant or no artifacts found.

Results of the field work found one site consisting of three structures located on Snodgrass Mountain. None of the sites are eligible for inclusion into the NRHP and no further archaeological work is recommended prior to project development. The report and its findings was reviewed and accepted by the State Historic Preservation Office (SHPO).

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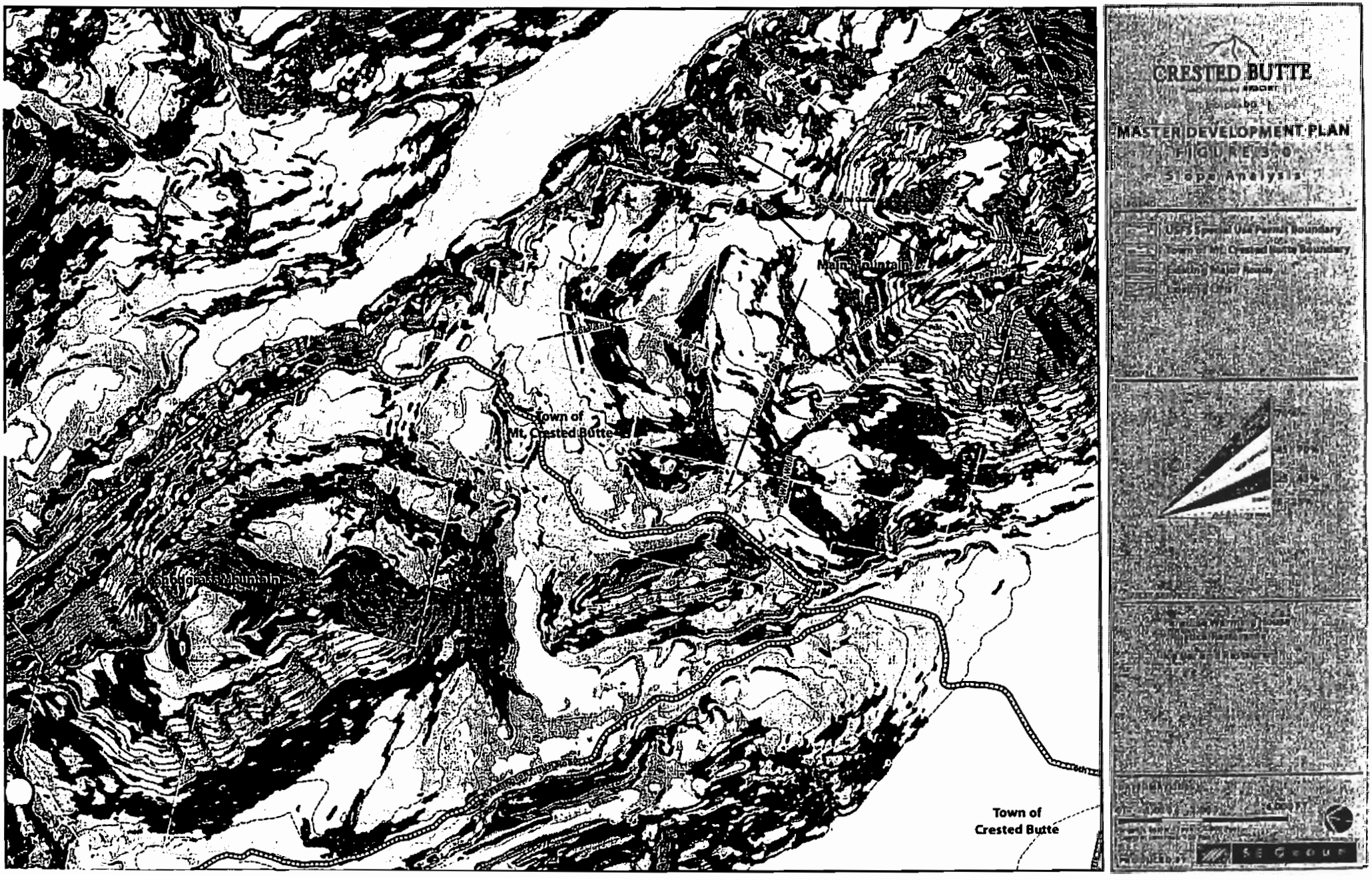
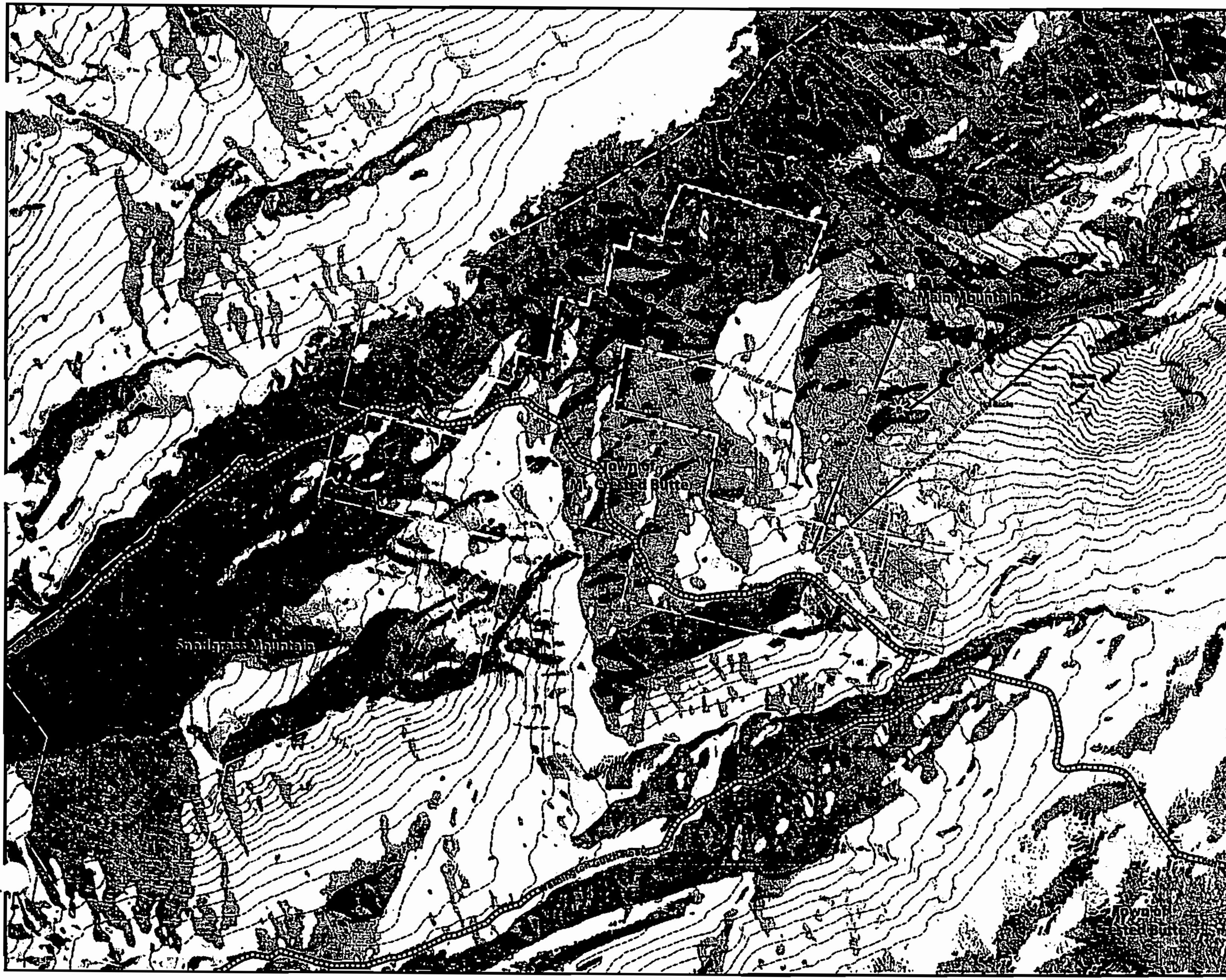

CRESTED BUTTE
MASTER DEVELOPMENT PLAN
FIGURE 3.0
Slope Analysis
USFS Special Use Permit Boundary
Town of Mt. Crested Butte Boundary
Existing Major Roads
Existing Lifts
Town of
Mt. Crested Butte
Town of
Crested Butte



CRESTED BUTTE

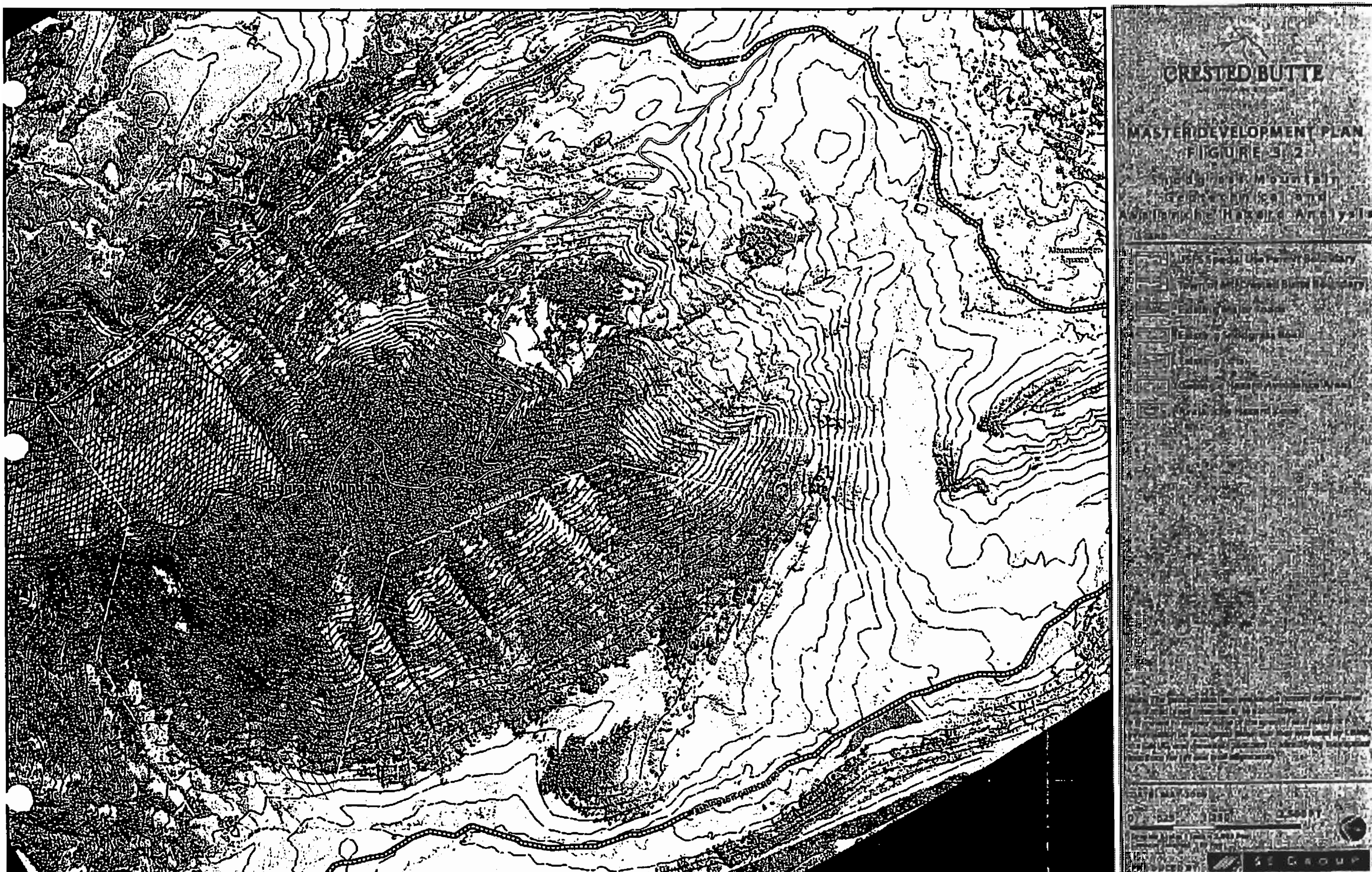
MASTER DEVELOPMENT PLAN

FIGURE 3

Aspect Analysis

LEGEND

USFS Special Use Permit Boundary
Town of Mt. Crested Butte Boundary


CRESTED BUTTE
MASTER DEVELOPMENT PLAN
FIGURE 3.2
Snodgrass Mountain
Geotechnical and
Avalanche Hazard Analysis

CRESTED BUTTE

MOUNTAIN RESORT

2009 RESORT MASTER DEVELOPMENT PLAN

CHAPTER 4 EXISTING CONDITIONS AND FACILITIES

4. EXISTING CONDITIONS AND FACILITIES WITHIN THE SUP AREA

Completion of a thorough resort inventory is the first step in the master planning process and involves the collection of data pertaining to a resort's existing facilities. This inventory includes ski lifts, ski trails, the snowmaking system, base area structures, skier services, other resort functions/activities, day-use parking and ski area operations. The analysis of the inventoried data involves the application of ski industry standards to CBMR's existing conditions. This process allows for the comparison of the resort's existing ski facilities to those facilities commonly found at comparison ski resorts of similar size and composition.

The overall balance of the existing ski area is evaluated by calculating the skier capacities of various facility components and then comparing these capacities to the ski area's Comfortable Carrying Capacity (CCC, discussed in Section B). This examination of capacities helps to identify the ski resort's strengths and deficiencies. The next step is the identification of improvements which would bring the existing facilities into better equilibrium, and will assist the resort in meeting the ever-changing expectations of its marketplace. Accomplishing these objectives will result in a well-balanced resort which provides an adequate array of services and experiences to satisfy guest expectations.

A. SUMMARY OF THE GUEST EXPERIENCE

CBMR's CCC is computed by analyzing the resort's supply of, and demand for, vertical transport. The capacity of the lift and trail network was determined to be approximately 5,940 guests.

The combination of the developed terrain network and Extreme Limits backcountry style terrain provides for extensive and varied skiing opportunities and the quality of snow is usually excellent. CBMR has a well-deserved reputation of providing some of the best lift-served Expert terrain in the country. Some of the frequent positive comments about CBMR are in relation to that extensive Expert terrain, the natural beauty of the area, the quality of grooming, the snow quality, and lack of lift lines. On most weekdays and non-peak weekends, actual daily visitation levels at the resort are well below the calculated CCC, meaning that long lift lines are uncommon, and most skier service facilities are not over-burdened. Because trail capacity is higher than CCC, a low-density, uncrowded ski experience is the result.

Despite these positive attributes, there are a number of deficiencies at CBMR that detract from the guest experience and may contribute to the resort's inability to retain destination guests and substantially increase annual skier visitation. While the resort's remote location and sometimes difficult access cannot be changed, some deficiencies can be addressed. Some of the existing lifts are antiquated and operate at low capacity, creating a negative impression of the ski area. For many years, the quality of the base village was considered a limiting factor, but CBMR has been addressing this issue through base area development (e.g., the new Mountaineer Square). While CBMR has a variety of terrain for all abilities, there are a number of areas that could be improved. Specifically, a terrain distribution analysis conducted for CBMR's developed terrain (see Section B.2) indicates that the variety and extent of Intermediate and lower-ability level terrain is quite limited. In addition, the same terrain distribution analysis reveals a deficit of developed Expert terrain – a fact that is often overlooked due to CBMR's reputation for its quantity and quality of "Extreme Limits" terrain.

CBMR has conducted skier surveys for the past several years and has participated in the annual National Ski Area Association's Demographic Study since its inception during the 1996/97 ski season. Comments received by CBMR often express sentiments such as: "Limited Intermediate terrain," "Intermediate skiers get bored quickly," "Not enough average terrain," and "Not a Beginner's mountain." These comments speak to a lack of terrain variety for Beginner and Intermediate skiers.

This chapter presents a more detailed analysis of CBMR's current strengths and weaknesses. Chapter 6 provides a description of improvements and upgrading programs that will help to improve the overall guest experience at CBMR and enhance the resort's image.

B. Comfortable Carrying Capacity

The daily carrying capacity of a resort is described as the Comfortable Carrying Capacity (CCC). CCC does not indicate a maximum level of visitation, but is rather a planning tool defined as the number of daily visitors a resort can comfortably or efficiently accommodate at one time without overburdening the resort's infrastructure. The CCC is derived from the resort's supply of vertical transport (the combined uphill hourly capacities of the lifts) and demand for vertical transport (the aggregate number of runs demanded multiplied by the vertical rise associated with those runs). The CCC is calculated by dividing vertical supply (VTF/day) by Vertical Demand.

The accurate calculation of a ski area's CCC is an important, complex analysis and is the single most important planning criterion for the ski area. All other related skier service facilities can be evaluated and planned based on the proper identification of the mountain's capacity. The detailed calculation of CBMR's current CCC is described in the following table and is calculated at 5,940 guests per day. It is not uncommon for ski areas to experience peak days during which skier visitation exceeds the CCC by as much as 25 percent. However, from a planning perspective, it is not recommended to consistently exceed the CCC due to the resulting decrease in the quality of the recreational experience, and thus the resort's market appeal.

Note that per CBMR's 2006 Mountain Improvements Plan, CCC was calculated to be 6,782. This relatively small difference in CCC between the 2006 MIP and the 2009 Resort MDP can be attributed to different methodologies that were employed by mountain planners between 2006 and 2009. Slight differences in the capacities that were calculated for individual lifts incrementally contributed to the difference in CCC between the two documents. Additionally, differences are the result of new mapping used for this analysis (as discussed in Chapter 1) which resulted in slightly different specification for the lifts; refinements to hourly capacities made to lifts in the intervening period; and the replacement of the East River Lift.

Table 4-1:
Comfortable Carrying Capacity – Existing Conditions

Lift Ref.	Lift Name / Lift Type	Slope Length (ft.)	Vertical Rise (ft.)	Actual Design Capacity (guests/hr.)	Open Hours (hrs.)	Up-Mtn Access Role (%)	Misloading/ Lift Stoppages (%)	Adjusted Hourly Cap. (guests/hr.)	VTF/Day (000)	Vertical Demand (ft./day)	Daily Lift Capacity (guests)
A	Red Lady Express DC-4	5,686	967	1,800	7.00	10	5	1,530	10,352	10,022	1,030
B	Westwall C-4	1,752	464	1,200	7.00	10	15	900	2,922	16,237	180
C	Twister C-2	3,410	1,053	1,080	6.75	0	10	972	6,907	20,251	340
D	Paradise DC-4	5,688	1,291	1,900	6.50	5	5	1,710	14,351	16,266	880
E	Peachtree C-2	797	167	1,200	7.00	0	15	1,020	1,191	4,092	290
F	East River DC-4	3,473	1,014	1,800	6.00	0	5	1,710	10,400	19,721	530
G	Teocali C-2	3,379	615	1,200	6.50	5	10	1,020	4,079	8,623	470
H	Silver Queen DC-4	7,858	2,072	1,980	7.00	30	5	1,287	18,669	23,298	800
I	Gold Link C-3	2,442	523	1,800	6.50	10	15	1,350	4,593	9,161	500
J	Painter Boy C-3	1,863	331	1,800	6.75	30	15	990	2,211	5,959	370
K	North Face S	1,448	471	1,000	5.75	0	10	900	2,436	15,014	160
L	Adult Beginner C	93	8	600	7.00	0	15	510	30	520	60
M	High Lift S	2,643	589	600	6.50	0	10	540	2,068	15,170	140
N	Mountain School S	181	22	720	7.00	0	5	684	105	1,533	70
O	Prospect C-4	2,246	505	1,170	7.00	50	15	410	1,448	12,195	120
	TOTAL	**42,957**		**19,850**				**15,533**	**81,762**		**5,940**

Source: SE GROUP

C. LIFT NETWORK

Existing lifts, trails and facilities within CBMR's SUP area are depicted on Figure 4.0.

1. Existing Lifts

As of 2009, CBMR's lift network consists of 16 lifts – 4 high-speed quad chairlifts, 2 fixed-grip quad chairlifts, 2 triple chairlifts, 3 doubles, 3 surface lifts, and 2 conveyor surface lifts. The resort's total uphill lift capacity has been calculated at 19,850 people-per-hour (pph). Table 4-2 summarizes the technical specifications for the existing lifts, and Figure 4.0 illustrates the location of existing lifts.

Most of the lift alignments are well located in terms of serving the available ski terrain in a logical and efficient manner. The following discussion addresses each lift individually.

Table 4-2:
Lift Specifications – Existing Conditions

Lift Ref	Lift Name Lift Type	Top Elev. (ft.)	Bot Elev. (ft.)	Vert Rise (ft.)	Plan Length (ft.)	Slope Length (ft.)	Avg. Grade (%)	Actual Design Capacity (pers./hr.)	Rope Speed (fpm)	Carrier Spacing (ft.)	Year Installed
A	Red Lady Express DC-4	10,334	9,367	967	5,576	5,686	17%	1,800	1,100	147	1997
B	Westwall C-4	9,735	9,271	464	1,684	1,752	28%	1,200	1,000	200	2005
C	Twister C-2	11,168	10,115	1,053	3,212	3,410	33%	1,080	500	56	1969
D	Paradise DC-4	11,121	9,830	1,291	5,461	5,688	24%	1,900	1,100	139	1994
E	Peachtree C-2	9,478	9,311	167	777	797	21%	1,200	350	35	1971
F	East River DC-4	10,141	9,127	1,014	3,291	3,473	31%	1,800	1,000	100	2007
G	Teocali C-2	10,301	9,686	615	3,300	3,379	19%	1,200	475	48	1979
H	Silver Queen DC-4	11,437	9,365	2,072	7,465	7,858	28%	1,980	1,100	133	1992
I	Gold Link C-3	10,151	9,627	523	2,374	2,442	22%	1,800	450	45	1983
J	Painter Boy C-3	10,142	9,811	331	1,828	1,863	18%	1,800	450	45	1983
K	North Face S	11,420	10,950	471	1,356	1,448	35%	1,000	670	40	2004
L	Adult Beginner C	9,407	9,399	8	92	93	9%	600	64	6	1997
M	High Lift S	11,866	11,277	589	2,539	2,643	23%	600	660	66	1991
N	Mountain School S	9,354	9,332	22	179	181	12%	720	283	24	1989
O	Prospect C-4	10,153	9,648	505	2,173	2,246	23%	1,170	1,000	205	2004

Source: SE GROUP

a. *Silver Queen Express and Red Lady Express*

Two chairlifts – Red Lady Express and Silver Queen Express – provide the primary out-of-base access at the Main Mountain.

The Red Lady Express was upgraded to a detachable quad in 1997. In addition to providing round trip skiing for much of the mountain's lower ability level terrain, Red Lady provides significant out-of-base capacity and plays an important role in moving Beginner and Novice skiers from the Ski School Magic Carpets onto the main mountain and offers the ski school enhanced teaching capabilities. This lift also serves a transportation function for distribution to the front side of the mountain.

The Silver Queen Express was upgraded to a detachable quad in 1992 and accesses primarily Advanced, Expert and Extreme Limits terrain. It also serves a transportation function for general distribution on the mountain. From the top of Silver Queen, riders can access Extreme Limits terrain directly or via the High Lift. Additionally, skiers can access upper Intermediate and Advanced terrain in the Twister Pod. Because of the limited access to lower ability level terrain directly off of Silver Queen, Intermediate and Beginner skiers use *Silver Queen Road* to bypass the steeper terrain. As a result, this skiway becomes overcrowded with skiers.

b. *Twister*

Twister, a fixed-grip double, serves a somewhat isolated pod of mostly Advanced terrain on the mid- to upper portions of the Main Mountain. Access to Twister is provided by the Silver Queen Express, Red Lady Express or Paradise Lift. Due to its location and demand for high-speed lift technology, Twister is underutilized.

c. *Peachtree, Westwall and Proximate Surface Lifts*

A separate pod of skiing is provided by Peachtree, a fixed-grip double chairlift, and by the Ski School lifts. These lifts are positioned to serve the gentle slopes at the base of the mountain. They also separate Beginners from more Advanced skiers on the mountain. Collectively, they provide a relatively diverse opportunity for the ski school program at CBMR to transition beginning skiers from the "user-friendly" Magic Carpets to the Peachtree fixed-grip double and then to the West Wall Lift. The Westwall Lift is a fixed-grip quad that provides access to Intermediate and Beginner ski terrain on Warming House Hill and also provides access to the base area from the lower areas.

The Adult Carpet lift is located above the Red Lady Express, and the Mountain School lift is located between the Silver Queen Express and Peachtree. Note that there is also a kids teaching/play area located on private lands between the Silver Queen Express and the Mountain School lift. This area includes play facilities, teaching terrain, and an additional carpet lift. Since this lift is not open to the public and is functionally part of the kid's activities programs and area, it is not identified in the lift specifications or capacity tables.

d. *East River Express, Paradise Express and Teocalli*

Three chairlifts – East River Express, Paradise Express and Teocalli – provide service to the predominately Intermediate terrain east of the main face of the mountain. The East River Express, a detachable quad chairlift, is located furthest from the Mountaineer Square base area and serves the lowest elevation terrain at CBMR. The lift takes advantage of the Intermediate terrain at the base of

the mountain and provides lift service to Extreme Limits skiers returning from Phoenix Bowl, Third Bowl and The North Face. The Paradise Express, a detachable quad chairlift, provides lift service to Intermediate terrain on the upper mountain. It offers almost 1,300 vertical feet of skiing on relatively long continuous fall line terrain, making it a popular lift for round trip skiing. As with the East River Express, the Paradise Express provides lift service for skiers to the North Face Lift returning to the back bowls. The Teocalli Lift, a fixed double chair, serves a small pod of ski terrain somewhat isolated from the overall skier circulation patterns on the mountain.

e. *Gold Link, Painter Boy and Prospect*

Gold Link and Painter Boy Lifts, both fixed-grip triples, are oriented for low Intermediate and Intermediate skiers. The Gold Link Lift is accessed via the Painter Boy Lift. Due to its isolated location, Gold Link is slightly underutilized. This area was somewhat reenergized with the addition of the fixed-grip Prospect Quad chairlift in 2004, which provides access to Intermediate terrain and also serves as an access lift for homeowners in the Prospect area.

f. *High and North Face*

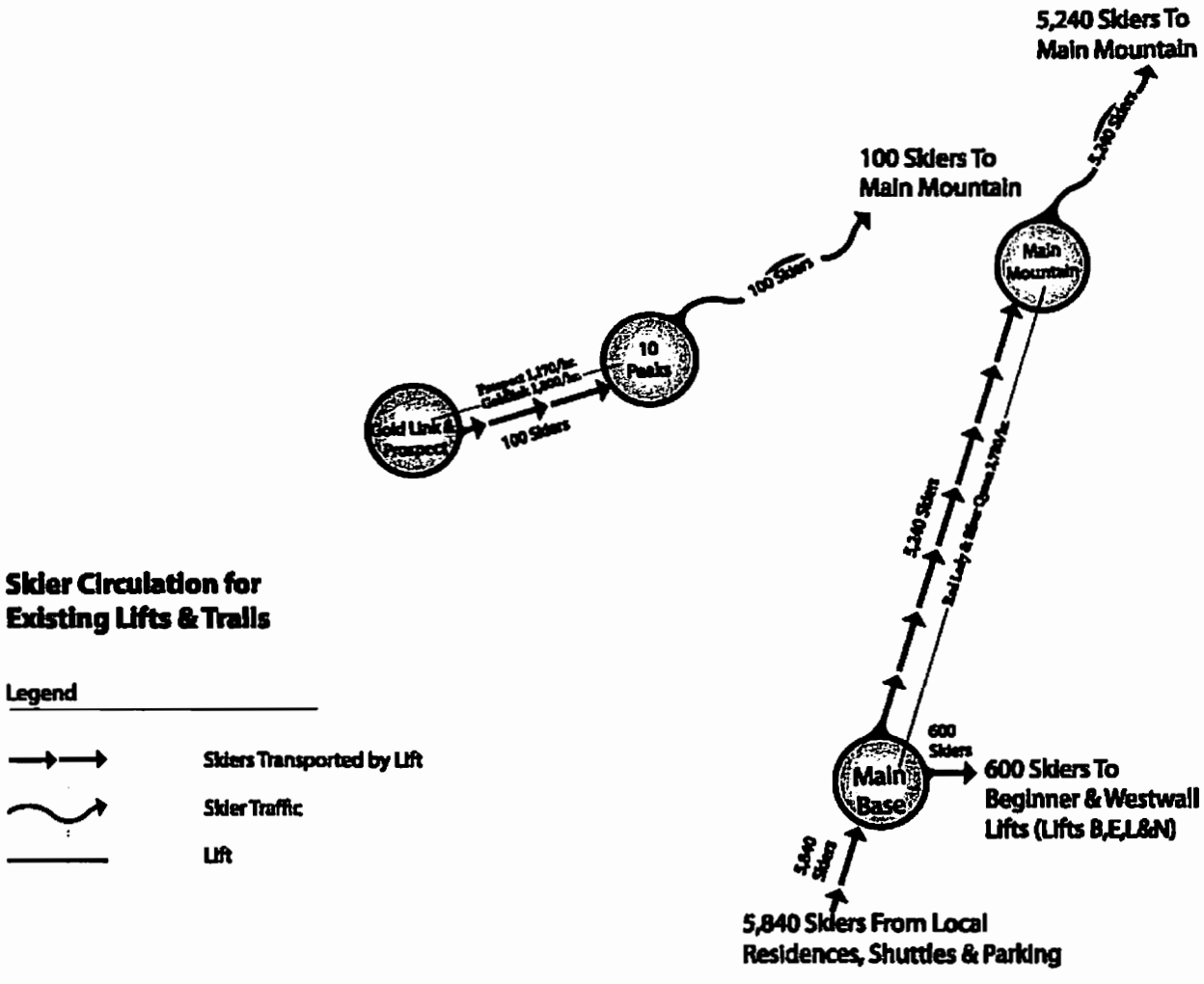
The High and North Face surface lifts are used almost exclusively for access to Extreme Limits terrain. The High Lift accesses the Headwall area, Teocalli Bowl, the Peak and Banana Funnel, while the North Face Lift accesses Extreme Limits terrain and glade skiing on the eastern side of the resort, including The North Face, The Glades, Spellbound Bowl, Third Bowl and Phoenix Bowl. Both of these lifts are dependent on other lifts for round-trip use of Extreme Limits terrain.

2. Out-of-Base Access

The existing lift configuration at CBMR includes four basic out-of-base access lifts; Red Lady Express, Silver Queen Express, Gold Link, and Prospect. The Red Lady Express and Silver Queen Express handle the vast majority of the skiers, as the main base area functions as the primary portal for virtually all destination skiers and all day skiers. Gold Link and Prospect act as a portal only for skiers staying in the homes and lodging that are currently available in the vicinity of the two lifts. To appraise the suitability of the access lifts to carry skiers to the up-mountain lifts within an acceptable time frame, a modeling technique has been used to simulate the staging functions of each access lift. This model computes the percentage of the uphill hourly capacity of the access lift that is dedicated to access versus the percentage of the lift capacity required for round-trip skiing during the access period. Comparing the total skier staging requirement for each access lift with the amount of uphill capacity available, the access time for each lift can be calculated and compared to industry standards. A graphic representation of this analysis and model is presented in Chart 4-1.

An industry norm states that for destination resorts, the dedicated access lifts should have sufficient hourly capacities to supply the remote lift systems they service with their daily CCC in a period of not more than two hours. This analysis shows that 5,840 skiers stage through the main base area. 600 of those skiers will be using Westwall, Peachtree, and the Beginner areas. Since the combined upgraded uphill capacities of the Red Lady Express and Silver Queen Express are 3,780 pph, they will accommodate that demand in approximately one hour and twenty minutes, well within the two hour planning parameter. The existing Gold Link and Prospect lifts can handle the existing demand in around two minutes.

Chart 4-1:
Out-of-Base Access Analysis – Existing Conditions



D. TERRAIN NETWORK

Terrain variety has been identified throughout the industry as being the key factor in evaluating the quality of the actual skiing (as opposed to lift quality, restaurant quality, or any other factor) guest experience. In Ski Magazine's Reader Resort Ratings, "terrain variety" is ranked as the second most important criterion in readers' choice of a ski destination, behind only snow quality, and ahead of such other considerations as lifts, value, accessibility, resort service, and others. This is a relatively recent industry trend, representing an evolution in skier tastes and market. The implication of terrain variety is that a resort must have a diverse, interesting, and well designed developed trail system, but also have a wide variety of alternate style terrain, such as mogul runs, bowl skiing, tree skiing, interconnect skiing, open park skiing, in-bounds backcountry style (hike-to) skiing, and terrain parks and pipes. At ski areas across the state and nation, there is a growing trend favoring these more natural, unstructured, "semi-backcountry" types of terrain, since the availability of this style of terrain has become one of the more important factors in terms of a resort's ability to retain guests, both for longer durations of visitation and for repeat business.

To provide the highest quality guest experience, resorts should offer groomed runs of all ability levels and some level of all the undeveloped terrain types to the extent practical. Typically, the undeveloped terrain is primarily used by Advanced and Expert level skiers during desirable conditions (e.g., periods of fresh powder, spring corn etc.). Even though some of these types of terrain only provide ski opportunities when conditions warrant, they represent the most intriguing terrain, and typically are the areas that skiers strive to be able to access.

Undeveloped terrain is the type of terrain that CBMR is known for. CBMR is in an enviable and virtually unique position in the ski industry; where the natural topography within the SUP area favors undeveloped terrain over developed, formalized terrain. Whereas most ski areas struggle to identify alternate terrain to satisfy evolving expectations of Advanced and Expert skiers/riders, CBMR has this terrain in abundance, and the well-deserved "Extreme Limits" reputation that goes along with it.

The quantity and quality of both developed and undeveloped terrain is discussed separately in the following text.

1. Developed Alpine Terrain Network

The developed, or formalized, terrain network at CBMR consists of the named, defined, lift-serviced, maintained runs at the resort. Most of these runs are groomed on a regular basis, although some are intentionally left ungroomed. Despite the importance of undeveloped, alternate style terrain, formalized runs represent the baseline of the terrain at any resort, as they are where the majority of guests ski, and they are usually the only place to ski during the early season, periods of poor or undesirable snow conditions, avalanche closures, and certain weather conditions. As such, the developed trail network represents a true reflection of acreage used by the average skier on a consistent basis, as well as that used by virtually all skiers during the aforementioned conditions. Therefore, the total acreage of the terrain and the ability level breakdown must be sufficient to accommodate the full skier capacity of the resort.

Based on the rationale presented in the preceding paragraph, and for the purposes of this analysis, only the *developed trail network* is applied to the trail acreage calculations, skier classification

breakdown, trail capacity, and density formulas. Were this analysis to account for terrain outside of the developed trail network, it would have a misleading effect on all of those calculations. However, terrain outside of the developed network is very important to terrain variety and the overall quality of the guest experience, and as such is addressed in the next section.

a. Alpine Trails Discussion

The topography of the developed Main Mountain is complex – slope gradients change dramatically along with elevation. The lower portions of the mountain tend to offer lower slope gradient terrain, while the upper mountain consists of increasingly steeper terrain.

The developed ski trail network accommodates Beginner- through Expert-level guests on 78 lift-served named trails spanning approximately 585 acres (see Table 4-3 and Figure 4.0). However, as previously stated, terrain variety is limited and continues to be a constraint in terms of retaining destination (primarily Intermediates) guests for longer durations. As discussed throughout this document, CBMR is known for its extensive and unique array of Expert terrain – known as "Extreme Limits" – that is accessed from the High and North Face lifts. Approximately 520 acres of tree, bowl, and open park skiing opportunities are available in addition to the formalized trail network, as discussed in Section 3.

Table 4-3:
Terrain Specifications – Existing Conditions

Lift Ref	Trail/Area Name	Top Elev (ft)	Bott Elev (ft)	Vert Rise (ft)	Plan Length (ft)	Slope Length (ft)	Avg Width (ft)	Slope Area (acres)	Avg Grade (%)	Max Grade (%)	Ability Level
A-1	Bubba's Shortcut Upper	10,335	10,238	97	1,195	1,200	118	3.3	8%	11%	Novice
A-2	Houston	10,237	9,694	544	5,326	5,361	149	18.4	10%	22%	Novice
A-3	Poverty Gulch	10,258	9,978	281	1,739	1,770	160	6.5	16%	31%	Low Intermediate
A-4	Kubler	10,242	10,092	150	1,606	1,617	38	1.4	9%	18%	Novice
A-5	Mineral Hill	10,332	9,958	374	2,097	2,137	153	7.5	18%	32%	Low Intermediate
A-6	Peanut	10,320	10,165	156	1,824	1,833	35	1.5	9%	15%	Low Intermediate
A-7	Tulsa	10,305	10,188	117	600	614	80	1.1	19%	29%	Low Intermediate
A-8	Twister Lower	10,180	9,367	812	4,311	4,400	217	21.9	19%	31%	Low Intermediate
A-9	Smith Hill Lower	10,090	9,748	341	2,464	2,495	137	7.8	14%	28%	Low Intermediate
A-10	Big Al's	9,854	9,747	107	700	712	93	1.5	15%	28%	Low Intermediate
A-11	Smith Hill Upper	10,318	10,055	263	1,228	1,262	186	5.4	21%	38%	Intermediate
A12	Keystone Bottom	9,700	9,370	330	2,111	2,140	218	10.7	16%	23%	Novice
B-1	Buckley	9,735	9,291	444	1,519	1,585	204	7.4	29%	37%	Intermediate
C-1	Jokerville	11,000	10,575	425	942	1,038	183	4.4	45%	57%	Expert
C-2	Twister Upper	10,968	10,190	778	2,376	2,524	160	9.3	33%	56%	Expert
C-3	Crystal	10,955	10,115	840	2,595	2,748	146	9.2	32%	50%	Advanced
C-4	Twister Connector	10,191	10,163	28	459	460	53	0.6	6%	8%	Advanced
C-5	Upper Park	10,565	10,346	219	545	588	209	2.8	40%	45%	Advanced
C-6	Keystone Ridge	11,168	10,948	220	503	569	42	0.5	44%	74%	Expert
C-7	Aspen Park Road	10,345	9,647	698	7,411	7,461	22	3.8	9%	20%	Low Intermediate
D-1	Paradise Bowl	11,120	10,754	367	1,724	1,771	317	12.9	21%	42%	Intermediate
D-2	DC Super Pipe	10,702	10,323	378	1,305	1,361	178	5.6	29%	42%	Intermediate
D-3	Ruby Chief Upper	11,111	10,501	610	2,127	2,233	364	18.7	29%	51%	Advanced
D-4	Ruby Road	11,120	10,940	180	2,163	2,182	36	1.8	8%	18%	Expert

Table 4-3:
Terrain Specifications – Existing Conditions

Lift Ref.	Trail Area Name	Top Elev. (ft)	Bot Elev. (ft)	Vert Rise (ft)	Plan Length (ft)	Slope Length (ft)	Avg. Width (ft)	Slope Area (acres)	Avg. Grade (%)	Max Grade (%)	Ability Level
D-5	Yellow Brick Road	10,777	10,339	438	5,257	5,284	15	1.8	8%	14%	Low Intermediate
D-6	Canaan	10,749	9,833	916	4,433	4,556	172	18.0	21%	45%	Intermediate
D-7	Bear	10,275	10,206	69	292	300	131	0.9	24%	27%	Low Intermediate
D-8	Forest Queen	10,323	10,050	273	1,674	1,702	161	6.3	16%	26%	Low Intermediate
D-9	Treasury Upper	10,232	9,962	270	1,306	1,341	145	4.4	21%	37%	Intermediate
D-10	Gallowich Upper	10,133	9,933	201	1,265	1,283	92	2.7	16%	23%	Low Intermediate
D-11	Red Lady Bend	9,828	9,663	165	826	845	118	2.3	20%	34%	Low Intermediate
D-12	Red Lady Short Cut	9,779	9,631	148	275	315	107	0.8	54%	64%	Expert
D-13	Red Lady	9,663	9,142	521	3,014	3,088	108	7.7	17%	41%	Intermediate
D-14	Ruby Chief Lower	10,501	9,828	673	3,780	3,858	175	15.5	18%	35%	Low Intermediate
E-1	Rustler's Gulch	9,486	9,307	179	1,087	1,105	104	2.6	17%	25%	Novice
E-2	Augusta	9,414	9,311	103	619	630	130	1.9	17%	23%	Novice
E-3	High Tide	9,486	9,312	175	1,045	1,061	113	2.7	17%	21%	Novice
E-4	Silver Queen Connector	9,466	9,366	101	680	689	88	1.4	15%	22%	Novice
F-1	Black Eagle	10,141	9,419	722	3,768	3,863	149	13.2	19%	44%	Intermediate
F-2	Double Top Glades	10,127	9,573	554	1,746	1,850	128	5.4	32%	60%	Expert
F-3	Floresta	10,014	9,826	188	966	985	151	3.4	19%	24%	Intermediate
F-4	Resurrection	10,141	9,130	1,011	3,337	3,509	211	17.0	30%	50%	Advanced
F-5	Treasury Lower	9,938	9,135	803	3,262	3,382	197	15.3	25%	45%	Intermediate
F-6	Daisey	10,141	9,842	299	2,581	2,608	127	7.6	12%	28%	Low Intermediate
F-7	Gallowich Lower	9,902	9,575	327	1,098	1,154	125	3.3	30%	47%	Advanced
G-1	Bubba's Shortcut Lower	10,234	10,176	58	311	317	139	1.0	19%	27%	Low Intermediate
G-2	Bushwacker	10,307	9,685	621	3,520	3,600	192	15.9	18%	40%	Intermediate
G-3	Meander	10,184	10,038	146	874	895	98	2.0	17%	44%	Intermediate

Table 4-3:
Terrain Specifications – Existing Conditions

Lift Ref	Trail Area/Name	Top Elev. (ft.)	Bot. Elev. (ft.)	Vert. Rise (ft.)	Plan Length (ft.)	Slope Length (ft.)	Avg. Width (ft.)	Slope Area (acres)	Avg. Grade (%)	Max Grade (%)	Ability Level
G-4	Gus Way	10,139	9,741	398	2,621	2,671	86	5.3	15%	43%	Intermediate
G-5	Paradise Access	9,984	9,833	151	704	723	81	1.4	21%	33%	Low Intermediate
H-1	Keystone Upper	11,439	10,206	1,233	4,323	4,533	181	18.8	29%	45%	Intermediate
H-2	Monument	11,287	10,984	304	603	686	339	5.3	50%	74%	Expert
H-3	Silver Queen Road	11,242	11,074	168	2,039	2,050	36	1.7	8%	16%	Low Intermediate
H-4	International	10,943	9,594	1,349	4,816	5,051	227	26.3	28%	51%	Advanced
H-5	Peoria	10,703	10,502	201	623	663	66	1.0	32%	54%	Advanced
H-6	Roller Coaster	10,362	10,098	263	1,434	1,466	136	4.6	18%	36%	Intermediate
H-7	Keystone Lower	10,202	9,700	501	2,890	2,941	207	14.0	17%	29%	Low Intermediate
H-8	Silvanite	10,171	9,614	558	2,609	2,696	77	4.7	21%	48%	Advanced
H-9	Aspen Park	10,327	9,955	372	1,276	1,342	203	6.3	29%	49%	Advanced
H-10	Championship	10,127	9,284	843	3,259	3,385	299	23.2	26%	47%	Advanced
H-11	Peachtree Connector	9,558	9,472	87	416	425	66	0.6	21%	25%	Novice
I-1	North Pass	10,125	9,685	440	1,905	1,966	123	5.5	23%	38%	Intermediate
I-2	Cascade	10,148	9,624	524	2,616	2,679	286	17.6	20%	34%	Low Intermediate
I-3	Panian's Run	10,148	9,624	524	2,714	2,776	207	13.2	19%	33%	Low Intermediate
	TOTAL					**157,856**		**585.4**			

Source: SE GROUP

b. *Terrain Distribution by Ability Level*

Based on CBMR's developed terrain network, the distribution of terrain through the full range of skill levels is relatively close to the breakdown for the national skier market. The terrain classification breakdown of the existing ski area is set forth in Table 4-4 and Chart 4-2. The last column in Table 4-4 represents what can be considered the ideal skill level distribution in the relevant skier market and provides a comparison with the existing breakdown at CBMR.

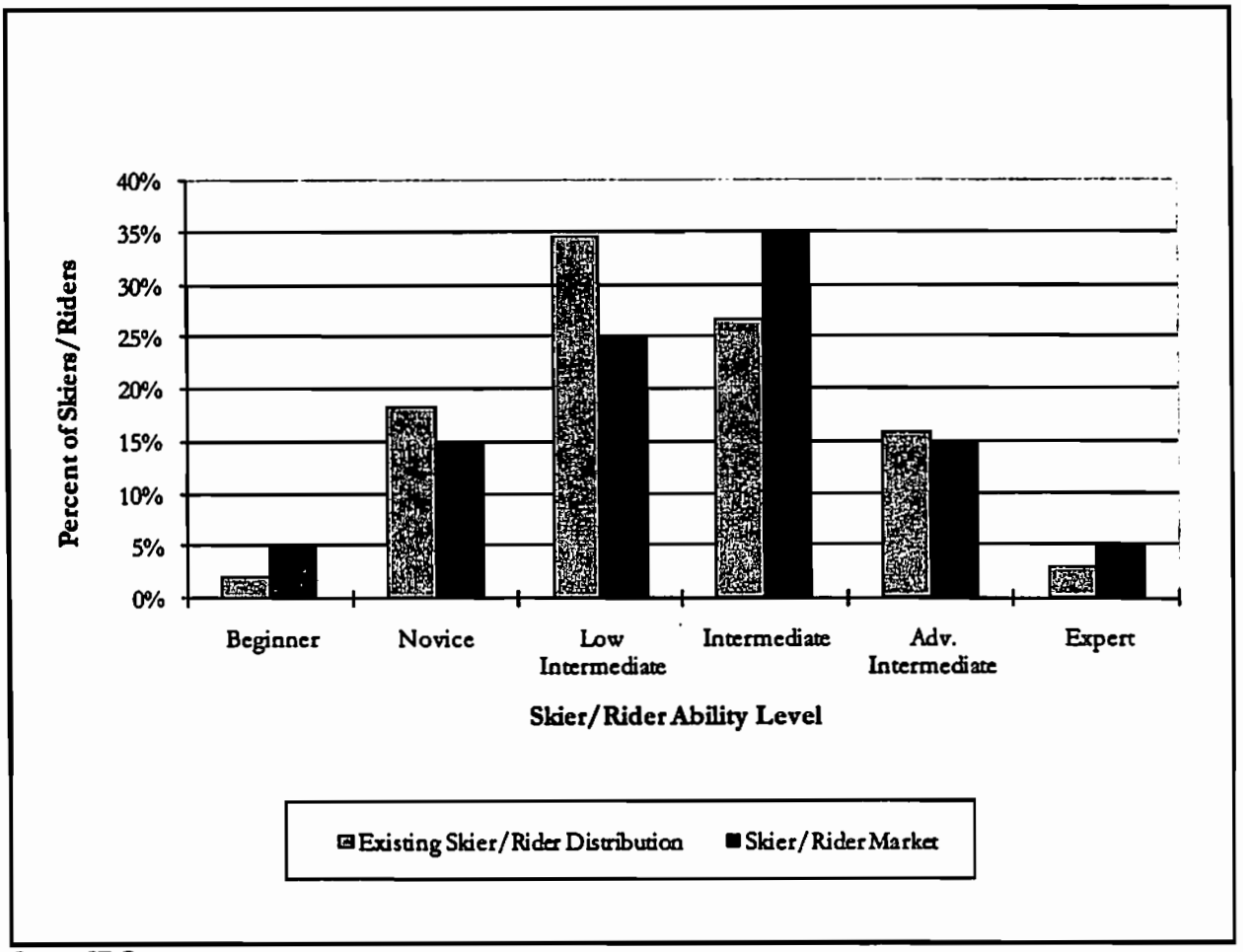
The distribution of skiers was analyzed as a comparison of *terrain capacity* by ability level. This approach looks at both the acreage of terrain of each ability level and the acceptable skier density on that terrain (as a general rule, higher ability level terrain supports a lower density of skiers; see Chapter 2 for the density parameters).

Specifications for the existing terrain capacity distribution and ski trail acreage distribution are set forth in Tables 4-4 and Chart 4-2. Table 4-4 and Chart 4-2 compare CBMR's *terrain capacity* distribution with the market demand for each ability level expressed as a percentage of skiers. Skier distribution by ability levels as expressed by a percentage of skiers is determined as follows: each trail is designated by ability level, as listed in Table 4-4. Each ability level has a standard design density for the ideal number of skiers occupying each acre of terrain at one time (see Chapter 2 for target densities per ability level). The number of acres of terrain designated to each ability level is multiplied by the standard design density for each ability level. The total for each ability level is expressed as a percentage of the total number of skiers. This percentage is then compared with the market demand for each ability level.

Table 4-4:
Terrain Ability Level Distribution by Capacity – Existing Conditions

Skier/Rider Ability Level	Trail Area (acres)	Skier Capacity (guests)	Skier Distribution (%)	Skier Market (%)
● Beginner	4.1	121.7	2%	5%
● Novice	62.6	1,126.6	18%	15%
■ Low Intermediate	154.2	2,158.8	35%	25%
■ Intermediate	165.7	1,657.1	27%	35%
◆ Advanced	139.6	977.5	16%	15%
◆ Expert	59.2	177.7	3%	5%
TOTAL	**585.4**	**6,219**	**100%**	**100%**

Chart 4-2:
Terrain Ability Level Distribution by Capacity



Source: SE GROUP

The CBMR ability level distribution tables and Chart 4-2 show a significant abundance of Low Intermediate terrain, relatively balanced Novice and Advanced terrain, a deficit of Beginner, and a notable deficit of Intermediate terrain. The effect of the deficit of Intermediate terrain is increased by the surplus of Low Intermediate terrain. When considered together, these two categories would cancel each other out and appear to balance well with the market. However, since there is more Low Intermediate terrain capacity than Intermediate, the implication of this is that much of that terrain does not have sufficient grade to hold the interest of true Intermediate skiers. Additionally, there is a deficit of developed Expert terrain. This fact is often overlooked, due to the high quantity and quality of alternate, backcountry style terrain (as discussed in the following text); however, during periods of low snow or poor snow conditions, it is important to have sufficient developed terrain for the Expert guests.

The analysis shows a deficiency in Intermediate capacity of 8 percent. The key factor to consider is the amount of terrain that would be required to make up that deficiency. With acreages of the other ability level categories remaining the same, a full 250 acres of Intermediate terrain would be required to meet the market demand of having 35 percent of the total developed terrain be Intermediate

level. With an approximately 165 acres of developed Intermediate terrain, an increase of approximately 90 acres (an over 50 percent increase) of additional terrain would be required to make up that existing shortfall.

Another perspective on the impact of this deficiency in Intermediate level terrain is to look at the skier capacity of the terrain. The existing calculated capacity of the terrain is 6,219 skiers. Note here that the terrain capacity does not need to balance to the CCC, as not all skiers on the mountain are actually on the terrain at any given time, as discussed in the density analysis/guest dispersement section. A significant factor in this terrain capacity number is the high percentage of Novice and Low Intermediate terrain. The higher densities associated with these low level terrain types result in a higher overall terrain capacity. However, if the existing Intermediate terrain was assumed to represent 35 percent of the overall terrain capacity (per the industry market), then the terrain capacity would decrease to 4,960 skiers, or a 20 percent decrease.

As discussed in Section 3, terrain diversity is a critical component for guests when choosing a destination vacation. CBMR's difficulty in attracting, and retaining, destination visitors is symptomatic of the resort's identified deficit of Beginner, Intermediate and developed Expert terrain.

c. *Skiways*

Several skiways (traverses) exist that facilitate easier circulation around the Main Mountain. These skiways also provide access for grooming equipment and snow machines to the upper segments of the mountain. In addition, many skiways double as summer access roads for maintenance programs and for mountain biking and hiking. The major traverses are described in the following text.

All of the traverses found on CBMR play important roles in facilitating skier circulation, as well as resort vehicle circulation, throughout the ski area. In most cases, the current configurations of the traverses, in terms of slope gradient and width, are acceptable for current skier traffic patterns. However, the high traffic volumes experienced on *Silver Queen Road* offer inadequate capacity to accommodate existing traffic.

Silver Queen Road carries skiers from the top of the Silver Queen Lift to Paradise Bowl. Many Intermediate level skiers using the Silver Queen Lift are often unaware of the Expert terrain accessed by the lift. As a result, many of these visitors use *Silver Queen Road* to travel to easier terrain. CBMR estimates upwards of 60 to 70 percent of riders on the Silver Queen Lift make use of *Silver Queen Road.* This traverse is used most during the morning access period, when skiers are traveling from the base area to the easier terrain at the eastern portion of the resort, and after lunch by skiers traveling from the base back onto the mountain.

Ruby Road leads from the end of *Silver Queen Road* and allows skiers to travel from the top of the Paradise Lift to Expert terrain on the front face of the mountain and to extreme limits terrain including *Upper Peel, Peel, Forest* and *Hot Rocks. Ruby Road Traverse* receives regular use throughout the day.

Yellow Brick Road provides an easiest way down for lower ability level skiers from Paradise Bowl to the gentler terrain such as *Peanut Access* and *Roller Coaster* at the Red Lady Lift. However, since it does

not start at the top of the Paradise Lift, lower level skiers must ski down the upper section of Paradise Bowl to access the skiway, which is too high of a gradient for Novice skiers.

Gunsight Pass connects the Painter Boy and Gold Link pods to the base of Teocalli Lift. The traverse receives fairly limited on-mountain traffic due to alternative fall-line trails, offering superior access to Teocalli from other lifts.

d. Density Analysis

An important aspect of ski area design is the balancing of uphill lift capacity with downhill trail capacity. Trail densities are derived by contrasting the uphill, at-one-time capacity of each lift system (CCC) with the trail acreage associated with each lift pod. At any one time, skiers are dispersed throughout the resort, while using guest facilities and milling areas, waiting in lift mazes, riding lifts, or enjoying descents. For the trail density analysis, 25 percent of each lift's capacity is presumed to be inactive – using guest service facilities or milling areas.

The active skier population can be found in lift lines, on lifts, or on trails. The number of skiers waiting in line at each lift is a function of the uphill hourly capacity of the lift and the assumed length of wait at each lift. The number of guests on each lift is the product of the number of uphill carriers and the capacity of the lift's carriers. The remainder of the skier population (the CCC minus the number of guests using guest facilities, milling in areas near the resort portals, waiting in lift mazes, and actually riding lifts) is assumed to be enjoying downhill descents.

Trail density is calculated for each lift pod by dividing the number of guests on the trails by the amount of trail area that is available within each lift pod. The trail density analysis compares the calculated trail density for each lift pod to the desired trail density for that pod (i.e., the product of the ideal trail density for each ability level and the lift's trail distribution by ability level).

The trail density analysis considers only the acreage associated with the developed trail network (see Figure 4-1). The density analysis for the existing conditions at CBMR is illustrated in Table 4-5. This table reflects a higher downhill terrain capacity in relation to uphill lift capacity. This situation is desirable from the quality of skiing perspective, and is reflected in CBMR's very low skier densities.

Table 4-5:
Density Analysis – Existing Conditions

Lift Ref.	Lift Name	Daily Lift Capacity	Guest Dispersal				Density Analysis				Density Index
			Support Fac./Milling	Lift Lines	On Lift	On Terrain	Terrain Area	Terrain Density	Desired Trail Density	Diff.	
			(guests)	(guests)	(guests)	(guests)	(acres)	(guests/ac.)	(guests/ac.)	(+/-)	(%)
A	Red Lady Express	1,030	258	77	132	563	92.1	6	15	-9	40%
B	Westwall	180	45	30	26	79	12.1	7	9	-2	78%
C	Twister	340	85	32	110	113	31.6	4	7	-3	57%
D	Paradise	880	220	86	147	427	86.8	5	10	-5	50%
E	Peachtree	290	73	68	39	110	7.9	14	18	-4	78%
F	East River	530	133	143	99	155	69.0	2	9	-7	22%
G	Teocali	470	118	85	121	146	54.9	3	10	-7	30%
H	Silver Queen	800	200	64	153	383	75.9	5	8	-3	63%
I	Gold Link	500	125	113	122	140	43.2	3	14	-11	21%
J	Painter Boy	370	93	83	68	126	22.5	6	17	-11	35%
K	North Face	160	40	75	32	13	26.5	0.5	7	-7	7%
L	Adult Beginner	60	15	17	12	16	1.3	12	30	-18	40%
M	High Lift	140	35	27	36	42	35.2	1	4	-3	25%
N	Mountain School	70	18	23	7	22	2.7	8	30	-22	27%
O	Prospect	120	30	27	15	48	23.7	2	11	-9	18%
TOTAL		**5,940**	**1,488**	**950**	**1,119**	**2,383**	**585.4**	**5**	**12**	**-7**	**42%**

Source: SE GROUP

The density figures set forth in Table 4-5 indicate that for all the lift/trail systems, the actual trail densities are lower than the target design criteria. Densities on some lifts are remarkably low, for example, the average density off the North Face Lift is 2 acres per skier. The average density numbers for the overall resort are listed along the bottom row of the table. These averages have been weighted for the lift system's CCC. When compared with industry standard criteria, the actual average skier densities experienced at CBMR are approximately 42 percent of the acceptable standard. Note that specific trails, such as egress trails towards the end of the day, can be expected to have consistently higher densities.

CBMR has an average density of five skiers-per-acre, which is very low when compared to industry averages. This is a desirable situation and is reflective of the style and quality of skiing experience that CBMR is trying to create. Lift uphill hourly capacities are intentionally kept low, so as to not overcrowd the terrain. However, the low density numbers also highlight an under-utilization of the existing terrain, indicating that the amount of effort required to properly maintain the quantity of ski terrain is disproportionately high when compared to the number of skiers on the mountain. This factor indicates an opportunity to upgrade existing lifts and/or install new lifts within the existing boundaries of the Main Mountain, without creating undesirably high skier densities.

e. *Boundary Management*

CBMR maintains an administrative boundary within its 4,350-acre SUP area. The roped and signed administrative boundary demarcates portions of the SUP area that are off-access to skiing and riding. The majority of the administrative boundary on the Main Mountain is "closed," meaning that anyone who exits the boundary can be prosecuted (there are currently no backcountry access points); however, a segment of the boundary through the base areas is open to accommodate access to adjoining private lands. These boundaries are illustrated on CBMR's trail map, and signage complies with the 1979 Colorado Ski Safety Act. The CBMR boundary management policy can be found in the Crested Butte Ski Patrol Procedures Manual.

f. *Uphill Access*

Uphill access (that which is not served by ski lifts) covers many different time periods, including winter and summer operations, spring (post season) and fall (pre season). No motorized recreational access is allowed without a Mountain Pass issued by the Mountain Operations Department. All vendors and outside contractors also need a Mountain Pass to access the ski area.

Winter uphill access on the ski area is only allowed before and after operating hours, and is limited to specific trails for safety reasons. The following trails are approved uphill routes designated by CBMR Ski Patrol: *Lower Keystone* to *Upper Park* to *Yellow Brick Road* to:

- *Upper Keystone* to the *Triangle* to *Windy Gap*
- *Paradise Bowl* to *Silver Queen Road* to *Windy Gap*
- *Upper Ruby Chief* to *Warren's Cut* to *Silver Queen Road*

Travel above the top of the Silver Queen Express is always prohibited. Descending routes are the same as ascending routes.

During summer operations, CBMR is open to biking and hiking activity. Guests are requested to use the maintained trail system for these activities. A Mountain Pass is necessary for motorized travel on the mountain during this time period. The road system has a main gate that is locked overnight and open during operational hours.

During fall, the summer policy extends to mid-October. Preparations for snowmaking operations or natural snowfall close the mountain to public access due to safety concerns for guests and CBMR staff. This closure is posted at access points and monitored by the Mountain Operations Department.

During spring (post season) the mountain is open to on-foot access; however, preparation for lift maintenance, road plowing and other take-down activities may close areas of the mountain at times, as the post season progresses. These closures are posted at access points and monitored by the Mountain Operations Department.

2. Terrain Variety/Alternate Terrain

As discussed, one of the more important factors of a resort's ability to retain guests has proven to be variation in terrain. This means having developed runs of all ability levels, some groomed on a regular basis and some not, as well as mogul runs, bowl skiing, tree skiing, in-bounds backcountry style (hike-to) skiing, and terrain parks and pipes. To provide the highest quality guest experience, resorts should offer some level of all these terrain types to the extent practical. Even though some of these types of terrain only provide ski opportunities when conditions warrant, terrain variety is increasingly becoming a crucial factor in guests' decisions of ski destinations.

In total, CBMR has approximately 520 additional acres of this style of terrain. Each terrain type is discussed separately in the following text.

a. Glades

The natural topography of CBMR lends itself to this style to glade skiing. Examples of gladed areas and natural openings and meadows are Keystone Ridge, Horseshoe, Horseshoe Springs, and the area around, and to the side of, Paradise Cliffs. Depending on snow conditions, these areas are heavily used by Advanced skiers.

Selective thinning and management could help further develop glade skiing at the Main Mountain and make it more functional for a wider range of skiers. This increased glading is discussed more in depth in Chapter 5 and in the 2006 Revised Crested Butte Mountain Resort Mountain Improvements Plan.

b. Open Bowls

In addition to Paradise Bowl (which is groomed), The Headwall and Rachael's are open bowls within the defined, developed terrain network. Due to their topography and elevation, Paradise Bowl and the Headwall generally have ideal snow conditions for Advanced and Expert ability level skiers. Rachael's is capable of supporting Intermediate, Advanced and Expert ability level skiers. Additional bowl skiing opportunities will be discussed in the upgrading plan.

c. *In-Bound Backcountry Style ("Extreme Limits") Terrain*

This terrain represents a large part of CBMR's reputation and market visibility. Much of this terrain is lift-served and truly represents some of the best in-bounds Expert terrain available at any ski resort in the country. There are two main areas of Extreme Limits terrain: off The High Lift and off the North Face Lift (see Figure 4.0).

The terrain off The High Lift encompasses over 120 acres and is characterized by open snow fields in addition to chutes and glades lower down. Teocalli Bowl is accessible off The High Lift as well. This bowl is approximately 75 acres in size and offers excellent chutes and bowl skiing when conditions are favorable. This area is underutilized, however, because a 10- to 15-minute hike is required to reach the Paradise Bowl area from the bottom of Teocalli Bowl. (A lift has been approved to transport skiers out of Teocalli Bowl – refer to Chapter 5.) The boulders and steep slopes in Teocalli Bowl 2 are also accessible from The High Lift. This bowl exists within CBMR's SUP boundary and was approved for skiing in the 1998 DN. Due to egress issues, Teocalli Bowl 2 has never been opened to guests at CBMR. As the Teocalli Egress route and Teocalli Bowl Lift are constructed, Teocalli Bowl 2 will be opened. There is also hike-to only terrain off the top of The High Lift with grades over 50 degrees. Other areas are *Upper Peel*, *Banana Funnel*, *Upper Forest*, and, lower down, *Peel*, *Forest*, and *Hot Rocks*. Skiing this terrain requires riding the Silver Queen Express and The High Lift to re-gain the upper terrain.

The terrain accessed off the North Face Lift encompasses around 325 acres and is characterized by chutes, glades, natural openings, and a few bowls. Parts of this area more to the north, like *Hard Slab*, *The Glades*, *Old Pro*, and *The North Face* allow skiers to return to the Paradise Lift. Additionally, two areas – *Powder Rock Glade* and *Pinball* – have been cleared below the natural treeline to allow additional access back to Paradise. Other parts of the area, such as *Third Bowl*, *Spellbound*, *Phoenix Bowl* and *Steps*, require skiers to traverse out and ski back to the bottom of the East River Express.

All these areas get quite heavy use by CBMR's Expert skiing guests when conditions are favorable.

d. *Terrain Parks*

Terrain parks have become a vital part of most mountain resorts' operations, and are now considered an essential mountain amenity. Popularity of terrain parks continues to increase, and is largely dependent on the quality of the parks. The presence of terrain parks at mountain resorts has changed various operational and design elements. The demand for grooming can increase, as terrain parks often require specialized or dedicated operators, grooming machines, and equipment (such as half-pipe cutting tools). Terrain parks typically require significant quantities of snow, either natural or man-made, often increasing snowmaking demand. Terrain parks can affect circulation on the mountain, as the parks are often a guest destination.

Current trends in park and pipe design are focused on quality and creating progression, so that less experienced riders have the means and ability to learn how to use the more difficult features. Parks are typically made up of pipes and constructed features. Beginner parks typically have features that are lower in height, softer, and rounder; typically with rollers and wide rails. The next step usually has small tabletops and more difficult rails. From there, parks will progress up to high-end parks showcasing significantly larger jumps and technical rails. Quality in park construction and design is achieved by positioning various features in such a way that riders can link them together, by making

individual features have multiple uses to provide variety between runs, by providing multiple take off points on features, and by keeping all the features of the park well built and interesting.

Terrain parks are a part of CBMR's operations and are operated on a continual basis. CBMR features three terrain parks, a superpipe, and natural features in locations all over the mountain. The purpose of CBMR's terrain park program is to provide education, safety, and progression in the sport of freestyle skiing and snowboarding. CBMR's DC Terrain Park is located under the Paradise Lift on *Canaan Trail*, and includes jumps of various shapes, sizes, and sequences and a dozen or so rail features for Intermediates to Advanced riders. The DC Superpipe is located at the top of the Paradise Express. Its dimensions are: 400 feet long, 55 feet wide by 18 feet high with a slope of 17 degrees. The popular Kids' Park is located off the Painter Boy Lift on *Splain's Gulch Trail*. The Park includes Beginner hits and features that include rails, tabletops, rolls and a mini half-pipe. The Keystone Jib Park, a kids' rail park, is located on *Lower Keystone Trail* and features an assortment of sliders.

Areas not currently designated as having terrain features may have them in the future. Evaluations are made throughout the season of features, ability levels, traffic patterns, snow depth, and customer feedback; which will sometimes lead to the parks being rebuilt several times during the year. CBMR also moves terrain features as snow base and customer use dictate. Park features and ability levels change throughout the season.

E. SKIER SERVICES FACILITIES, SPACE USE AND FOOD SERVICE SEATING

1. Skier Services

Base area staging locations, or portals, are 'gateway' facilities that have three main functions:

- Receiving arriving guests (from parked cars and buses)
- Distributing the skiers onto the mountain's lift and trail systems
- Providing the necessary services for the guest's day at the resort (tickets, rentals, etc.)

Staging-related guest services (e.g., tickets, rentals, retail, and lockers) are currently offered by CBMR and other private operations at the Main Base Area location. The Main Base Area also offers commercial skier services that are utilized throughout the day including food services, restrooms, and retail. Table 4-6 provides a summary of guest services space provided within the Main Base Area.

Table 4-6:
Guest Services – Main Base Area: *Existing Conditions*

Service Function	The Lodge	Axell	Whetstone	Treasury	Emmons	Grand Lodge	The Outpost	Elevation Hotel	Existing Total
Ticket Sales/Guest Services	1,700	-	-	-	986	-	-	-	2,686
Public Lockers	-	-	-	2,801	-	-	-	-	2,801
Rentals/Repair	-	-	259	8,607	-	-	-	-	8,866
Retail Sales	-	-	-	9,873	-	-	1,528	-	11,401
Bar/lounge	1,648	-	-	845	-	996	-	4,500	7,989
Adult Ski School	1,044	2,100	1,616	-	-	-	-	-	4,760
Kid's Ski School and Daycare	-	-	6,330	-	-	-	-	-	6,330
Restaurant Seating	-	-	279	4,620	-	1,653	2,100	5,000	13,652
Kitchen/Scramble	-	-	-	1,540	-	827	-	2,800	5,167
Restrooms	910	144	289	623	64	304	85	802	3,221
Ski Patrol	-	600	1,045	-	-	-	-	-	1,645
Administration	500	4,931	-	-	6,420	1,700	-	1,600	15,151
Employee Lockers/Lounge	-	-	1,346	400	-	500	1,151	1,500	4,897
TOTAL SQUARE FEET	**5,802**	**7,775**	**11,164**	**29,309**	**7,470**	**5,980**	**4,864**	**16,202**	**88,566**

Notes:
Numbers provided by CBMR.
Source: SE GROUP

Additional services are provided on-mountain in two locations: Ice Bar and the Paradise Lodge. Facility conditions are addressed in the "On-Mountain Facilities" discussion.

Sufficient guest service space should be provided to accommodate the existing resort CCC of 5,940 guests per day. The resort CCC is the design standard and planning tool defined as the number of daily visitors a resort can comfortably or efficiently accommodate at one time without overburdening the resort infrastructure. In essence, CCC is a guest attendance level that can be serviced by the resort while operations remain optimally functional. As such, it is the distribution of the CCC which is utilized to determine guest service capacities and space requirements for skier services at base area portals and on-mountain facilities. The CCC should be distributed between each guest service facility location according to the number of guests that would be utilizing the lifts and terrain associated with each facility.

In addition to distributing the CCC amongst the facilities, guest service capacity needs and the resulting spatial recommendations are determined through a process of reviewing and analyzing the current operations to determine specific guest service requirements that are unique to the resort.

Based upon a CCC of 5,940 skiers, the following table compares the current space use allocations of the visitor service functions to industry standards for a resort of similar market orientation and regional context as CBMR. Square foot figures contained in this table are calculated to illustrate how the ski area compares to industry averages, and should not be considered absolute requirements.

Service functions include:

- **Restaurant Seating:** All areas designated for food service seating, including: restaurants, cafeterias, and brown bag areas. Major circulation aisles through seating areas are designated as circulation/waste, not seating space.
- **Kitchen/Scramble:** Includes all food preparation, food service, and food storage.
- **Bar/Lounge:** All serving and seating areas designated as restricted use for the serving and consumption of alcoholic beverages. If used for food service, seats are included in seat counts.
- **Restrooms:** All space associated with restroom facilities (separate women, men, and employees).
- **Guest Services:** Services including resort information desks, kiosks, and lost and found.
- **Adult Ski School:** Includes ski school booking area and any indoor staging areas. Storage and employee lockers directly associated with ski school are included in this total.
- **Kid's Ski School:** Includes all daycare/nursery facilities, including booking areas and lunch rooms associated with ski school functions. Storage and employee lockers directly associated with ski school are included.
- **Rentals/Repair:** All rental shop, repair services, and associated storage areas.

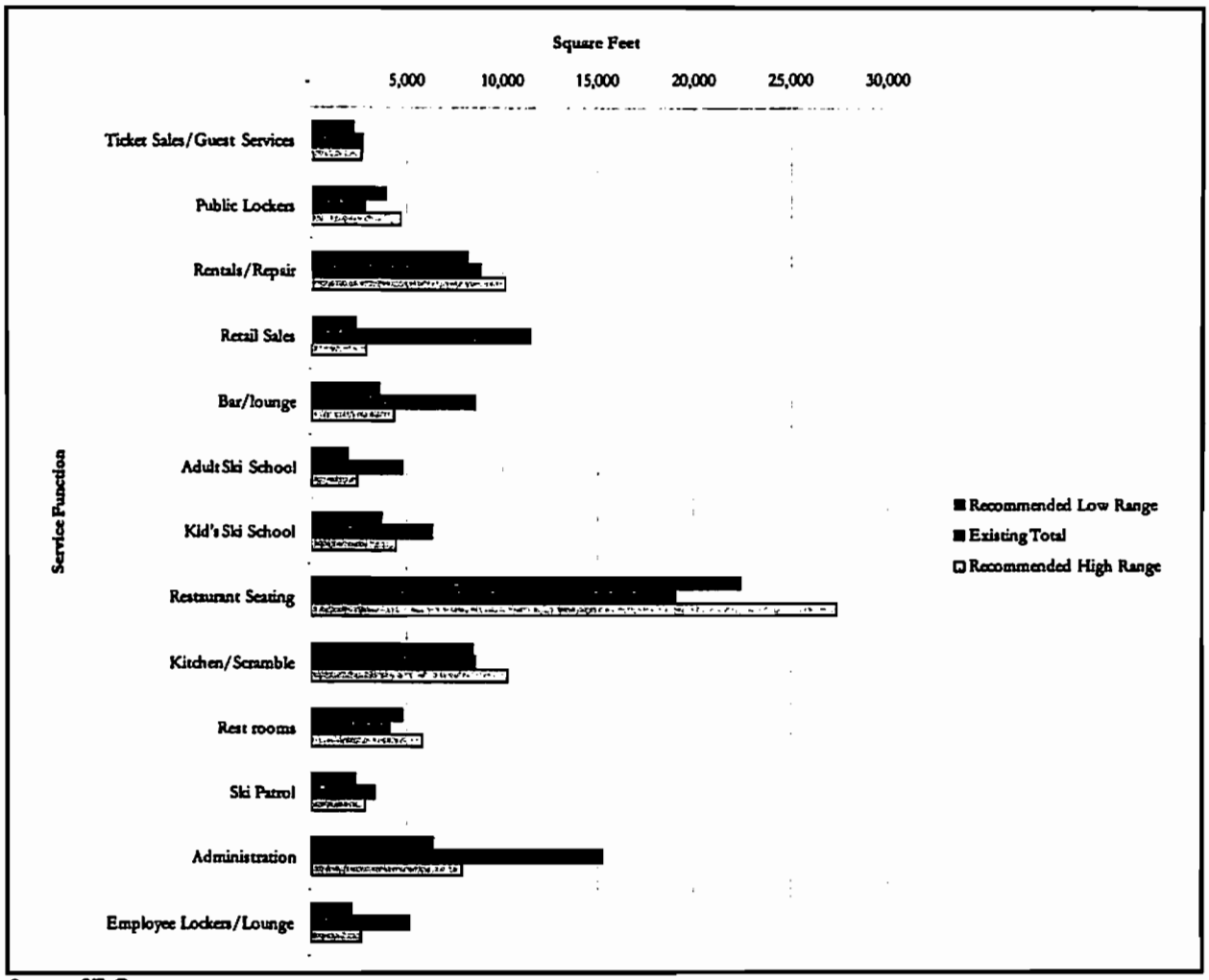
- **Retail Sales:** All retail shops and associated storage areas.
- **Ticket Sales:** All ticketing and season pass sales areas and associated office space.
- **Public Lockers:** All public locker rooms. Any public lockers located along the walls of circulation space are included, as well as the 2 feet directly in front of the locker doors.
- **Ski Patrol/First Aid:** All first aid facilities, including clinic space. Storage and employee lockers directly associated with ski patrol are included in this total.
- **Administration/Employee Lockers & Lounge/Storage:** All administration/employee/storage space not included in any of the other functions identified.

Table 4-7:
Industry Average Space Use – Existing Conditions: *Resort Total*

Service Function	Existing Total	Recommended Range	
		Low	High
Ticket Sales/Guest Services	2,686	2,140	2,610
Public Lockers	2,801	3,850	4,700
Rentals/Repair	8,866	8,130	10,160
Retail Sales	11,497	2,330	2,850
Bar/lounge	8,517	3,490	4,270
Adult Ski School	4,760	1,920	2,350
Kid's Ski School and Daycare	6,330	3,640	4,440
Restaurant Seating	19,081	22,450	27,440
Kitchen/Scramble	8,524	8,410	10,300
Restrooms	4,068	3,650	4,460
Ski Patrol	3,309	2,310	2,820
Administration	15,251	6,400	7,820
Employee Lockers/Lounge	5,089	2,130	2,610
TOTAL SQUARE FEET	**100,779**	**70,850**	**86,830**

Notes:
Food service in Bar/lounge facilities offsets restaurant seating deficit.
Retail Sales also serves non-skiing guests.
Source: SE GROUP

Chart 4-3:
Total Space Use Recommendations



Source: SE GROUP

As Table 4-7 and Chart 4-3 illustrate, there is currently an overall surplus of space at CBMR. There are notable surpluses of retail, bar/lounge, and administration space. The surplus of bar/lounge space offsets the deficit of restaurant seating space, since there is also food service provided at these locations. The excess of retail space is due to the need to provide a shopping experience for non-skiing guests who are staying in base area accommodations. The entire resort administration, not just mountain operations administration, is accounted for in the administration space shown, which explains the resulting surplus.

Table 4-7 and Chart 4-3 also do not indicate whether the overall deficiency is typical at each base area and on-mountain facility location, nor does it speak to the location or quality of the guest services. Further analysis of the individual guest service locations is required to determine specific locations and amount of surplus or deficit space throughout the resort. This level of analysis is necessary in order to determine opportunities for future expansion or improvements to the guest experience. The following tables and text address the existing space use at each guest service facility.

a. *Main Base Area Facilities*

The primary skier support services at CBMR are located in the pedestrian-oriented Main Base Area. The Main Base Area offers many amenities including restaurants, retail, employee facilities, administrative offices, and other services necessary to ski area functions.

The entire Main Base Area complex is located on private land and a number of other buildings within the complex provide additional services not necessarily related to the daily resort operations. This includes numerous commercial overnight accommodations, a conference center, Chamber of Commerce, and banking facilities.

Table 4-8:
Industry Average Space Use – Existing Conditions: *Main Base Area*

Service Function	Existing Total	Recommended Range	
		Low	High
Ticket Sales/Guest Services	2,686	2,140	2,610
Public Lockers	2,801	3,850	4,700
Rentals/Repair	8,866	8,130	10,160
Retail Sales	11,401	2,330	2,850
Bar/lounge	7,989	3,490	4,270
Adult Ski School	4,760	1,920	2,350
Kid's Ski School and Daycare	6,330	3,640	4,440
Restaurant Seating	13,652	12,380	15,130
Kitchen/Scramble	5,167	4,640	5,680
Restrooms	3,221	2,010	2,460
Ski Patrol	1,645	1,360	1,660
Administration	15,151	6,400	7,820
Employee Lockers/Lounge	4,897	2,130	2,610
TOTAL SQUARE FEET	**88,566**	**54,420**	**67,740**

Notes:
Numbers provided by CBMR.
Rentals space for existing units (1,731 skis and 301 snowboards).
Whetstone kid's ski school includes 3,004 ski school and 1,710 daycare.
Additional third party retail supplied at The Lodge, Treasury, Grand Lodge, Elevation Hotel, (not included in this total).
Additional third party food service supplied at The Lodge (not included in this total).
Food service numbers provided for Grand Lodge divided between seating (2/3) and kitchen/scramble (1/3).
Ski school locker space divided between adults and kid's ski school.
Main Base Area is primary location for resort administration.
Treasury includes new (in 2008) Pizza place (2,085sq.ft.) and rental shop (3,882sq.ft.).
Non CBMR restaurant seating (not included) = 394 indoor seats and 103 outdoor (Django's, Fire House and Substation, Camp 4, Avalanche, Brown Lab Pub).
CBMR restaurant seating (extended base area location – not included due to distance from base lifts) = 107 indoor and 25 outdoor (Woodstone, Deli, Trackers).
Outpost – includes some retail, adjacent restrooms (45sq.ft.) and brown bag seating (70 seats).
Need to accommodate guests from Red Lady, Twister, North Face and High Lift (would prefer to stay on-mountain but there is no convenient place to go).
Source: SE GROUP

The previous table illustrates that there is a significant surplus of space in the Main Base Area. As discussed earlier, much of this surplus is due to the larger amount of administration space which services the entire resort rather than just the mountain operations, and retail space which also serves non-skiing CBMR guests.

b. *On-Mountain Facilities*

Ice Bar Restaurant

The Ice Bar is located adjacent to the bottom of the Twister Lift, and provides food services and restrooms to on-mountain guests. The wood frame building appears slightly rundown, and is roughly 1,500 square feet in size with 40 indoor seats, and 60 outdoor deck seats.

Table 4-9:
Industry Average Space Use – Existing Conditions: *Ice Bar*

Service Function	Existing Total	Recommended Range	
		Low	High
Ticket Sales/Guest Services	-	-	-
Public Lockers	-	-	-
Rentals/Repair	-	-	-
Retail Sales	-	-	-
Bar/lounge	144	-	-
Adult Ski School	-	-	-
Kid's Ski School and Daycare	-	-	-
Restaurant Seating	886	1,480	1,810
Kitchen/Scramble	300	550	680
Restrooms	100	240	290
Ski Patrol	-	-	-
Administration	-	-	-
Employee Lockers/Lounge	10	-	-
TOTAL SQUARE FEET	**1,440**	**2,270**	**2,780**

Notes:
Numbers taken from 04/08 spreadsheet from CBMR.
Food Service space provided divided between seating (2/3) and Kitchen/scramble (1/3).
Source: SE GROUP

Due to its limited size and seating capacity, the Ice Bar may only accommodate a small number of guests. Despite limited capacity of the Ice Bar, restroom space is undersized for the existing demands, requiring guests to use restrooms in the Ski Patrol building, at the top of Painter Boy Lift, on-mountain outhouses or descend to the base area. Guests skiing in the Red Lady Express, Twister, North Face and High Lift pods that cannot be accommodated at the Ice Bar must either ski over to Paradise or down into the base area.

As indicated later in this document, the 2008 Decision Notice approved expansion of the Ice Bar by 1,200 square feet, which will provide needed seating and improve the building's appearance.

Paradise Lodge

This 9,173-square foot wood frame structure was built at the base of the Paradise Lift in 1983. It houses a cafeteria, a restaurant, sundries, and restrooms. The building is in good condition and is well situated to take advantage of the surrounding views. Paradise offers 195 indoor restaurant seats and 260 seats on the deck.

Rustica's Restaurant is located in the Paradise Lodge. Rustica's is a sit down dining facility with 86 indoor seats, which can serve approximately 283 people per day.

Table 4-10:
Industry Average Space Use – Existing Conditions: *Paradise*

Service Function	Existing Total	Recommended Range	
		Low	High
Ticket Sales/Guest Services	-	-	-
Public Lockers	-	-	-
Rentals/Repair	-	-	-
Retail Sales	96	-	-
Bar/lounge	384	-	-
Adult Ski School	-	-	-
Kid's Ski School and Daycare	-	-	-
Restaurant Seating	4,543	8,590	10,500
Kitchen/Scramble	3,057	3,220	3,940
Restrooms	747	1,400	1,710
Ski Patrol	64	950	1,160
Administration	100	-	-
Employee Lockers/Lounge	182	-	-
TOTAL SQUARE FEET	**9,173**	**14,160**	**17,310**

Notes:
Numbers taken from 04/08 spreadsheet from CBMR.
Kitchen/scramble includes 1,651sq.ft. F&B storage.
Need to accommodate guests from Red Lady, Twister, North Face and High Lift.
Source: SE GROUP

As illustrated in the Table 4-10, there is a significant deficit of space at Paradise given the existing distribution of skiers and riders. With restaurant seating almost half of the recommended range, on a handful of peak days, guests can become frustrated with long wait times for available seating and can be forced to descend to the base area facilities for lunch. There is also a deficit of on-mountain restroom space at Paradise, however, guests can use other on-mountain facilities or restroom space at the Main Base area (see Table 4-12 for restroom fixtures Resort wide). On-mountain facilities are popular lunchtime destinations, as guests typically prefer to take advantage of convenience and enjoy the panoramic views.

Ski Patrol

On-mountain ski patrol and first aid operations are headquartered in a station near the top terminal of the Silver Queen Express Lift, with two satellite patrol stations located in the Gold Link and

Painter Boy Lift outpost and the East River outpost. These facilities are well positioned to adequately accommodate the existing terrain and emergency needs of resort guests.

2. Food Service Seating

Food service seating at CBMR is provided at the following locations:

- Main Base Area – Butte 66, Elevation Hotel, Spellbound Pizza
- On-mountain – Paradise, Rusticas, Ice Bar

A key factor in evaluating restaurant capacity is the turnover rate of the seats. A turnover rate of two to five times is the standard range utilized in determining restaurant capacity. Sit-down dining at ski areas typically results in a lower turnover rate, while "fast food" cafeteria style dining is characterized by a higher turnover rate. Furthermore, weather has an influence on turnover rates at ski areas, as on snowy days skiers will spend more time indoors than on sunny days. As a result of input from CBMR management, an average turnover rate of 3 times was used for CBMR. To accommodate the lunchtime capacity (CCC + 5% non-skiing guests), 2,079 total seats would need to be available at the Main Base and on-mountain facilities. The following table shows seats available at each facility and seats required to accommodate the current Alpine CCC.

Table 4-11:
Recommended Restaurant Seating

	Main Base Area	Ice Bar	Paradise	Total Resort
Lunchtime Capacity (CCC)	3,440	411	2,387	6,237
Average Seat Turnover (indoor)	3	3	3	-
Existing Indoor Seats	505	40	281	826
Required Seats	1,147	137	796	2,079
Difference	*-642*	*-97*	*-515*	*-1,253*
Average Seat Turnover (outdoor)	3	3	3	-
Existing Outdoor Seats	350	60	260	670
TOTAL SEATS (Indoor and Outdoor)	**855**	**100**	**541**	**1,496**
Required Seats	1,147	137	796	2,079
Difference	-292	-37	-255	-583

Notes:
Seating inventory taken from 7/05 Mountain Improvements Plan.
Outdoor Seats are counted toward overall seating capacity, assuming that the resort will meet capacity on fair weather days when they may be utilized.
Main Base Area includes Butte 66 (117 indoor, 150 out), Elevation hotel (185 indoor/200 out), Pizza (133 indoor), Outpost (70 indoor).
Non CBMR restaurant seating (not included) = 394 indoor seats and 103 outdoor (Django's, Fire House and Substation, Camp 4, Avalanche, Brown Lab Pub).
Outdoor seats in Main Base Area include Butte 66 (150) and Elevation Hotel (200).
Paradise includes cafeteria (195 indoor and 260 outdoor) and Rusticas (86 indoor).
CBMR restaurant seating (extended base area location – not included due to distance from base lifts) = 107 indoor and 25 outdoor (Woodstone, Deli, Trackers).
Source: SE GROUP

As shown in Table 4-11, there is a significant deficit of indoor seating capacity at all locations. Even the outdoor seating does not make up for the deficit of indoor seats. This is particularly relevant, given the fact that most busy days occur when the weather is clear and guests may utilize the outdoor seating.

Seating and restaurant space recommendations are directly related to the lunchtime capacity. The lunchtime capacity is determined by the distribution of each lift's CCC. It is assumed that guests will prefer to dine at the facility closest to the area where they are skiing or riding. To allow for this convenience, it is important to provide restaurant seating to accommodate the lunchtime capacity requirement of the area.

3. Restroom Fixtures

Restrooms at CBMR are provided in the following base area facilities: The Lodge, Axtell, Whetstone, Treasury, Emmons, Grand Lodge, Outpost and the Elevation Hotel. On-mountain restrooms are provided at the Ice Bar, Paradise, Ski Patrol building and the top of Painter Boy Lift. The recommended number of fixtures is based on the distribution of skiers across the mountain and in the base area.

Table 4-12:
Recommended Restroom Fixtures

	Main Base Area	Ice Bar	Paradise	Total Resort
Lunchtime Capacity	3,440	411	2,387	6,237
Existing				
Men's toilets	27	1	6	34
Men's urinals	22	1	8	31
Women's toilets	43	1	12	56
Recommended				
Men's toilets	19	1	2	22
Men's urinals	19	1	4	24
Women's toilets	51	2	12	65
Difference				
Men's toilets	8	0	4	12
Men's urinals	3	0	4	7
Women's toilets	-8	-1	0	-9

Notes:
Recommended restroom fixtures are based on the existing lunchtime capacity shown above in the first row.
Additional on-mountain facilities are located at the Ski Patrol facility (1 men's toilet, 1 urinal, 1 women's toilet) and at the top of Painter Boy Lift (1 men's toilet, 1 urinal, 1 women's toilet).
Additional on-mountain facilities are located outhouses (1 at East River top terminal, 1 at East River bottom terminal, 1 at Peachtree top terminal, and 2 at Teocalli top terminal).

Table 4-12 shows a deficit of women's toilets on-mountain at the Ice Bar and at the base area. The deficit of on-mountain women's toilets are supplemented by toilets at the Ski Patrol facility, the top of Painter Boy Lift and on-mountain outhouses. There is also shortage of women's toilets at the main base area. The number of fixtures for men is sufficient.

F. ACCESS AND PARKING

1. 2008 Upper Gunnison Valley Transportation Plan

In 1998 Gunnison County along with the City of Gunnison, and the towns of Crested Butte and Mt. Crested Butte (stakeholders), commissioned a comprehensive transportation study that culminated in the 1999 Upper Gunnison Valley Transportation Plan (1999 Plan). The study analyzed the Valley's transportation system, and identified a number of key issues raised by the community and stakeholders. The 1999 Plan included a host of recommendations to address the issues that had been raised. The recommendations were broken into five parts: Public Transit Programs, Motor Vehicle Programs, Non-Motorized Systems, Transportation Demand Management Programs, and Land Use Measures Programs.

In 2008 the stakeholders commissioned an update to the 1999 Plan; the Upper Gunnison Valley Transportation Plan was released in October 2008 (2008 Update). The 2008 Update is attached as Appendix B. As can be seen in Chapter 5 of the 2008 Update, a significant number of the recommendations from the 1999 Plan have been implemented over the past decade. Some of the most significant recommendations that have been implemented include:

- Creation of the Gunnison Valley Regional Transportation Authority
- Permanent funding of the RTA through County taxes
- Expansion of Mountain Express bus service
- Initiation of all day scheduled transit service between Gunnison and Mt. Crested Butte;
- Improvements to the Four Way Stop along Sixth Street in Crested Butte
- Widening (paved shoulders) along Gothic Road
- Paved shoulders, construction of turn lanes, and improved signing and markings on State Highway 135 from Gunnison to Crested Butte

These improvements have reduced traffic volumes and improved the traffic flows and safety, and with the creation of the RTA and its funding source, a stabilized mechanism for providing public transportation is now in place.

While the Valley has made great strides in addressing potential transportation and parking issues over the past decade, the 2008 Update has identified issues that remain a concern to the Valley; these include traffic congestion, and parking (among other items). The 2008 Update includes recommendations for addressing these issues going forward. The County and city/town governments have taken a very proactive posture in identifying and addressing transportation concerns in the Valley and as a result of this proactive stance, the Valley is in a good position to deal with growth as it occurs in the future.

2. Access

The Crested Butte area is primarily accessed from the south via State Highway 135. From the town of Gunnison, Highway 135 is a two-lane, paved road that is approximately 30 miles long and is the

only way to access the area in the winter. During the rest of the year, access is also provided via County Road 306 to Cottonwood Pass from the town of Buena Vista and Kebler Pass Road, which is approximately 29 miles long and serves as Crested Butte's main link to the towns of Paonia and Aspen during the summer. However, due to the high elevation, these routes are closed to all traffic during the winter season.

The closest international airport is in Denver, approximately 230 miles to the east. The closest regional airport is the Gunnison-Crested Butte Regional Airport located in the Town of Gunnison, approximately 30 miles to the south. While the schedules for individual carriers are subject to change from year to year, there are numerous options for non-stop service between the Gunnison-Crested Butte Regional Airport and Denver, Dallas, Atlanta, Chicago, and Salt Lake City. From the airport, guests can either take a shuttle service that meets every flight providing direct access from the airport to Crested Butte, or rent a car and drive to Crested Butte.

Transit services are provided by Mountain Express, a public transit service, and Alpine Express, a private company. Mountain Express provides services between the Town of Crested Butte and Mt. Crested Butte, while Alpine Express runs transit services between Gunnison, Crested Butte and Mt. Crested Butte. The Town Taxi service also provides local transportation on an on-call basis.

The Mountain Express service offers three routes. The Town Loop travels through the Town of Crested Butte and a small intercept lot to a drop-off at CBMR. Two loops are provided within the Town of Mt. Crested Butte, a Main Condo Loop and Outer Condo Loop. These two loops serve visitors staying in overnight accommodations within the Town of Mt. Crested Butte. Mountain Express enjoys a relatively high utilization of its service.

The Alpine Express service is utilized mostly to shuttle visitors from Gunnison and the airport to on-site accommodations. However, the service is also used as a commuter service by residents in Gunnison and along the route to Mount Crested Butte and provides transportation to a significant number of visitors and employees to the resort on a given day.

3. Parking

Ski resort parking demand is influenced by a number of things including whether the resort is a day ski area or a destination resort, and what type of public transportation is available. Parking demand at a destination ski resort such as CBMR is lower than it is at ski resorts that serve a higher percentage of day skiers such as the Front Range resorts in Summit and Eagle Counties or Winter Park. A large proportion of CBMR visitors are destination guests who are staying and parking in local accommodations, rather than in public lots. Many of these are ski-in/ski-out units, and many others are easily ski accessible. The Gunnison Valley also has a very strong public transportation service that is managed by the Gunnison Valley Rural Transportation Authority (RTA) and funded through a county sales tax and other sources of public transportation funds. RTA buses cover a wide geographic area, and have frequent round trips making riding the bus an attractive alternative to driving a personal vehicle. As a result of these factors, only an average of around 20 percent of guests drive to the resort and use the parking lots on a daily basis.

For the day-skier guests that choose to drive to the resort, there are two parking options. First is CBMR's main parking lot, which is a pay lot that can accommodate 425 vehicles.[34] The second option includes two free lots – one owned and one leased by the town of Mt. Crested Butte – totaling 30 spaces. These include a lot located south of the Plaza building (130 spaces) that is convenient for guests, and the Inn site lot (100 spaces) that is less convenient. Additional free parking is available at the intersection of Elk Avenue and 6th Street in Crested Butte.

Based on car counts that are taken across each ski season, the main lot is significantly underutilized most of the time. In fact, over the past six ski seasons there were only a combined total of 26 days where parking demand exceeded 300 cars and only six days when demand exceeded the 425 parking space supply in the main lot. The town parking lots are frequently used by skiers that prefer to park in these free lots as opposed to paying for parking at the resort. These lots do fill during peak winter periods, but the lot at the Inn site is often not filled. Table 4-13 summarizes the number of cars parked in the CBMR main parking lot over the past seven seasons.

Table 4-13:
Main Parking Lot Usage Numbers – Existing Conditions

Number of Cars Parked	Percent of Total Days per Season						
	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Less than 100 Cars	49%	68%	75%	19%	16%	31%	23%
101-200 Cars	38%	25%	18%	54%	50%	49%	53%
201-300 Cars	12%	7%	6%	20%	23%	13%	13%
301-400 Cars	1%	0%	1%	3%	11%	6%	7%
401-425 Cars	0%	0%	0%	0%	0%	1%	1%
More than 425 Cars	0%	0%	0%	3%	0%	1%	3%

Source: SE GROUP

Table 4-13 clearly demonstrates the significant underutilization of the existing parking capacity. In order to accurately model the balance of access and parking to resort, it is important to model the number of parking spaces used on days when visitation closely matches CCC, rather than season-long averages. For that reason, the parking count data was analyzed to determine the average number of cars that are parked on days when skier counts closely match CCC. Since 2001, an average of 280 cars were parked in the CBMR pay parking lots on those days. Based on observations, it was assumed that approximately 85 percent of the town lot parking spaces area filled on those days as well. Using those factors, a total of 475 cars were calculated to be using parking spaces on days when visitation matches CCC. Average vehicle occupancy rates (AVO) are a critical planning parameter for determining capacity of parking. The industry standard is typically within a range of 2.3 guests per car to 2.7 guests per car. AVO rates tend to be higher on busier days, since most guests tend to ski with larger groups or families on holiday periods and weekends. Conversely, AVO rates tend to be lower on days with low visitation, since guests often ski alone or in small groups on weekdays. Observed and counted rates at CBMR indicate that AVO tends to be about 2.5 guests per car on the busier days (i.e. days when visitation approximates CCC). Using this average occupancy rate of 2.5 guests per car, the number of guests using parking on days close to CCC is

[34] In addition to the main lot, the Manor lot and VIP lots provide parking spaces for area visitors.

approximately 1,188, or 20 percent of the total CCC. The remainder of guests can therefore accurately be assumed to be staying in lodging that is conveniently accessible to ski facilities, or using shuttles or the mass transit system. This planning parameter is used in the upgrading plan, Chapter 6. The following table details these calculations and the existing parking situation at CBMR.

Table 4-14:
Parking Capacity – Existing Conditions

	Total
CCC	5,940
Percent of guests not using parking	80%
Number of guests not using parking	4,752
Percent of guests using parking	20%
Number of guests using parking	1,188
Average guests per car	2.5
Number of required parking spaces	475
Number of resort-owned parking spaces	425
Number of town-owned parking spaces	230
Total available parking spaces	655
Number of surplus parking spaces	183
Percent of parking capacity used	73%

Based on the average vehicle occupancy (AVO) of 2.5, existing parking capacity at CBMR has been calculated at approximately 1,688 guests, which is well above the demonstrated need of 1,188. This is reflected in the 27 percent surplus parking capacity shown. Most destination visitors use lodging parking and walk or get shuttled to the ski area; so day skiers rarely fill CBMR's parking to capacity.

G. Ski Area Operations

1. Ski Patrol/First Aid

Four ski patrol buildings are found at CBMR: three on-mountain and one in the base area. One on-mountain patrol station is located at the top of *Silver Queen Road;* the other two are located at the top of the East River and Gold Link lifts. The Silver Queen facility (1,000 square feet) is the headquarters, equipment storage and central dispatch. The East River and Gold Link patrol buildings provide a combined area of roughly 600 square feet for logistical support and storage.

Skiers with injuries are transported to one of the two privately owned medical clinics in the Main Base area for treatment. The first clinic is located in the lower level of the Axtell Building, and includes a patient holding area, which is also used by Ski Patrol. The second clinic is found in the Crested Mountain complex. Both are adequate in meeting the resort's first aid and emergency medical needs.

2. Existing Snowmaking

As demonstrated in Table 4-15, CBMR provides snowmaking coverage on approximately 327 acres of terrain. Trails with snowmaking coverage are illustrated on Figure 4.15.

Table 4-15:
Existing Snowmaking Coverage

Trail (#)	Trail Name	Acreage (acres)
47	Canaan	17.4
81	Prospect	14.0
30	Roller Coaster	2.3
40	Bubba's Way	3.2
35	Peanut Access	0.6
43	Meander	1.1
31	Lower Twister	21.5
5	Buckley	7.1
8	International	25.1
38	Lower Keystone	14.0
21	Upper Keystone	16.6
38	Keystone Bottom	10.6
45	Lower Ruby Chief	15.2
68	Splains Gulch	5.4
41	Bushwaker	15.5
51	Treasury	14.7
48	Upper Treasury	4.0
56	Paradise Bowl	12.6
46	Forest Queen	6.2
34	Houston	18.3
50	Daisy	5.0
57	Resurrection	13.1
64	Cascade	19.3
36	Upper Smith Hill	5.2
36	Lower Smith Hill	2.3
11	Championship	9.7
69	Little Lizzie	6.1
7	North Star	2.9
23	Twister Connector	0.6
4	High Tide	4.4
--	Peach Tree Connector	0.6
10	Silver Queen Connector	2.7
61	Red Lady Bend	2.2
--	R	0.3
--	Q	1.1
--	DC Super Pipe/Upper Ruby Chief	23.3
2	Rustler's Gulch	0.3
19	Crystal	0.9
32	Mineral Point	0.6
9	Ruby Road	0.9
TOTAL		326.9

Crested Butte's existing snowmaking water rights accommodate all existing snowmaking (see Section F - Water Rights). The Snowflake Control Building snowmaking plant at CBMR provides a combination air/water and airless snowmaking system. It has a system capacity of 2,700 gallons per minute (gpm) for water and 8,000 cubic feet per minute (cfm) of compressed air. The snowmaking equipment includes a variety of air/water guns, including 52 ground guns, 138 tower guns, and two airless "fan" guns. Of the total snowmaking acreage, snowmaking pipes and hydrants exist on approximately 75 percent of terrain, with the remaining 25 percent covered by snowmaking surface hoses and guns.

3. Existing Grooming

Developed skiable terrain at CBMR totals approximately 585 acres. Of this acreage, between 250 and 350 acres are regularly groomed including the Beginner through Intermediate ski trails and selected Advanced and Expert terrain. The CBMR grooming fleet consists of nine grooming vehicles; priorities vary according to snow and weather conditions. Typically, the fleet completes nightly groomed terrain and ensures at least one top to bottom trail per lift system is serviced. Heavy storm conditions require re-grooming certain trails. CBMR has two winch-cats for grooming steep terrain. Anchors are used in conjunction with the winch-cats for steeper terrain.

Groomers at CBMR are able to maintain approximately 3.3 to 5.3 acres of ski trail per hour with each machine. At that rate, each machine can groom approximately 25 to 40 acres in a 7.5 hour shift, which falls within industry norms for groomed acres per machine.

4. Ski School

Ski school operations are distributed between the Whetstone Building (for children's programs) and the Axtel Building for adult programs. Total space use is ample for the current ski school operation.

5. Day Care

The day care facility is located in the Whetstone Building. The day care facilities are well located relative to the pedestrian plaza and on-mountain facilities. Food is prepared off-site and brought in. Special programs for children include the "Kid's Ski and Ride School" and birthday parties.

6. Maintenance Facilities

Maintenance and operations for CBMR are located in a building just north of the Gold Link area, well isolated from skiing and visitor activity. Vehicular access to the site is by way of Gothic Road. Snowcats have ready access to the ski trail network via the Gold Link Lift pod. The facility serves as the primary shop for maintaining the snow grooming equipment, other mountain utility vehicles, lifts and buildings.

7. Mountain Roads

Summer vehicular access to the mountain facilities is necessary for off-season maintenance operations and fire protection. The existing mountain roads provide summer access for rubber tire vehicles to all mountain buildings and lift terminal locations. The exception is the High Lift, which has no road access to the mid- or upper terminal. Maintenance access for the High Lift is typically carried out over the snow. Existing mountain access roads are shown on Figure 4.0.

H. WATER RIGHTS

CBMR currently holds water rights to 11 cubic feet per second (cfs) drawn directly from the East River for snowmaking and 0.155 cfs drawn from on-mountain springs for domestic and commercial uses. These rights would accommodate existing and foreseeable future need of the resort. These water rights allow for withdrawal of up to 6 cfs for current snowmaking on the Main Mountain, as long as a minimum in-stream flow of 7 cfs through November 30, and 6 cfs during 360 hours of December, remains in the river.[35] The remaining rights are for 5 cfs to be withdrawn from the East River for expanded direct flow snowmaking operations on Snodgrass Mountain. These conditional rights specify that the same minimum in-stream flow requirements will exist regardless of CBMR projects. These water rights are for direct flow only and must be applied directly to snowmaking; this water cannot be stored in Crescent Lake.

For domestic and commercial uses, CBMR holds rights to 0.05 cfs from the Paradise Collection System and 0.05 cfs from the Twister Water System for use at the Ice Bar and Paradise restaurants on the Main Mountain; treatment occurs on-site. CBMR also holds water rights to 0.055 cfs from the North Mountain Spring No. 1 primarily for future domestic and commercial use on Snodgrass.

I. UTILITIES

Domestic Water System

Domestic water is supplied by the Mt. Crested Butte Water and Sanitation District (CBWSD). Water sources consist of four raw water collection boxes on the Main Mountain with a maximum capacity of 300 gallons per minute (gpm) during snowmelt conditions. Water is also drawn from the East River. Up to 1,000,000 gallons of water may be treated per day within the on-site facility, with the ability to store 100,000 gallons on-site. Primary storage occurs at two surface tanks (1,200,000 gallon capacity) above the Town of Mt. Crested Butte. The Ice Bar and Paradise Restaurant draw water from nearby springs and treatment occurs on-site.

Sewer

Sewage disposal at CBMR is provided by a treatment facility operated by CBWSD. The facility currently has a capacity of 600,000 gallons per day (gpd) and has been designed to accommodate a total capacity of 1,000,000 gpd. All base area and on-mountain buildings are connected to the CBWSD facility.[36] No sewage service is provided to the on-mountain outhouses. The Ice Bar and Paradise restaurants have solid waste tanks which are pumped seasonally and the contents are hauled off the mountain for treatment by the CBWSD.

Power

Electrical power is supplied to CBMR by Gunnison County Electric Association (GCEA). A single substation, with two 25 MVA (million volt amps) transformers is located in Crested Butte. Two 24,900 volt, 3-phase feeders distribute the power. This substation supplies the entire north end of the valley, and peak use has historically only used one of the 25 MVA transformers. Therefore, the

[35] Originally decreed as a conditional right for snowmaking purposes with an adjudication date of 1981. Of the decreed amount, CBMR owns 1.2 cfs, and the United States of America owns 4.8 cfs. The portion owned by the United States of America is used by CBMR in accordance with a SUP.

[36] Prior to the 1998/99 winter season, sewage treatment at The Ice Bar and Paradise occurred through on-site leach fields. Both facilities are now connected to the CBWSD facility.

system is adequate in meeting current and projected demand. All power distribution lines are buried on the mountain.

Communications

Primary communication between the base area and on-mountain buildings is provided by a standalone private phone system owned by CBMR. Communication lines radiate from the base area buildings to all lift terminal locations, the Ice Bar, the Paradise Restaurant, and the Ski Patrol buildings. The system is adequate to accommodate anticipated needs for the upgrading and expansion. Communication for mobile staff (i.e., ski patrol, groomers, maintenance, etc.) is provided by centrally dispatched two-way radios.

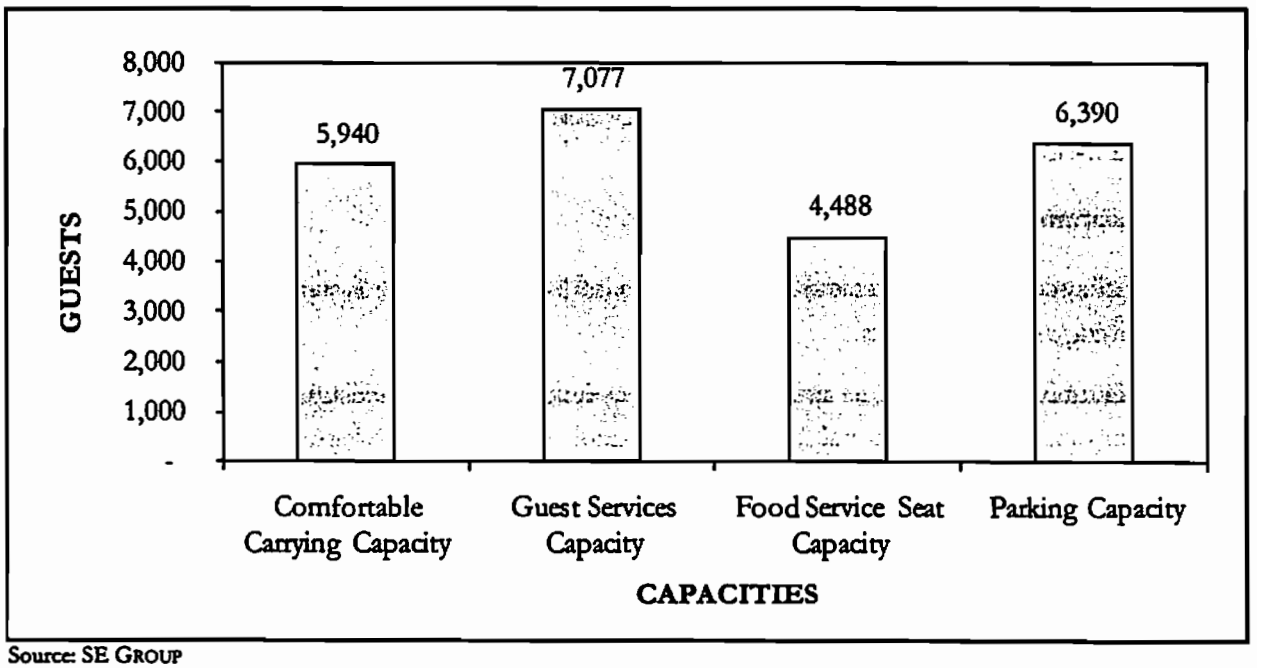
Fuel Storage

Fuel storage and pumps for gas and diesel are provided adjacent to the grooming/vehicle maintenance building to serve snow grooming and ski area utility vehicles. Fuel storage includes a 2,000 gallon, above-ground gasoline tank, a 500 gallon gasoline tank at the snowmaking building, and two above-ground diesel tanks (3,000 and 4,000 gallons, respectively). Fuel is also stored on-mountain at each lift terminal for use in operating auxiliary lift power units.

J. BALANCE OF FACILITIES

The overall balance of the existing ski area is evaluated by calculating the capacities of the resort's various facilities and comparing those facilities to the resort's CCC. The discussed capacities are shown in Chart 4-4.

Chart 4-4:
Existing Resort Balance



Source: SE GROUP

A review of the balance of facilities and the guest capacities indicates that, in general, the existing facilities are in balance with the existing capacity. The skier service capacities are generally balanced to a number that includes the Alpine CCC plus additional non-skiing guests. It should be noted that the deficiency in food service seating is improved by private restaurants in the base area. There are an additional approximately 500 seats in privately-owned restaurants that are within walking distance of the lift bases, an additional amount that brings the total restaurant seating capacity to about 5,800. The high parking capacity reflects the 80 percent of guests that do not use the parking lots plus the surplus amount of pay parking available. As discussed, most destination visitors use lodging parking and walk or get shuttled to the ski area; so day skiers rarely fill CBMR's parking to capacity. Additionally, some of the deficiencies have been addressed through the upgrade and improvements that are part of the Mountaineer Square main base redevelopment project (see Chapter 6, Section G and/or Appendix A for more information). Other improvements have been, and will be, addressed individually as the resort expands its capacity through approved lift upgrades.

K. Additional Recreational Opportunities and Activities at the Main Mountain

Beyond alpine skiing, many other year-round recreational activities are offered by CBMR and other local vendors. Winter activities include a tubing park at the base area, fondue dinners, torchlight parades and sleigh rides. Other winter recreational activities in the region include cross-country skiing, guided back-country ski touring (Nordic and Alpine), snowmobiling, dog sledding, snowshoeing, and nature viewing. A children's tubing hill is available after lifts close at the base of the Red Lady Express. This hill is lit for nighttime tubing. The Atlas snowshoe loop offers two daily tours available as well as moonlight tours available in January, February and March.

CBMR offers a variety of summer recreational activities including lift supported mountain biking and hiking, disc golf, nature viewing, and public access to the summit of Crested Butte Mountain. The Adaptive Sports Center operates a ropes course located at the top of the Red Lady Lift. Hang gliding from the summit of the resort is authorized with prior permission. These activities are available in conjunction with the operation of both the Silver Queen and Red Lady Express chairlifts. Silver Queen operates daily from June 24 through Labor Day, and Red Lady operates daily from June 24 through August 15.

CBMR's summer recreational objectives include:

- Enhance summer recreation opportunities on National Forest System lands with additional hiking and biking trails.
- Maintain and expand, as appropriate and as demand dictates, existing summer recreation opportunities on National Forest System lands including the Adaptive Sports Center rope course, disc golf, and hang gliding.
- Provide new recreation activities on private lands including ice skating, bungee jumping, rock climbing, bouldering, skate-park, and other similar activities.

The location and setting of the resort draws a significant number of tourists to the area. Other regional summer recreational activities and special events in the area include the Fat Tire and Wildflower Festivals, tennis, golf, swimming, fishing, rafting, mountain biking, hiking, and camping.

1. Mountain Biking & Hiking

Summer trails on Crested Butte Mountain for hiking and mountain biking represent a critical component of CBMR's summer offerings. CBMR's vision is to continue improvements and re-invest at the Base Area of Crested Butte Mountain to expand the summer experience on private and public lands.

Currently, there are over 13 miles of existing trails for mountain biking and 3 miles of "hiking only" trails. CBMR maintains a number of dedicated trails for mountain biking and hiking. From the Silver Queen Lift, two hiking-only trails are available. The *Summit* Trail leads to the summit of Crested Butte Mountain and is one of the most popular hiking trails on the Gunnison Ranger District of the GMUG. The *Silver Queen* Trail follows the *Silver Queen Road* from the top terminal of the Silver Queen chairlift to the top of the Red Lady Express and then continues to the base area. Multiple use, hiking, and biking trails are illustrated on Figure 4.2.

L. Existing Recreational Opportunities on Snodgrass Mountain

Snodgrass Mountain exists in an undeveloped state and offers no formalized public services. With the exception of a small, designated parking area (approximately 20 cars), there are currently no facilities or amenities on, or adjacent to, Snodgrass Mountain. All developed recreation opportunities operated by CBMR are located on the Main Mountain.

Current public uses of Snodgrass Mountain include dispersed recreational activities such as hiking, mountain biking, trail running, wildflower viewing, backcountry skiing, and snowshoeing. Access to these recreational opportunities is provided by Gothic Road via an undeveloped trailhead and parking area located just north of the Main Mountain. From this trailhead, guests can access the summit of Snodgrass Mountain via the Snodgrass Mountain Road, or link to other trails on private and Forest Service land.

Mountain bikers, hikers, and horseback riders can also access the single-track *Snodgrass Trail* located approximately 0.5 mile up Snodgrass Road. This east-west running trail is approximately 3 miles long and runs along the south side of Snodgrass Mountain, and leaves Forest Service lands approximately 1 mile in, where it traverses private land and terminates at the Washington Gulch Road. Riders then have the choice of taking Washington Gulch Road up to Gothic Road and back to the *Snodgrass Trailhead*, linking into a myriad of other trails, or riding the *Snodgrass Trail* back the way they came. This popular trail has an ability rating of easy to moderate and takes riders through fields of wildflowers and aspen and pine groves. At times, the *Snodgrass Trail* can be closed due to grazing on the adjacent private land during July and August.

Backcountry skiing on Snodgrass Mountain is a popular winter recreation activity that has been occurring for decades. The trailhead at the base of Snodgrass Mountain also provides an access point for backcountry ski enthusiasts. Backcountry ski terrain is accessed via a 2.2 mile hike or ski tour up Snodgrass Road. CBMR periodically grooms the Snodgrass Road to facilitate access for recreation. The primary backcountry ski destination includes the "Glory Hole" area on the northeast face of Snodgrass Mountain, where skiers enter steep slopes and egress the area via Gothic Road. A lesser backcountry use is simply skiing back down the road or in the numerous lower angle glades.

Gothic Road is the only winter non-motorized recreation corridor on the GMUG in the vicinity of Crested Butte. It therefore receives substantial cross country skiing as well as backcountry skiing, and provides access to Gothic Cabin. Gothic Road is closed to all motorized use per Gunnison County and the Forest Service per the GMUG's 1995 Winter Travel plan. There are also winter travel designations in Washington Gulch.

M. CONCESSIONAIRES AND OUTFITTERS

As noted in Chapter 4, CBMR has several concessionaires that work on a contract basis within the SUP area. Concessionaires include:

- Case Photography (winter only)
- Fantasy Ranch horse rides (summer only)
- the Adaptive Sports Program (year-round)

Crested Butte Mountain Guides operates within CBMR's SUP area under a Forest Service-issued Outfitter and Guide Permit. They have mountain climbing programs in the summer season on the peak of Crested Mountain and operate backcountry skiing and avalanche training courses on the Snodgrass Mountain portion of the SUP area in the winter season.

CRESTED BUTTE

MASTER DEVELOPMENT PLAN

FIGURE 4.0

Existing Main Mountain

- USFS Special Use Permit Boundary
- Property Boundary
- Existing Major Roads
- Existing Mountain Roads
- Existing Lifts
- Existing Beginner Trail Centerlines
- Existing Intermediate Trail Centerlines
- Existing Advanced Trail Centerlines
- Existing Expert Trail Centerlines

- Existing Paradise Warming House
- Existing Ice Bar and Restaurant

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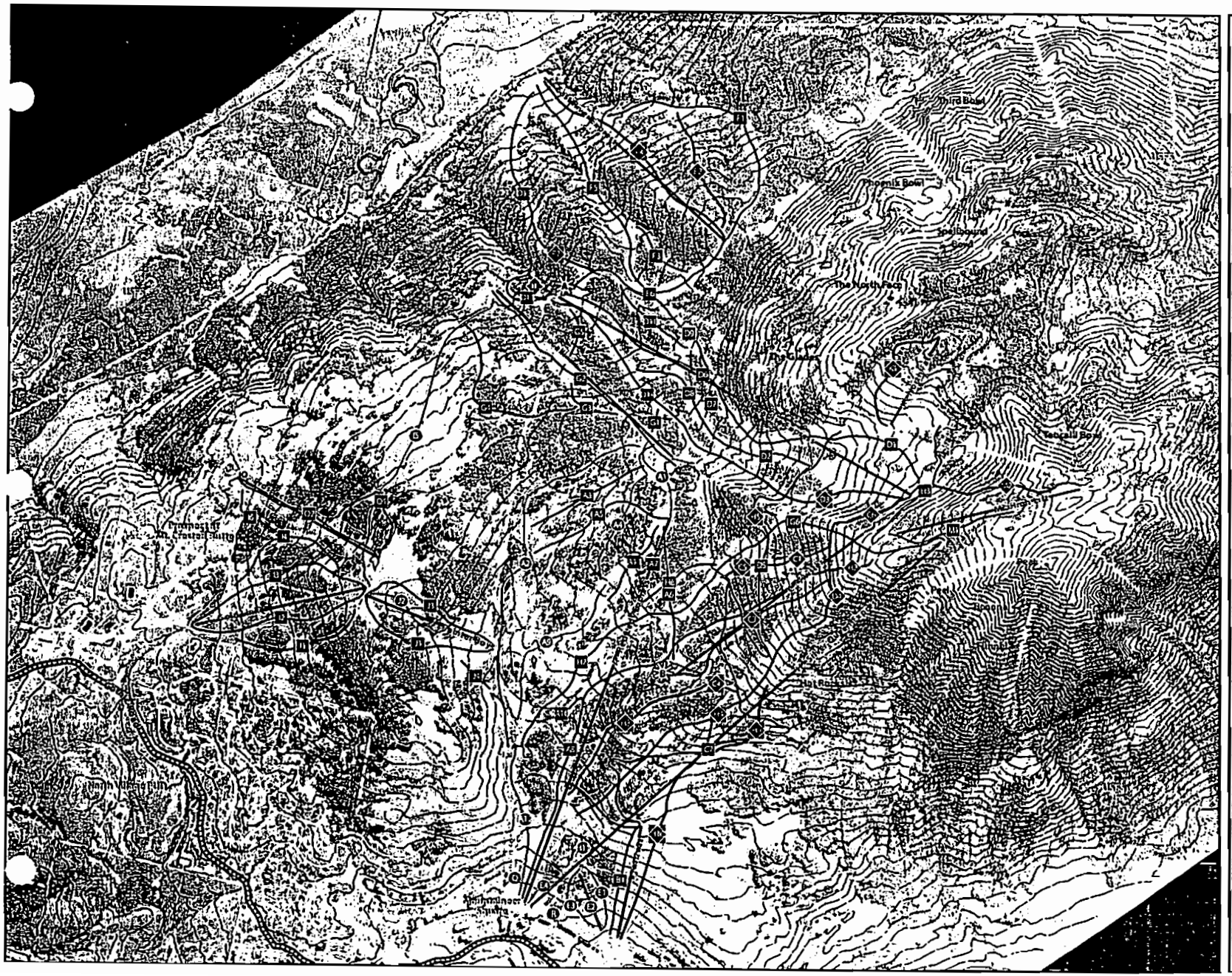


CRESTED BUTTE
MOUNTAIN RESORT
COLORADO

MASTER DEVELOPMENT PLAN

FIGURE 4.1

Existing Main Mountain Snowmaking

LEGEND

- USFS Special Use Permit Boundary
- Property Boundary
- Existing Major Roads
- Existing Lifts
- Existing Beginner Trail Centerlines
- Existing Intermediate Trail Centerlines
- Existing Advanced Trail Centerlines
- Existing Expert Trail Centerlines
- Existing Snowmaking

GUEST SERVICES

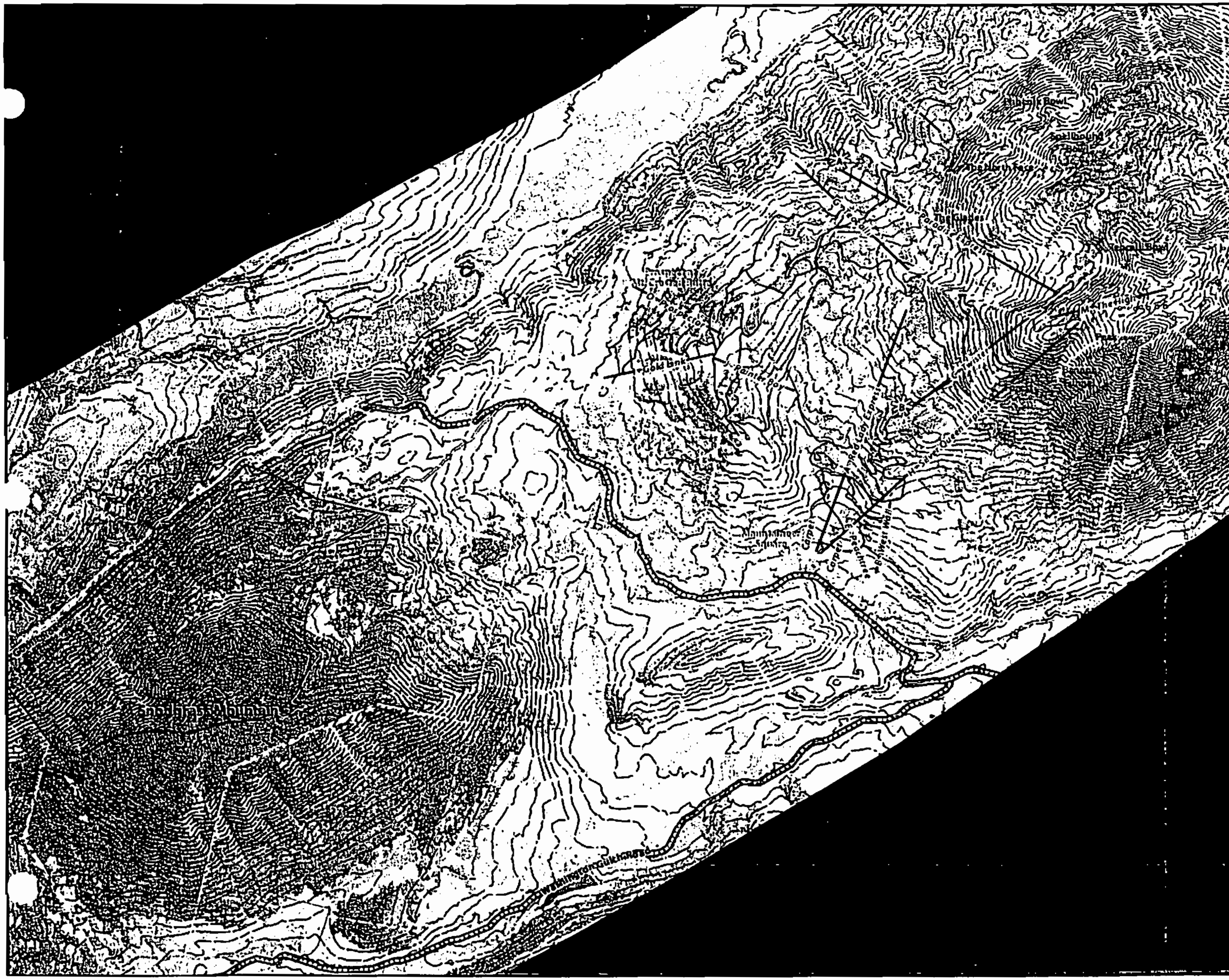
- Existing Paradise Warming House
- Existing Ice Bar and Restaurant

DATE: MAY 2009

0 625 1,250 2,500 FT

Graphic Scale: 1 inch = 1,250 Feet
Contour Interval: 50 Feet

PRODUCED BY: SE GROUP



CRESTED BUTTE

MOUNTAIN RESORT

COLORADO

MASTER DEVELOPMENT PLAN

FIGURE 4.2

Existing Alternate Winter and Non-Winter Activities

LEGEND

- USFS Special Use Permit Boundary
- Property Boundary
- Existing Major Roads
- Existing Snodgrass Road
- Existing Lifts
- Existing Main Mountain Multi-Use Trails
- Existing Main Mountain Hiking Only Trails
- Existing Snodgrass Mountain Biking Trail
- Approximate Extent of Backcountry Skiing

GUEST SERVICES

- Existing Paradise Warming House
- Existing Ice Bar and Restaurant

DATE: MAY 2009

0 1,000 2,000 4,000 FT

PRODUCED BY: SE GROUP

CRESTED BUTTE

MOUNTAIN RESORT

2009 RESORT MASTER DEVELOPMENT PLAN

CHAPTER 5: PREVIOUSLY APPROVED / UNIMPLEMENTED PROJECTS

5. SUMMARY OF PREVIOUSLY APPROVED/UNIMPLEMENTED PROJECTS AT THE MAIN MOUNTAIN

In 1996 CBMR submitted a proposal to the GMUG for upgrades and additions to ski area infrastructure and terrain on Crested Butte Mountain. In accordance with the National Environmental Policy Act (NEPA) an Environmental Assessment (EA) was completed documenting the potential environmental effects of the proposed projects on National Forest land. In May 1998 the GMUG Forest Supervisor Robert Storch signed a Decision Notice approving all but two of the proposed projects. The approved projects included a Gondola, new/ upgraded/realigned lifts and trails, an extension of the SUP, a Nordic trail system, a restaurant, restrooms, patrol headquarters, snowmaking, utilities, an access road and hiking and biking trails. The Decision Notice also included project mitigation. Projects from the 1998 Decision Notice that have been implemented include: trail grading, hiking and biking trails, expansion of the SUP boundary and Forest Plan amendment, replacement of the T-bar, upgrade North Face Lift, new CB-5 (which is Prospect Lift) and associated trails, and the new vehicle maintenance access road.

In July 2005 CBMR submitted its Mountain Improvements Plan (MIP) to the GMUG, which was designed to guide development at the ski area over the next five years. The 2005 MIP was revised in 2006. In 2007 an EA was completed to site-specifically analyze projects contained in the MIP. This culminated with a Decision Notice that was signed by GMUG Forest Supervisor Charles Richmond in January 2008. The 2008 Decision Notice approved most, but not all, of the proposed facilities and upgrades included in the MIP. Approved projects from the 1998 and 2008 Decision Notices include: new/upgraded/realigned lifts; new trails and glades; trail improvements; additional snowmaking; a new tubing hill; a new dining facility; expansion of the Ice Bar; and new biking and hiking trails. To date, none of Forest Supervisor Richmond's 2008 approvals at the Main Mountain have been exercised; all of the MIP projects remain "previously-approved/unimplemented."

The following summary of previously-approved/unimplemented projects at the Main Mountain is from the 2008 Decision Notice, with three exceptions: the Red Lady Lodge; the Teocalli Bowl Lift; and the Teocalli Lift realignment – all of which were approved in a May 1998 Decision Notice for Proposed Improvements at Crested Butte Mountain Resort.

A. APPROVED PROJECTS

1. Lifts

Four lifts are approved to be upgraded and/or relocated, with one new lift – Teocalli Bowl – approved to be installed. The Teocalli Lift is also approved to be relocated to the top of Red Lady Lift, per the 1998 Decision Notice.

a. Relocated/Realigned Gold Link Lift

The Gold Link Lift (a fixed-grip triple with an hourly capacity of 1,800 people-per-hour [pph]) is approved to be relocated to a lower area and upgraded to a detachable quad. This is designed to accommodate increased skier traffic from the Prospect Junction area and will provide access to and from the North Village Interconnect lift, when constructed.

b. *Upgraded Red Lady Express*

Red Lady Lift is approved to be upgraded to 2,400 pph capacity (the upgraded capacity will be achieved with installation of additional carriers) and to add an undetermined amount of gondola cars that would allow for pedestrian access to the Red Lady Restaurant. Adding gondola cars to the Red Lady Express, for night-time operation of the restaurant and tubing hill, would allow use of these facilities during evening hours and for special events, which will allow greater utilization of those facilities by the public. Additionally, the gondola cabins could be used during the daytime for non-skier access to the restaurant and possibly the tubing facility. Note that the addition of any number of gondola cabins would not increase the capacity of the lift over 2,400 pph, but rather the cabins would take the place of chairs, resulting in the same hourly capacity.

c. *Upgraded Painter Boy Lift*

The Painter Boy Lift (a fixed-grip triple with an hourly capacity of 1,800 pph) is approved to be upgraded to a detachable quad. This will accommodate increased skier traffic returning to the Prospect Junction area from the Main Mountain, and will also provide access to the North Village Interconnect when it is constructed.

d. *Relocated/Shortened High Lift*

The lower terminal of the High Lift (a surface lift) is approved to be relocated to a higher elevation (approximately 400 feet) so that it does not impede skier circulation between Silver Queen and Paradise Bowl via *North Star*. This trail will be necessary to accommodate the new *Upper Silver Queen* skiway, which is part of a phased package of approved projects. Shortening the High Lift would occur in sequence with other improvements. The hourly capacity of 600 pph will not change.

e. *Realigned/Upgraded Twister Lift*

The Twister Lift (a fixed-grip double with an hourly capacity of 1,080 pph) is approved to be realigned to allow for access into Paradise Bowl via the *Silver Queen Road*. Upgrading the lift to a detachable quad is designed to increase use of the underutilized Twister Pod and improve skier distribution and circulation.

f. *New Teocalli Bowl Lift*

This new fixed-grip double chairlift, along with the Teocalli Bowl ingress/egress, is approved to provide return access to Paradise Bowl and access to Extreme Limits terrain. The top terminal of this lift will be near the summit of the North Face Lift.

g. *Relocated Teocalli Lift*

Although the bottom terminal will remain in its current location, the 1998 Decision Notice approved the Teocalli Lift (a fixed-grip double) to be realigned/extended to the west so that its upper terminal is located adjacent to the top terminal of the Red Lady Express and the approved Red Lady Lodge.

2. New Alpine Trails

a. *New Canaan Spur Trail*

This new trail is approved to allow skiers to bypass the lower section of the terrain park, improving Intermediate skiing in the Paradise pod.

b. *New Resurrection Spur Trail*

This new trail will provide additional upper Intermediate terrain and additional trail capacity to balance with the East River Lift upgrade.

c. *New Upper Meander Trail*

This new trail section will facilitate round-trip skiing in the Teocalli pod.

d. *New Columbine Trail*

This approved trail section will provide an easier, alternative route to the base area from the top of Painter Boy and Gold Link lifts.

e. *New Teocalli Bowl Ingress/Egress Trail*

Along with the Teocalli Bowl Lift, this approved trail will provide return access to Paradise Bowl and access to extreme limits terrain. It is also necessary for equipment access to complete other improvements in the area.

f. *New Upper Silver Queen Skiway*

This skiway is intended to be built from *North Star* to Paradise Bowl to meet capacity demands for skiers transiting from Silver Queen Lift to Paradise pod, alleviating congestion at the switchback. Analysis in the 2007 EA, as well as public comment, pointed out that cut and fill on steep slopes to accomplish the proposed ski-way would be substantial. The 2008 Decision Notice requires that the initial actions of moving the Patrol Headquarters, and widening of the trail (Element "T3") be done first. If, on the basis of subsequent monitoring the flow of skier traffic indicates that the ski-way as proposed is needed, the District Ranger, as authorized officer for administration of the ski area, may allow construction of the ski-way if it is considered appropriate following the completion of the initial actions above. Such authorization will be made in either the summer operating plan or in specific construction plans.

3. Improved Alpine Trails

a. *Silver Queen*

Widening is approved to take place in the area where *Silver Queen Road* switches back to drop into Paradise pod, providing more room for skiers making the turn or merging onto the trail from the new Twister Lift upper terminal. This widening will improve skier circulation in an increasingly congested area.

b. *North Star/Silver Queen*

Various trail improvements will increase skier circulation through the *North Star/Silver Queen* intersection. An opening is approved to be cleared from *Silver Queen* above the switchback, allowing skiers to drop down and rejoin *Silver Queen* trail without negotiating the elbow.

c. *Luge Trail*

Spot widening and regrading of *Luge* is approved to make the grade consistent and skiable, and will allow groomer access. This will provide more reliable egress from the Expert terrain south of the Silver Queen Lift.

d. East River Glading

Glading in this area is approved to increase tree skiing opportunities, particularly for Intermediate skiers. Glading will also improve forest health by removing trees infested with Armillaria and dwarf mistletoe and reducing fire hazards.[37]

e. West Side Aspen Glading

Aspen glading south of the Silver Queen Lift is approved to increase tree skiing opportunities, particularly for Intermediate skiers for whom such opportunities are currently limited at CBMR.

f. Smith Hill/Mineral Point Glading

Glading between *Houston* and *Smith Hill* is approved to increase tree skiing opportunities, particularly for Intermediate skiers. Glading is approved in stands of pure lodgepole of 1 acre or larger in this area, as lodgepole does not suffer the same risk of wind damage to residual stands as spruce/fir do.

g. Teocalli Glading

Removal of primarily over-aged, diseased trees in this moderately to heavily skied area (west of the Teocalli Lift) is approved to improve the health of the aspen stand and improve tree skiing opportunities.

h. Horseshoe Springs Glading

Glading in this dense, spruce-fir stand west of the Paradise Lift is approved to increase tree skiing opportunities, particularly for Intermediate skiers. Much of this area is already naturally gladed and only limited glading of small to mid-diameter spruce-fir will be necessary.

i. Smith Hill Widening

Widening is approved to enhance the trail below the approved Red Lady Lodge and to better accommodate increased skier numbers.

j. Jokerville Trail Widening

Approved widening on the skier's right side will improve this narrow trail and increase use of the Twister pod.

k. Cascade Skiway Widening

Approved widening will enhance this trail as part of the Gold Link Lift realignment.

l. Houston Trail Widening

Approved widening along the skier's right side will enhance this trail and improve circulation at the intersections with *Poverty Gulch* and *Mineral Point.*

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[37] Glading is defined as the removal of small groups of trees, or individual trees, to meet the objectives of increasing tree skiing opportunities and promoting Forest Service goals for vegetation management and fire mitigation. The 2005 MIP notes that glading will be consistent with the goals of the 1995 Vegetation Management Plan for Crested Butte Mountain Resort, Inc. (1995 VMP). The 1995 VMP incorporates disease management techniques and fire concerns. CBMR will work with the Forest Service to determine the prescriptions for each specific glading area based on environmental considerations and context.

m. Mineral Point Trail Widening

Approved widening along the skier's left side will promote a lower elevation merger with *Houston* to avoid flat terrain.

n. Lower Canaan Trail Widening

Approved widening along the skier's right edge will improve access on the Paradise Lift and restaurant approach and accommodate the intersection with the new *Canaan Spur.*

o. Upper Gallowich Trail Widening

Approved trail improvement at the head of this trail will promote use of *Upper Gallowich* as an alternative to *Canaan*, resulting in better distribution of skiers, and less congestion.

p. Schofield Road Widening

Approved widening will improve return access into Paradise Bowl from the Teocalli Bowl Lift via *Shep's Chute.*

q. International Trail Widening/Re-Grading

This approved project will improve return access to Twister Lift, accommodate higher-speed skier traffic to the base area, and allow for high- and low-speed traffic separation into the base area.

4. Approved On-Mountain Guest Services

The Ice Bar restaurant is approved to be expanded by approximately 1,200 square feet, which will provide needed seating and improve the building's appearance.

The 1998 Decision Notice approved a restaurant at the top of (what is now) the Red Lady Express. This facility was approved at up to 450 seats – 300 indoor, 150 outdoor.

5. Approved Snowmaking

Snowmaking is approved on approximately 50 acres: *Poverty Gulch, Silver Queen Road, Red Lady, Upper Twister, Jokerville, Crystal, Championship* and *Gunsight Pass.* Buried snowmaking pipe is approved to be installed to each new snowmaking area. This new snowmaking is contingent upon establishment of a 3 million gallon water storage facility. A buffering storage pond or a storage tank for water would reduce the drawing down of the East River when there is a call for water needed for snowmaking, hence, mitigating the effects on the East River. The 2008 Decision Notice indicates that "it falls on CBMR to construct the reservoir or storage facility they choose to meet this requirement."

6. Recreational Opportunities

a. Approved Nordic Trails

A new Nordic trail system in the Prospect area is approved to provide a winter alternative to Alpine skiing, increasing recreational opportunities for guests.

b. New Tubing Hill

An approved snowtubing facility at the top of the Red Lady Express will provide additional winter recreation opportunities in conjunction with the previously-approved (unimplemented) Red Lady Lodge. A surface lift and night lighting is authorized with specific mitigation measures.

c. *Summer Trails*

Hiking and biking trail improvements are approved to more effectively use CBMR's facilities during the summer months and to increase summer recreation opportunities and experiences.

The 2005 MIP allows for an additional 8 miles of trail development on the Main Mountain for all abilities. Working in collaboration with the GMUG, CBMR is planning to build new trails to meet the growing demands of summer guests. The focus for the past few years has been to develop lift-served access for hikers, recreational bikers and the growing trend of downhill biking. In the near future, CBMR plans to develop the new approved trails with the intent of segregating bikers and hikers from vehicular traffic on mountain roads, thereby providing a better experience for guests. Also, in conjunction with the Mountain Sports Team, CBMR will develop a "gravity park" and "skills park" to provide a training area for Beginner skiers to improve technique before attempting the mountain trails.

CRESTED BUTTE

MOUNTAIN RESORT

2009 RESORT MASTER DEVELOPMENT PLAN

CHAPTER 6: UPGRADING PLAN

6. UPGRADING PLAN

As discussed in Chapter 1, this Resort MDP has been prepared to provide four main functions for CBMR:

1. Provide a thorough assessment of existing operations and facilities (including opportunities and constraints) at the Main Mountain.

2. Summarize previously-approved projects at the Main Mountain.

3. Plan the future development of Snodgrass Mountain with lifts, trails, and skier services.

4. Comprehensively plan the operational and recreational functionality of CBMR – accounting for all existing, previously-approved and upgrading projects at the Main Mountain and Snodgrass Mountain.

The first two functions have been addressed in Chapters 1 through 5; the final two functions will therefore be addressed here. This Resort MDP provides direction for the future development of the ski resort which ensures a balance of facilities and a variety of amenities and opportunities to provide for an exceptional guest experience. This plan is designed to improve CBMR's competitive standing in the destination resort and the Colorado skier market, help retain existing guests, and attract/retain new visitors. As stated previously, the need to provide more diverse terrain is a driving force behind the Snodgrass Mountain upgrading plan.

The Phasing Plan included in Appendix C is meant to provide a conceptual outline of CBMR's priorities for build-out of the Main Mountain and Snodgrass Mountain over the next ten years. The Phasing Plan is subject to change based on internal operations, capital availability, and entitlement processes.

As noted in Chapter 1, CBMR lacks the quantity and diversity of terrain (primarily Intermediate level) that attracts destination visitors on a continual basis. To the extent that terrain variety is a key driver of skiers' trip decisions, expanded terrain that is a component of this upgrading plan will help CBMR increase its competitiveness in broader geographic markets, and thus expand and diversify its visitor base. This will equate to an increased destination visitor base, which makes up the core of CBMR's clientele.

Although CBMR has received GMUG approval for a variety of on-mountain improvements that may be implemented in the coming years on the Main Mountain (discussed in Chapter 5), due to the naturally steep nature of the Main Mountain, opportunities for developing significant additional Intermediate terrain there do not exist – i.e., construction of previously-approved trails and glades on the Main Mountain cannot achieve the goal of diversifying CBMR's terrain offerings. Therefore, a thorough analysis of the entire SUP area was conducted to identify potential development of additional Intermediate terrain sufficient to meet the demands of the destination marketplace. This study identified the Snodgrass Mountain portion of the SUP area as the most logical source to fulfill the needed Intermediate terrain.

In conjunction with previously-approved projects at the Main Mountain, the Snodgrass Mountain upgrading plan will broaden the recreational experience offered at CBMR by providing a diversity of terrain. This is intended to satisfy demands in the destination marketplace (and to retain destination skiers for longer durations) and to provide stability to the local economy. As noted in Chapter 1, all project elements included in the upgrading plan that are located on NFS lands within the SUP area will require analysis and approval through the NEPA process prior to implementation. The upgrading plan is depicted on Figures 6.0 through 6.4B.

CBMR will perform a series of improvements, as detailed in this section. These projects include:

- Additional lifts and conveyor installations that will improve guest comfort and increase uphill capacity;
- New trails and gladed terrain at the Main Mountain, as well as improvements to existing runs;
- New terrain on Snodgrass Mountain;
- Improvements to existing skier service facilities and construction of new buildings, including on-mountain facilities; and
- Expanded snowmaking coverage.

A. SUMMARY OF THE UPGRADING PLAN

The mountain master planning process emphasizes the importance of balancing recreational facility development with a ski area's market. All skier service functions have been designed in accordance with the CBMR's CCC (see Section C).

As discussed previously in Chapter 1, the principal operational goals for CBMR are:

> *Establish the resort as a unique, year-round destination resort that offers integrated facilities to local, regional, national and international guests; and to provide quality recreational opportunities to the public, in an outdoor, natural setting on National Forest System lands.*

The upgrading plan presented in this chapter describes project elements that are guided by these goals. Fundamental to meeting CBMR's operational goals is upgrading the resort lift network. New chairlifts will improve skier comfort and enhance service to terrain and overall skier circulation. Both new and upgraded lifts will improve access to terrain of all ability levels. Several lift realignments will improve mountain circulation. These additions and improvements will increase uphill capacity, distribute skiers more evenly throughout the ski area, and increase the overall capacity of the area.

A number of enhancements will be made to the developed trail network. On the Main Mountain, previously approved trail widening/grading and several new runs will help with circulation and provide additional terrain. In addition, several glading projects will increase the quantity of available tree skiing and improve terrain variety. The Snodgrass Mountain upgrading plan includes an entirely new lift and trail system. CBMR's total developed terrain network will increase by 305 acres, from 585 to 890 acres – or an increase of around 52 percent.

Upon completion of all the upgrading projects, CBMR's CCC will increase from 5,940 skiers to 9,570 – an increase of 3,630 skiers (a 61 percent increase).

An important feature of CBMR's upgrading plan is the development of skier services. The 1998 and 2008 Decision Notices approved new and upgraded facilities at the existing Main Mountain base area (see Chapter 5). The Snodgrass Mountain upgrading plan includes two restaurant facilities, a mid-mountain facility and a mountain top facility that will provide skier services in addition to expansive views of the surrounding area.

B. Development of Snodgrass Mountain for Lift-Served Skiing & Riding

In terms of creating a developed lift and trail network, Snodgrass Mountain exhibits a reliable snowpack, suitable elevations, a variety of slope gradients and exposure orientations, good fall-line opportunities, and consistent ski terrain. Equally important, this upgrading plan has been carefully constructed to maximize the lift and trail design on Snodgrass Mountain so that its full potential is realized. The result is that the entire range of terrain ability levels (Beginner through Expert) is offered, with a focus on Intermediate terrain. Thus, Snodgrass Mountain is capable of supporting a sufficient carrying capacity to achieve the goals and objectives outlined in Chapter 1.

Since Snodgrass Mountain is physically removed from the Main Mountain, it is critical to create a lift and trail network that appeals to skiers of all ability levels. This means creating a situation where a group or family can spend half a day or a full day skiing at Snodgrass Mountain and be presented with terrain options that will hold the interest of the entire group. As a result, the upgrading plan for Snodgrass Mountain, as shown throughout the Chapter 6 figures, incorporates the full range of ability levels, at a ratio that closely reflects the overall skier market. Additionally, the design works with the natural topography and includes variations in width and gradient throughout the length of the trail. Variations in gradient from one side of the trail to another are also incorporated to create trails that feel different depending on where and how they are skied. Additionally, tree islands of varying size are left throughout the trails to make them more interesting and visually appealing. Further discussions of the trail design can be found in Section E – Terrain Network.

Furthermore, the current design maximizes quality skiing potential while respecting various constraints. As discussed in Chapter 3, *preliminary* surveys were conducted for numerous resources on Snodgrass Mountain. Upon acceptance of a formal proposal for projects on Snodgrass Mountain, a National Environmental Policy Act (NEPA) process will be initiated and site-specific analyses for all resources will be conducted. At that time, and if appropriate, specific project elements may be modified in order to minimize potential impacts to resources.

Three primary resource issues were accounted for in the upgrading plan for Snodgrass Mountain:

- proximity and buffer to the Rocky Mountain Biological Laboratory (RMBL) study area
- avalanche/geotechnical concerns
- proximity to areas that are highly regarded as backcountry skiing areas

CBMR concluded that protection of these resources outweighed the need for additional lift-served Expert terrain across Snodgrass Mountain – a consideration that is consistent with the goals and

objectives of the resort, the community, and the GMUG. In response to the RMBL study area and backcountry skiing, the upgrading plan for Snodgrass Mountain includes a relocated northern SUP boundary, thereby removing the Glory Hole area from the SUP and effectively *reducing* the Snodgrass Mountain portion of the SUP boundary by over 25 percent (from approximately 1,476 acres to 1,102 acres). An access trail is also planned from the Gothic Road trailhead to a new backcountry access point on the northern boundary of the Snodgrass Mountain SUP area.

In addition, and compared to previous designs, the alignment of the North Village Gondola, as well as planned trails on the southern flank of Snodgrass Mountain, were modified to avoid areas of known geologic concerns (see Figure 3.2 for more information).[38] Two areas of geologic concern were identified for avoidance of ground disturbing activities and no clearing, grading, road construction, trenching, lift terminals or snowmaking would occur in these areas. Projects that may occur within other areas of potential geologic hazard would require mitigation measures to address potential slope stability issues. These mitigation measures would be identified through site specific NEPA.

As a result of the removal of the Glory Hole area from consideration, the avoidance of large defined geologic hazard areas, the limited amount of snowmaking acreage, and other factors as described, the remaining potential area for development of lift-serviced skiing on Snodgrass Mountain is somewhat constrained. However, the terrain available is conducive to the design of a skiing product that is comprised of a majority of developed trails with a wide range of alternate-style terrain design elements, with an appropriate amount of undeveloped terrain – in short, a diverse, innovate lift and terrain design that will appeal to a whole spectrum of skiers.

C. Comfortable Carrying Capacity

As stated in Chapter 4, the daily carrying capacity of a resort is described as the Comfortable Carrying Capacity (CCC). CCC does not indicate a maximum level of visitation, but is rather a planning tool defined as the number of daily visitors a resort can comfortably or efficiently accommodate at one time without overburdening the resort's infrastructure. The CCC is derived from the resort's supply of vertical transport (the combined uphill hourly capacities of the lifts) and demand for vertical transport (the aggregate number of runs demanded multiplied by the vertical rise associated with those runs). The CCC is calculated by dividing vertical supply (VTF/day) by Vertical Demand.

At full build-out, with the incorporation of Snodgrass Mountain into CBMR's developed lift and trail network, the CCC will increase from 5,940 guests to 9,570 guests, an increase of 3,630 guests, or 61 percent (note the close correlation with the increase in developed terrain).

It is not uncommon for ski areas to experience peak days during which skier visitation exceeds the CCC by as much as 25 percent. However, from a planning perspective, it is not recommended to consistently exceed the CCC due to the resulting decrease in the quality of the recreational experience, and thus the resort's market appeal. Ultimately, the CCC of 9,570 should allow for a much better experience during peak periods and allow for increases to visitation.

[38] The Gunnison County Master Plan also identifies unstable slopes, landslides and potential shallow ground water sites as areas that need special development considerations and should be analyzed and mitigated when necessary.

Table 6-1:
Comfortable Carrying Capacity – Upgrading Plan

Lift Ref.	Lift Name / Lift Type	Slope Length (ft)	Vertical Rise (ft)	Actual Design Capacity (guests/hr)	Oper. Hours (hrs)	Up-Mtn Access Role (%)	Mis-loading/ Lift Stoppages (%)	Adjusted Hourly Cap. (guests/hr.)	VTF/Day (000)	Vertical Demand (ft./day)	Daily Lift Capacity (guests)
Main Mountain Lifts											
A	Red Lady Express DC-4	5,686	967	2,400	7.00	10	5	2,040	13,803	10,022	1,380
B	Westwall C-4	1,752	464	1,200	7.00	10	15	900	2,922	16,237	180
C	Twister C-4	3,274	1,113	1,800	6.75	-	10	1,620	12,171	27,663	440
D	Paradise DC-4	5,688	1,291	1,900	6.50	5	5	1,710	14,351	16,266	880
E	Peachtree C-2	797	167	1,200	7.00	-	15	1,020	1,191	4,092	290
F	East River DC-4	3,473	1,014	1,800	6.00	-	5	1,710	10,400	19,721	530
G	Teocali C-4	3,753	637	1,800	6.50	5	10	1,530	6,334	8,076	780
H	Silver Queen DC-4	7,858	2,072	1,980	7.00	30	5	1,287	18,669	23,298	800
I	Gold Link DC-4	2,588	526	1,800	6.50	10	5	1,530	5,230	10,727	490
J	Painter Boy DC-4	1,863	331	1,800	6.75	30	5	1,170	2,613	7,025	370
K	North Face S	1,448	471	1,000	5.75	-	10	900	2,436	15,014	160
L	Adult Beginner C	93	8	600	7.00	-	15	510	30	520	60
M	High Lift S	2,643	589	600	6.50	-	10	540	2,068	15,170	140
N	Mountain School S	181	22	720	7.00	-	5	684	105	1,533	70
O	Prospect C-4	2,246	505	1,170	7.00	50	15	410	1,448	12,195	120
P	Teocalli Bowl S	1,385	265	1,000	5.50	-	10	900	1,314	8,632	150
Q	Base Area Transport 1 S	309	36	600	7.00	100	-	-	-	1,568	-
R	Base Area Transport 2 S	265	24	600	7.00	100	-	-	-0	1,176	-
Snodgrass Mountain Lifts											
S	Frontside C-3	3,192	783	1,800	6.50	-	10	1,620	8,247	11,654	710
T	Westside DC-4	4,932	1,428	1,800	6.00	-	5	1,710	14,654	21,434	680
U	Eastside DC-4	6,171	1,310	2,400	6.50	10	5	2,040	17,369	13,964	1,240
V	Beginner Carpet C	402	40	600	6.50	-	-	600	156	1,490	100
W	Interconnect G	7,446	644	2,800	10.00	100	-	-	-	6,458	-
	TOTAL	**67,451**		**33,250**				**24,317**	**135,540**		**9,570**

Source: SE GROUP

D. LIFT NETWORK

1. Lift Network

CBMR currently operates 16 chairlifts, surface lifts and Beginner carpets. The total uphill hourly capacity for the existing lift network is 19,850 persons per hour (pph). The CBMR upgrading plan includes four lift upgrades and one new lift at the Main Mountain (previously-approved) and five new lifts on, or in conjunction with, Snodgrass Mountain. The upgrading plan will increase the total number of lifts to 23 and will increase the total uphill hourly lift capacity to 33,370 pph. Previously-approved lift upgrades, as well as new lifts included in the upgrading plan, are intended to:

- Increase guests' enjoyment, convenience, and safety;
- Improve access to an improved and expanded terrain network within the existing SUP boundary, with a focus on Intermediate skiing opportunities;
- Reconfigure the lift and trail system to allow for improved circulation and more efficient utilization of existing terrain; and
- Efficiently access the new ski terrain on Snodgrass Mountain.

The following table details the lift specifications for the upgrade plan. See Figures 6.0A and 6.0B for locations of the new and upgraded lifts.

Table 6-2:
Lift Specifications – Upgrade Plan

Lift Ref	Lift Name/ Lift Type	Top Elev (ft.)	Bot. Elev (ft.)	Vert. Rise (ft.)	Slope Length (ft.)	Avg. Grade (%)	Hourly Cap. (pers/hr)	Rope Speed (fpm)	Carrier Spacing (ft.)	Year Installed
Main Mountain Lifts										
A	Red Lady Express DC-4	10,334	9,367	967	5,686	17%	2,400	1,100	110	1997
B	Westwall C-4	9,735	9,271	464	1,752	28%	1,200	1,000	200	2005
C	Twister C-4	11,228	10,115	1,113	3,274	36%	1,800	1,000	133	Replaced
D	Paradise DC-4	11,121	9,830	1,291	5,688	24%	1,900	1,100	139	1994
E	Peachtree C-2	9,478	9,311	167	797	21%	1,200	350	35	1971
F	East River DC-4	10,141	9,127	1,014	3,473	31%	1,800	1,000	133	1997
G	Teocali C-4	10,321	9,684	637	3,753	17%	1,800	450	60	Replaced
H	Silver Queen DC-4	11,437	9,365	2,072	7,858	28%	1,980	1,100	133	1992
I	Gold Link DC-4	10,151	9,625	526	2,588	21%	1,800	1,000	133	Replaced
J	Painter Boy DC-4	10,142	9,811	331	1,863	18%	1,800	1,000	133	Replaced
K	North Face S	11,420	10,950	471	1,448	35%	1,000	670	40	2004
L	Adult Beginner C	9,407	9,399	8	93	9%	600	64	6	1997
M	High Lift S	11,866	11,277	589	2,643	23%	600	660	66	1991
N	Mountain School S	9,354	9,332	22	181	12%	720	283	24	1989
O	Prospect C-4	10,153	9,648	505	2,246	23%	1,170	1,000	205	2004
P	Teocali Bowl S	11,394	11,129	265	1,385	20%	1,000	660	40	New Lift
Q	Base Area Transport 1 S	9,320	9,284	36	309	12%	600	100	10	New Lift
R	Base Area Transport 2 S	9,350	9,325	24	265	9%	600	100	10	New Lift
Snodgrass Mountain Lifts										
S	Frontside C-3	10,893	10,110	783	3,192	25%	1,800	500	50	New Lift
T	Westside DC-4	11,123	9,695	1,428	4,932	31%	1,800	1,000	133	New Lift
U	Eastside DC-4	11,118	9,808	1,310	6,171	22%	2,400	1,000	100	New Lift
V	Beginner Carpet C	10,257	10,217	40	402	10%	600	150	15	New Lift
W	Interconnect G	10,270	9,626	644	7,446	9%	2,800	1,000	171	New Lift

Source: SE GROUP

Previously-approved upgrades to lifts at the Main Mountain will improve the balance between uphill and downhill capacity while enhancing the overall guest experience. See Chapter 5 for a discussion of approval status on those lifts. Three high-speed detachable quad chairlifts and one surface lift will be developed on Snodgrass Mountain. In addition, an interconnect gondola will link the Main Mountain with Snodgrass Mountain.

As discussed in Section G-Access and Parking, guest access to Snodgrass Mountain will be provided by lifts and public transportation (there are no plans to develop day ski parking facilities at Snodgrass Mountain or North Village). Accessing Snodgrass Mountain will require guests to ride the

Red Lady and Painter Boy lifts at the Main Mountain, and then ride the interconnect gondola through North Village. Additionally, bus stops for guests and residents of the Main Mountain and the Town of Crested Butte who wish to utilize this type of transportation are planned for North Village. There will be time restricted parking in the North Village.

Specifics and desired goals of lift upgrades are detailed in the following discussion.

Silver Queen Express

The CBMR upgrading plan does not include any improvements to the Silver Queen Lift, other than on-going maintenance.

Red Lady Express

An hourly capacity increase will occur to help accommodate the existing high demand for the lift and the anticipated increase in use of the lift to access the Snodgrass Mountain area.

In conjunction with bringing the previously-approved Red Lady Lodge on-line, CBMR may replace a limited number of chairs on the Red Lady Express with enclosed gondola cabins. This would accommodate foot passengers heading to the Red Lady Lodge and the previously-approved on-mountain snowtubing facility. The addition of gondola cabins to the Red Lady Express would accommodate day and night time use of this lift during both the winter and summer seasons. The Red Lady Express was engineered with the potential addition of gondola cabins in mind, which will not alter the lift's capacity.

Twister Lift

This lift will be upgraded to a fixed-grip quad chair at a higher hourly capacity, and realigned to better serve the terrain and improve circulation.

Peachtree Lift

At this time, it is anticipated that the Peachtree Lift will stay in its current alignment; however, the equipment may be modernized with several options including removing the remote counterweight system and upgrading various lift components. Additionally, the lift may be shortened slightly by moving the top terminal downhill.

Westwall Lift

The CBMR upgrading plan does not include any improvements to the Westwall Lift other than on-going maintenance.

East River Express

The CBMR upgrading plan does not include any improvements to the East River Lift other than on-going maintenance.

Paradise Express

The CBMR upgrading plan does not include any improvements to the Paradise Lift other than on-going maintenance.

Teocalli Lift

This lift will be upgraded to a fixed-grip quad chairlift at a higher hourly capacity, and realigned to better serve the terrain and improve circulation.

Gold Link Lift

This lift will be upgraded to a detachable lift and realigned to improve the skier experience in that area and provide connectivity to the Snodgrass Mountain access gondola.

Painter Boy Lift

This lift will be upgraded with detachable technology to improve mountain circulation, particularly with the anticipated increase in use of the lift for accessing Snodgrass Mountain.

Prospect Lift

The CBMR upgrading plan does not include any improvements to the Prospect Lift other than on-going maintenance.

High Lift and North Face Lifts

The CBMR upgrading plan does not include any improvements to the High Lift or the North Face Lift other than on-going maintenance.

Beginner/Teaching Lifts

New carpets will be installed for teaching and base area circulation in conjunction with the base area upgrades. Since Beginner conveyors and tows are easily moved, it is common for ski areas to alter the layout and design of teaching terrain from season to season. Changing trends in lift technology, teaching techniques, and other factors dictate that teaching terrain be somewhat dynamic and able to be reconfigured when required. As an example, CBMR has realigned, regraded, and reconfigured the teaching terrain on several occasions over the years. It is possible that the current adult teaching area may need to move, depending on various development scenarios. As such, there is no current set plan for the future layout of the Beginner/teaching lifts at the Main Mountain. However, the current capacity and functionality of the terrain will remain, with multiple conveyors and separate facilities for teaching, adults, and kid's play areas. It is additionally important to note that all options for reconfiguration will occur entirely on private land. The only planned Beginner lift within the SUP area (i.e., on Forest Service land) is on Snodgrass Mountain, as discussed in the following text.

Teocalli Bowl

A new surface lift will be installed to allow skiers to egress the Teocalli bowl area without having to hike out.

Snodgrass Mountain Lift S: Frontside

The "Frontside" lift is designed as a fixed-grip chairlift with an approximate 6.4 minute ride time, a carrying capacity of 1,800 people per hour (pph), and a total vertical rise of approximately 783 feet. The Frontside lift will access a wide variety of terrain ranging from Novice to Expert, offering skiers and riders diverse terrain options. Consistent Intermediate and Advanced grades, combined with good northeast exposures, will make this area attractive. It provides access to a significant amount of low-end terrain as well. This lift is easily accessed from the top of the gondola. The alignment of this

lift was sited to provide the best possible skiing experience while completely avoiding the geological hazard area.

Snodgrass Mountain Lift T: Westside

The "Westside" lift is a high-speed, detachable quad chairlift with a ride time of approximately 4.9 minutes and a carrying capacity of 1,800 pph. The Westside lift will be installed on the northwest portion "backside" of Snodgrass Mountain, providing a total vertical rise of approximately 1,430 feet. The Westside lift will offer guests round-trip access to over 90 acres of new Intermediate and Advanced level terrain, with around 20 acres of that being Expert terrain. This lift accesses the terrain on Snodgrass Mountain that is most northerly facing, and as such will likely have the highest snow quality and retention of the area. Because a significant amount of the terrain off the Westside lift is Advanced level, this lift will provide a transition area for Intermediate skiers and snowboarders wishing to improve their skills.

Snodgrass Mountain Lift U: Eastside

The "Eastside" lift is a high-speed, detachable quad chairlift with a roughly 6.2 minute ride time and a carrying capacity of 2,400 pph. This lift will provide a total vertical rise of approximately 1,310 feet. This lift is planned to have a mid-unload station at a high point to give access to much of the terrain. The Eastside lift will offer guests round-trip skiing to all ability levels. Novice skiers will ride the lift to the top and then have several options of Novice runs down, all of which will require skiing down a skiway to return to the bottom terminal. Several long consistent Intermediate runs will be available from the mid-station down to the bottom terminal, and Expert terrain will include a steep north-facing bowl which should provide the most challenging terrain in the Snodgrass Mountain area. Additionally, riding this lift to the top is the route to access the backside terrain and Lift T.

Snodgrass Mountain Lift V: Beginner Carpet

A short carpet lift will be installed adjacent to the top terminal of the gondola and the restaurant facility. There is a significant quantity of sunny, south-facing terrain in this area, which would provide an excellent teaching venue. This lift and terrain will be easily accessed from the gondola.

North Village Gondola

An interconnect gondola will link Snodgrass Mountain to the Main Mountain. This lift will have a carrying capacity of 2,800 pph, a slope distance of approximately 4,446 feet, and a total vertical rise of approximately 644 feet. It will be necessary for guests to ride the Red Lady and Painter Boy lifts to access the new gondola. The majority of this lift will be on private lands, with only a short section falling within the SUP area on Snodgrass Mountain. This lift alignment has been sited to minimize any conflict with the identified Geological Hazard area. A short section of the alignment crosses over the eastern edge of a slump block, as shown in Figure 6.0. Upon engineering, it will be determined where individual lift towers will be located, and if any are located in this slump block. Specific mitigation measures will be identified through site specific NEPA should these areas not be avoidable for lift tower placement. This lift will provide transportation only, as it does not access any repeat-skiable terrain.

2. Access and Circulation

a. *Contribution of Planned Lodging and Residential to Skier Population*

A substantial amount of real estate and lodging is planned for the North Village, Promontory, Prospect, and Mountaineer Square and Mountaineer Square North. Guests staying in the planned lodging and residential units are expected to account for the majority of the increase in skiers between the existing and upgraded conditions. The following table details the quantity and type of proposed units for each of these areas and the number of skiers expected to be contributed to the mountain CCC. Additionally, see Section H for further description of private lands development.

Table 6-3:
Skiers from Lodging and Real Estate –Upgrading Plan

	Multiplier	Units	Totals
Rental Units in North Village (Hot Beds)		375	
Owner Occupied Units in North Village (Cold Beds)		650	
Owner Occupied Units in Promontory (Cold Beds)		30	
Rental Units in Prospect (Hot Beds)		80	
Owner Occupied Units in Prospect (Cold Beds)		218	
Rental Units in Mountaineer Square/North (Hot Beds)		342	
Total Units			1,695
Occupancy/Utilization Rate for Rental Units (Hot Beds)	75%		
Occupancy/Utilization Rate for Owner Occupied Units (Cold Beds)	40%		
Average People per Rental Unit (Hot Beds)	3		
Average People per Owner Occupied Unit (Cold Beds)	5		
Percentage of People that are Skiing Guests	80%		
Skiing Guests in North Village		1,715	
Skiing Guests in Promontory		48	
Skiing Guests in Prospect		493	
Skiing Guests in Mountain Square/North		616	
Skiing Guests in Future CBMR Units			2,871

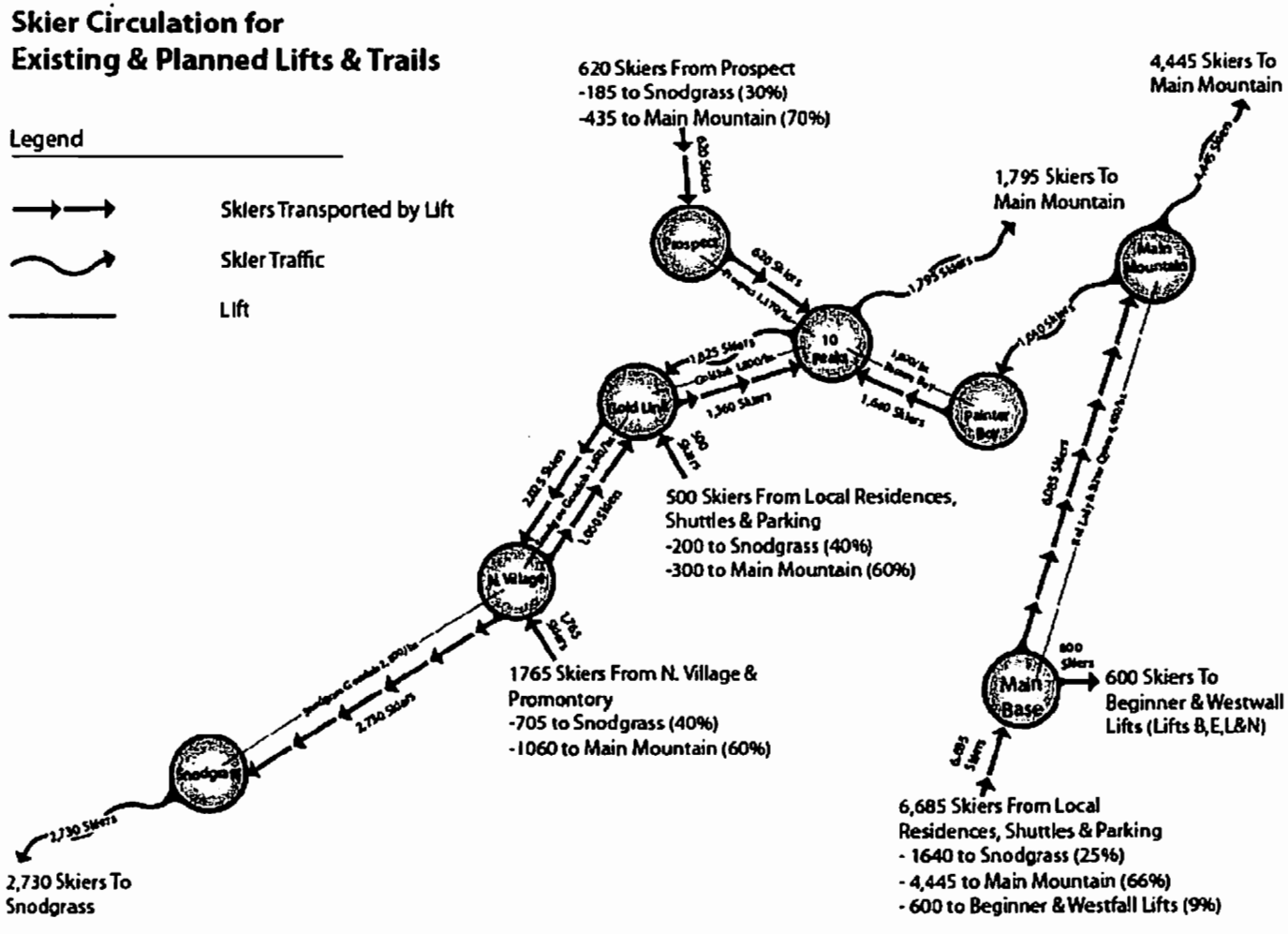
Notes:
All assumptions and calculations in this table are intended to reflect and model a day where actual visits match CCC.
157 Employee units will be developed along with the future CBMR development areas, but are excluded from these calculations.
The terms Hot Beds and Cold Beds are industry standard terms connotating whether or not a unit is in a rental pool.

b. *Out-of-Base Access*

The proposed lift configuration at CBMR includes five basic out-of-base access lifts: Red Lady Express, Silver Queen Express, Gold Link, Prospector, and the Snodgrass Mountain/North Village Interconnect Gondola. Red Lady Express and Silver Queen Express need to handle the majority of the skiers, as the main base area will continue to act as the primary portal for destination skiers and virtually all of the day skiers. Gold Link and Prospect will act as a portal for skiers staying in the homes and lodging that will be available in the Prospect area, as well as Gold Link providing access from the Interconnect Gondola. To appraise the suitability of the access lifts to carry skiers to the

up-mountain lifts within an acceptable time frame, a modeling technique has been used to simulate the staging functions of each access lift. This model computes the percentage of the uphill hourly capacity of the access lift that is dedicated to access versus the percentage of the lift capacity required for round-trip skiing during the access period. The situation at CBMR is rather complicated and includes such factors as: skiers will be travelling in both directions on the gondola, a series of lifts will be used in order to access Snodgrass Mountain from the Main Mountain, and certain areas (e.g., North Village and Prospect) have a set number of skiers that are determined by lodging rather than CCC. Comparing the total skier staging requirement for each access lift with the amount of uphill capacity available, the access time for each lift can be calculated and compared to industry standards. A graphic representation of this analysis and model is presented in the Chart 6-1.

Chart 6-1:
Out-of-Base Access Analysis – Upgrading Plan



An industry standard states that for destination resorts, the dedicated access lifts should have sufficient hourly capacities to supply the remote lift systems they service with their daily CCC in a period of not more than two hours. Each node is discussed separately in the following text. For further discussion of some of the staging capacities see Section F.

- Main Base Area: This area will have approximately 6,685 skiers staging through it. This number is comprised of 4,252 skiers in existing lodging and homes, 780 skiers in new lodging (including Mountaineer Square and Mountaineer Square North), and day skiers. Six-hundred of those skiers will be using Westwall, Peachtree, and the Beginner areas. Since the combined upgraded uphill capacities of the Red Lady Express and Silver Queen Express will be 4,400 pph, they will accommodate that demand in approximately one hour and twenty five minutes – well within the two-hour planning parameter. Note that the demand on these lifts could increase, since some portion of the skiers arriving at Ten Peaks would likely ski down to the base area, rather than skiing down to Teocalli or East River. However, even if all of those 1,795 skiers were to load onto Red Lady Express and Silver Queen Express during the two-hour access period (which is unlikely), the combined lift capacities could handle the demand (which would be 7,880) within one hour and fifty minutes.

- Gold Link and Prospect: This area is projected to have approximately 1,120 skiers staging through these two lifts. With Gold Link at 1,800 pph, it will accommodate the demand within forty-five minutes, and Prospect will accommodate the demand with in thirty-two minutes.

- North Village/Snodgrass Mountain: The design of this area places the highest concentration of skiers (North Village) at the mid-station of the gondola. This basically doubles the effective capacity of the lift, as skiers will be travelling in both directions for both the access time period in the morning and the egress time period in the afternoon. In the morning, some skiers staying in North Village will head to the Main Mountain and some will head to Snodgrass Mountain. And in the afternoon, skiers from Snodgrass Mountain will ride the gondola, with some disembarking at North Village and some continuing to the Main Mountain. Also in the afternoon, skiers staying in North Village but skiing on the Main Mountain will return to North Village. In every one of these situations, as displayed in Chart 6-1, the total number of skiers is less than the 2,800 pph planned capacity of the gondola, indicating that the total demand will be accommodated in less than an hour, or half of the two-hour planning parameter.

c. *Main Mountain – Snodgrass Mountain Circulation*

Circulating to and from the main base area to Snodgrass Mountain will require several separate legs of riding lifts and skiing set routes. The following table details the time required to follow these circulation routes in either direction.

Table 6-4:
Skier Circulation Times between Main Mountain and Snodgrass Mountain – Upgrading Plan

Access Route From Main Mountain to Snodgrass Mountain	Minutes	Return Route From Snodgrass Mountain to Main Mountain	Minutes
Red Lady Express line wait	5	Interconnect Gondola line wait	2
Red Lady Express ride time	5.2	Interconnect Gondola ride time	7.4
Descent to Painter Boy	7.8	Gold Link line wait	5
Painter Boy line wait	3	Gold Link ride time	2.6
Painter Boy ride time	1.9	Descent to Base	13.9
Descent to Interconnect Gondola	7.1	*Total*	*31*
Interconnect Gondola line wait	2		
Interconnect Gondola ride time	7.4		
Total	*39*		

It is important to note that the skiing sections of these circulation routes (particularly the route to Snodgrass Mountain, but certainly both directions) are comprised of interesting, quality skiing. No traverse skiways or catwalks are required; all the skiing is fall-line skiing with multiple trail options. The implication is that most skiers are not likely to see the time required to complete these circulation routes as an inconvenience, but rather as a part of their ski day.

d. Snodgrass Mountain/North Village Connection

Due to the physical proximity, an obvious connection exists between the planned North Village area and the planned Snodgrass Mountain lift and trail network. With the mid-station of the gondola planned for the center of the North Village, and the gondola top terminal being in a very central location on Snodgrass Mountain, accessing the skiing on Snodgrass Mountain from North Village will be quick and convenient. It will also be somewhat convenient to access the Main Mountain from North Village. However, it is important to note that it is not possible to ski continuously back to North Village from Snodgrass Mountain, due to the flat topography. A single egress trail, designated W1 as shown on Figure 6.0B, will be established. This trail maintains skiable grade to the upper (or northern) reaches of North Village, but the terrain is too flat to be able to ski all the way into the village center. A 600-foot walk, at minimum, would be required from the end of skiable grade to the village. Additionally, the convoluted topography in the Geological Hazard area downhill of the bottom terminal of Lift S prohibits any functional return route to North Village. Among other constraints on this route, an uphill walk would be required over a ridge near the bottom, as well as the walk at the end. It can be assumed that some Advanced level skiers will use these routes to return to North Village from Snodgrass Mountain, but the vast majority of skiers will use the gondola to return to North Village or the Main Mountain. The top terminal of the gondola has been sited to provide a central location that can easily be accessed from virtually any spot on Snodgrass Mountain. The hourly capacity of the gondola is high enough that there should not be long lines during egress times, as discussed in Section B.

The Promontory development is sited in a location where the topography does allow for skiers to return to many of the lots. A network of skiways has been designed to allow homeowners to ski

back to the lots, as depicted in Figure 6.0B. See Section G for further discussion of North Village and Promontory, as well as other private land developments.

E. TERRAIN NETWORK

As discussed in Chapters 2 and 4, terrain variety has been identified throughout the industry as being the key factor in evaluating the quality of the skiing product. The implication of a wide variety of terrain is that a resort must have a diverse, interesting, and well designed developed trail system, but also have a significant quantity of alternate-style terrain, such as mogul runs, bowl skiing, tree skiing, interconnect skiing, open park skiing, in-bounds backcountry style (hike-to) skiing, and terrain parks and pipes.

To provide the highest quality guest experience, resorts should offer groomed runs of all ability levels and some level of all the undeveloped terrain types. Typically, the undeveloped terrain is primarily used by Advanced and Expert level skiers during desirable conditions (e.g., periods of fresh powder, spring corn, etc.). Even though some of these types of terrain only provide ski opportunities when conditions warrant, they represent the most intriguing terrain, and typically are the areas that skiers strive to access. The question of how to bring the alternate-style skiing experience to the majority of skiers (who cannot ski true undeveloped terrain) is one that is being addressed throughout the industry. The latest trends in ski terrain design attempt to bring the feel and spirit of undeveloped skiing to the developed terrain network. Probably the most significant factor in determining if an average skier can ski any given trail, other than sheer slope gradient, is whether or not the trail can be groomed on a regular basis. As a result of this, state-of-the-art ski area design incorporates groomable trails that do not feel like traditional ski trails. An excellent example of this is the "interconnected ski spaces" technique, where a connected web of ski routes with a minimum width of 30 feet and an average width of 60 feet or more are developed between large tree islands. This allows skiers to have the feeling of natural undeveloped open park skiing while allowing for full maintenance of the ski trail. Other techniques include "heavy glading" where an area is gladed to the extent that winding, groomable routes are created through the tree stand, with ungroomed glades on the sides; open bowls with defined groomed routes; and other similar techniques. The Snodgrass Mountain design incorporates all of these techniques throughout the area and reflects the latest in ski area design.

In addition to groomable areas, Snodgrass Mountain has exceptional glade skiing opportunities that have been incorporated into this upgrading plan. This progressive trail design will provide exceptional groomed trail skiing along with unique glade skiing and produce a more natural visual landscape. The variety of tree cover including aspen, spruce/fir, and lodgepole pine make it imperative that vegetation cover be considered in trail design with regard to the pine beetle epidemic in the Rocky Mountains. Therefore, the upgrading plan maximizes traditional and innovative trail design with regard to fall line, solar aspect, ability gradient, and the use of existing open meadows. However, trail designs may undergo adjustments as vegetation resources are analyzed during the site-specific NEPA analysis. The ultimate goal is to provide high quality skiing opportunities within the SUP area while maintaining a healthy and diverse forest. For example, a prescription could be to attempt to retain healthy spruce/fir stands and focus on removal of beetle-susceptible lodge pole pine. Additionally, all terrain, traditional as well as gladed, will be analyzed with regard to potential resource impacts (e.g., vegetation, wildlife, wetlands/hydrology and geotechnical concerns) upon site-specific NEPA analysis.

True undeveloped terrain is the type of terrain for which CBMR is most well known. CBMR is in an enviable and virtually unique position in the ski industry; where the natural topography within the SUP area favors undeveloped terrain over developed, formalized terrain. Whereas most ski areas struggle to identify alternate terrain to satisfy evolving expectations of Advanced and Expert skiers/riders, CBMR has this terrain in abundance. In fact, CBMR has over twice the acreage of undeveloped terrain as it does developed terrain – including 520 acres of defined "Extreme Limits" terrain, as described in Chapter 4. As a result, there is more of a demand for additional developed terrain, incorporating the alternate terrain-style feel, than there is for additional true undeveloped terrain.

The quantity and quality of both developed and undeveloped terrain is discussed separately in the following text.

1. Developed Alpine Terrain Network

As discussed in the previous chapter, the developed (or formalized) terrain network at CBMR consists of the named, defined, lift-serviced, maintained runs at the resort. These runs represent the baseline of the terrain at any resort, as they are where the majority of guests ski, and they are usually the only place to ski during the early season, periods of poor or undesirable snow conditions, avalanche closures, and certain weather conditions. Typically, terrain off the developed network is only used by Advanced and Expert level skiers, during periods of fresh powder, spring corn, and other desirable snow and weather conditions. As such, the developed terrain network represents a true reflection of acreage used by the average skier on a consistent basis.

a. *Alpine Trails Discussion*

The upgraded CBMR trail configuration is shown in Figure 6.0A and 6.0B. When the upgrading plan is complete, the ski area will be served by a network of approximately 44 new trail segments, for a total of 122 trails, accommodating the full range of ability levels, as depicted in Table 6-5. With an additional approximately 305 acres of developed terrain, the trail system will account for about 890 acres of terrain. All trail alignments identified on Figures 6.0A and 6.0B are conceptual and based on topographic mapping combined with limited ground truthing. Therefore, all trail centerlines, and left and right edges, will be field verified and accurately referenced with Geographic Information Systems (GPS) technology prior to, or in conjunction with, site specific National Environmental Policy Act review.

Trail development on Snodgrass Mountain will add most of the increase in acres of new terrain, but there will be widening of existing trails as well as new trails on the Main Mountain. Consistent with the goals and objectives of this Resort MDP (identified in Chapter 1) a significant percentage of the new terrain on the Main Mountain will be Intermediate ability level. Placing the emphasis on Intermediate terrain supplements the limited existing Intermediate terrain on the Main Mountain, and offers guests a wider variety of terrain options.

Trails that will be widened on the Main Mountain include: *International*, *Lower Twister*, *Jokerville*, *Houston*, *Mineral Point*, *Smith Hill*, *Lower Canaan*, *Upper Gallowich*, and *Luge*. New trail sections on the Main Mountain include *Columbine Trail*, *Gallowich Spur*, *Meander*, and *Resurrection Spur*. Refer to the 2006 CBMR Mountain Improvements Plan and associated approval documentation for further detail on these projects.

Trail development on Snodgrass Mountain is intended to increase the quantity and variety of available terrain at CBMR, across all ability levels. While Intermediate terrain has been particularly targeted, it is important to create terrain across the spectrum of ability levels to ensure that the area will be attractive to all resort guests. As such, the upgrading plan for Snodgrass Mountain offers a well balanced terrain network that is designed to add variety to CBMR's existing terrain while emphasizing Intermediate terrain. This is intended to help offset the existing Intermediate terrain deficiency at the Main Mountain. As discussed in the Lifts discussion, Lifts S and U will provide access to a significant quantity and diversity of lower ability level terrain (Low Intermediate and Novice) in addition to excellent Intermediate level terrain and some upper level runs, while Lift T provides access to mostly Intermediate and Advanced ability levels with two Expert runs as well. Finally, Lift V provides access to Beginner level and teaching terrain.

CBMR's upgraded terrain specifications are shown in the following table.

Table 6-5:
Terrain Specifications –Upgrading Plan

Lift Ref.	Trail Area/Name	Top Elev. (ft)	Bot Elev. (ft)	Vert. Rise (ft)	Slope Length (ft.)	Avg. Width (ft)	Slope Area (acres)	Avg. Grade (%)	Max. Grade (%)	Ability Level
A-1	Bubba's Shortcut Upper	10,335	10,238	97	1,200	124	3.4	8%	11%	Novice
A-2	Houston	10,237	9,694	544	5,361	151	18.6	10%	22%	Novice
A-3	Poverty Gulch	10,258	9,978	281	1,770	163	6.6	16%	31%	Low Intermediate
A-4	Kubler	10,242	10,092	150	1,617	38	1.4	9%	18%	Novice
A-5	Mineral Hill	10,332	9,958	374	2,137	164	8.1	18%	32%	Low Intermediate
A-6	Peanut	10,320	10,165	156	1,833	35	1.5	9%	15%	Low Intermediate
A-7	Tulsa	10,305	10,188	117	614	80	1.1	19%	29%	Low Intermediate
A-8	Twister Lower	10,180	9,367	812	4,400	217	21.9	19%	31%	Low Intermediate
A-9	Smith Hill Lower	10,090	9,748	341	2,495	142	8.1	14%	28%	Low Intermediate
A-10	Big Al's	9,854	9,747	107	712	93	1.5	15%	28%	Low Intermediate
A-11	Smith Hill Upper	10,318	10,055	263	1,262	186	5.4	21%	38%	Intermediate
A-12	Keystone Bottom	9,700	9,370	330	2,140	218	10.7	16%	23%	Novice
B-1	Buckley	9,735	9,291	444	1,585	204	7.4	29%	37%	Intermediate
C-1	Jokerville	11,000	10,575	425	1,038	227	5.4	45%	57%	Expert
C-2	Twister Upper	10,968	10,190	778	2,524	160	9.3	33%	56%	Expert
C-3	Crystal	10,955	10,115	840	2,748	146	9.2	32%	50%	Advanced
C-4	Twister Connector	10,191	10,163	28	460	53	0.6	6%	8%	Advanced
C-5	Upper Park	10,565	10,346	219	588	209	2.8	40%	45%	Advanced
C-6	Keystone Ridge	11,168	10,948	220	569	42	0.5	44%	74%	Expert
C-7	Aspen Park Road	10,345	9,647	698	7,461	22	3.8	9%	20%	Low Intermediate
D-1	Paradise Bowl	11,120	10,754	367	1,771	317	12.9	21%	42%	Intermediate
D-2	DC Super Pipe	10,702	10,323	378	1,361	178	5.6	29%	42%	Intermediate
D-3	Ruby Chief Upper	11,111	10,501	610	2,233	364	18.7	29%	51%	Advanced

Table 6-5:
Terrain Specifications –Upgrading Plan

Lift Ref.	Trail Area/Name	Top Elev. (ft.)	Bot Elev. (ft.)	Vert Rise (ft.)	Slope Length (ft.)	Avg. Width (ft.)	Slope Area (acres)	Avg. Grade (%)	Max. Grade (%)	Ability Level
D-4	Ruby Road	11,120	10,940	180	2,182	36	1.8	8%	18%	Expert
D-5	Yellow Brick Road	10,777	10,339	438	5,284	15	1.8	8%	14%	Low Intermediate
D-6	Canaan	10,749	9,833	916	4,556	176	18.4	21%	45%	Intermediate
D-7	Bear	10,275	10,206	69	300	131	0.9	24%	27%	Low Intermediate
D-8	Forest Queen	10,323	10,050	273	1,702	161	6.3	16%	26%	Low Intermediate
D-9	Treasury Upper	10,232	9,962	270	1,341	145	4.4	21%	37%	Intermediate
D-10	Gallowich Upper	10,133	9,933	201	1,283	141	4.2	16%	23%	Low Intermediate
D-11	Red Lady Bend	9,828	9,663	165	845	118	2.3	20%	34%	Low Intermediate
D-12	Red Lady Short Cut	9,779	9,631	148	315	107	0.8	54%	64%	Expert
D-13	Red Lady	9,663	9,142	521	3,088	108	7.7	17%	41%	Intermediate
D-14	Ruby Chief Lower	10,501	9,828	673	3,858	175	15.5	18%	35%	Low Intermediate
E-1	Rustler's Gulch	9,486	9,307	179	1,105	104	2.6	17%	25%	Novice
E-2	Augusta	9,414	9,311	103	630	130	1.9	17%	23%	Novice
E-3	High Tide	9,486	9,312	175	1,061	113	2.7	17%	21%	Novice
E-4	Silver Queen Connector	9,466	9,366	101	689	88	1.4	15%	22%	Novice
F-1	Black Eagle	10,141	9,419	722	3,863	149	13.2	19%	44%	Intermediate
F-2	Double Top Glades	10,127	9,573	554	1,850	128	5.4	32%	60%	Expert
F-3	Floresta	10,014	9,826	188	985	151	3.4	19%	24%	Intermediate
F-4	Resurrection	10,141	9,130	1,011	3,509	211	17.0	30%	50%	Advanced
F-5	Treasury Lower	9,938	9,135	803	3,382	197	15.3	25%	45%	Intermediate
F-6	Daisey	10,141	9,842	299	2,608	127	7.6	12%	28%	Low Intermediate
F-7	Gallowich Lower	9,902	9,575	327	1,154	125	3.3	30%	47%	Advanced
G-1	Bubba's Shortcut Lower	10,234	10,176	58	317	139	1.0	19%	27%	Low Intermediate
G-2	Bushwacker	10,307	9,685	621	3,600	192	15.9	18%	40%	Intermediate
G-3	Meander	10,184	10,038	146	895	98	2.0	17%	44%	Intermediate
G-4	Gus Way	10,139	9,741	398	2,671	86	5.3	15%	43%	Intermediate
G-5	Paradise Access	9,984	9,833	151	723	81	1.4	21%	33%	Low Intermediate
H-1	Keystone Upper	11,439	10,206	1,233	4,533	181	18.8	29%	45%	Intermediate
H-2	Monument	11,287	10,984	304	686	339	5.3	50%	74%	Expert
H-3	Silver Queen Road	11,242	11,074	168	2,050	36	1.7	8%	16%	Low Intermediate
H-4	International	10,943	9,594	1,349	5,051	227	26.3	28%	51%	Advanced
H-5	Peoria	10,703	10,502	201	663	66	1.0	32%	54%	Advanced
H-6	Roller Coaster	10,362	10,098	263	1,466	136	4.6	18%	36%	Intermediate

Table 6-5:
Terrain Specifications –Upgrading Plan

Lift Ref	Trail Area/Name	Top Elev (ft.)	Bot Elev (ft.)	Vert Rise (ft.)	Slope Length (ft.)	Avg Width (ft.)	Slope Area (acres)	Avg Grade (%)	Max Grade (%)	Ability Level
H-7	Keystone Lower	10,202	9,700	501	2,941	207	14.0	17%	29%	Low Intermediate
H-8	Silvanite	10,171	9,614	558	2,696	77	4.7	21%	48%	Advanced
H-9	Aspen Park	10,327	9,955	372	1,342	203	6.3	29%	49%	Advanced
H-10	Championship	10,127	9,284	843	3,385	299	23.2	26%	47%	Advanced
H-11	Peachtree Connector	9,558	9,472	87	425	66	0.6	21%	25%	Novice
I-1	North Pass	10,125	9,685	440	1,966	123	5.5	23%	38%	Intermediate
I-2	Cascade	10,148	9,624	524	2,679	286	17.6	20%	34%	Low Intermediate
I-3	Panian's Run	10,148	9,624	524	2,776	207	13.2	19%	33%	Low Intermediate
I-4	Elko Park	10,099	9,692	407	2,024	184	8.5	21%	33%	Low Intermediate
I-5	Gunsight Pass	10,144	9,695	449	4,588	31	3.3	10%	22%	Novice
I-6	Deer Pass	9,834	9,677	157	905	91	1.9	18%	35%	Low Intermediate
J-1	Topsy	10,142	9,811	332	2,130	189	9.3	16%	25%	Novice
J-2	Splain's Gulch	10,140	9,993	147	911	263	5.5	16%	22%	Novice
J-3	Little Lizzie	10,142	9,812	330	2,101	129	6.2	16%	35%	Low Intermediate
J-4	To Base Area	9,866	9,766	101	551	120	1.5	19%	23%	Novice
K-1	Rachel's	11,419	10,939	480	1,943	595	26.5	26%	46%	Advanced
M-1	North Star	11,679	11,263	416	1,863	82	3.5	23%	38%	Intermediate
M-2	Headwall	11,856	11,135	721	2,284	605	31.7	35%	80%	Expert
O-1	Little Queen	10,154	9,977	177	1,641	64	2.4	11%	37%	Intermediate
O-2	Prospector	10,153	9,644	509	2,352	268	14.5	22%	38%	Intermediate
Q-1	Teaching Terrain	9,407	9,398	9	124	960	2.7	8%	10%	Beginner
R-1	Teaching Terrain	9,360	9,355	5	103	562	1.3	5%	11%	Beginner
P-1	Columbine Trail	10,123	9,602	521	3,999	167	15.3	16%	35%	Low Intermediate
P-2	Gallowich Spur	10,040	9,941	99	407	198	1.9	25%	35%	Intermediate
P-3	Meander	10,200	10,042	158	855	125	2.5	19%	44%	Intermediate
P-4	Resurrection Spur	9,953	9,580	373	1,038	195	4.7	39%	59%	Expert
S-1	New Trail	10,894	10,103	791	3,444	130	10.3	24%	40%	Intermediate
S-2	New Trail	10,826	10,263	563	1,581	158	5.7	38%	61%	Expert
S-3	New Trail	10,875	10,226	649	2,243	147	7.6	30%	55%	Advanced
S-4	New Trail	10,893	10,754	139	855	112	2.2	17%	25%	Novice
S-5	New Trail	10,531	10,115	415	1,999	132	6.1	21%	45%	Intermediate
S-6	New Trail	10,333	10,242	91	728	138	2.3	13%	16%	Novice
S-7	New Trail	10,388	10,116	272	1,888	154	6.7	15%	25%	Novice
S-8	New Trail	10,338	10,112	226	1,790	130	5.4	13%	19%	Novice
T-1	New Trail	11,124	9,695	1,429	7,348	111	18.7	20%	57%	Intermediate

Table 6-5:
Terrain Specifications –Upgrading Plan

Lift Ref	Trail Area/Name	Top Elev (ft)	Bot Elev (ft)	Vert Rise (ft)	Slope Length (ft)	Avg Width (ft)	Slope Area (acres)	Avg Grade (%)	Max Grade (%)	Ability Level
T-2	New Trail	11,117	11,017	100	613	125	1.8	17%	22%	Intermediate
T-3	New Trail	11,002	10,011	991	3,398	147	11.5	31%	59%	Intermediate
T-4	New Trail	10,753	9,844	909	3,160	140	10.2	30%	51%	Advanced
T-5	New Trail	10,885	10,662	223	770	130	2.3	30%	42%	Advanced
T-6	New Trail	11,114	11,051	63	400	94	0.9	16%	21%	Intermediate
T-7	New Trail	11,087	10,982	105	1,304	59	1.8	8%	9%	Intermediate
T-8	New Trail	11,037	10,401	636	1,942	161	7.2	35%	50%	Advanced
T-9	New Trail	11,072	9,714	1,359	4,920	142	16.1	29%	53%	Advanced
T-10	New Trail	10,623	9,698	925	2,893	156	10.4	34%	67%	Expert
T-11	New Trail	10,943	9,689	1,255	3,915	128	11.5	34%	66%	Expert
U-1	New Trail	11,124	10,851	272	2,347	109	5.9	12%	19%	Novice
U-2	New Trail	11,096	10,870	226	1,226	157	4.4	19%	38%	Intermediate
U-3	New Trail	11,061	10,895	166	872	152	3.0	19%	24%	Novice
U-4	New Trail	11,014	10,944	71	478	82	0.9	15%	17%	Novice
U-5	New Trail	11,116	10,958	158	1,538	80	2.8	10%	17%	Novice
U-6	New Trail	11,012	9,803	1,209	9,264	92	19.6	13%	25%	Novice
U-7	New Trail	11,026	10,707	319	1,626	155	5.8	20%	30%	Low Intermediate
U-8	New Trail	10,993	10,683	310	1,360	153	4.8	24%	39%	Intermediate
U-9	New Trail	11,025	10,553	472	2,049	136	6.4	24%	50%	Advanced
U-10	New Trail	10,806	10,432	375	1,059	173	4.2	38%	64%	Expert
U-11	New Trail	10,127	9,910	217	809	151	2.8	28%	45%	Intermediate
U-12	New Trail	10,193	9,806	387	1,272	162	4.7	32%	43%	Intermediate
U-13	New Trail	10,262	9,831	430	1,643	196	7.4	27%	57%	Expert
U-14	New Trail	10,834	9,971	864	2,820	181	11.7	32%	45%	Intermediate
U-15	New Trail	10,981	9,839	1,142	4,330	147	14.7	28%	45%	Intermediate
U-16	New Trail	10,191	9,803	389	2,675	94	5.8	15%	30%	Intermediate
U-17	New Trail	10,708	10,102	606	1,725	218	8.6	39%	78%	Expert
U-18	New Trail	11,024	9,954	1,070	4,089	120	11.3	28%	90%	Expert
U-19	New Trail	10,936	10,250	686	1,553	199	7.1	50%	84%	Expert
V-1	New Trail	10,263	10,212	52	538	118	1.5	10%	10%	Beginner
W-1	New Trail	10,011	9,511	500	2,499	66	3.8	21%	44%	Intermediate
	TOTAL				**255,116**		**889.4**			

Source: SE GROUP

It should be noted that two trails on the backside of Snodgrass Mountain – identified as T1 and T3 – and two trails off Lift U – identified as U15 and U16 – do not classify as Intermediate terrain per

their maximum slope rating. However, they are identified as Intermediate trails because they are planned to be graded out during the construction process such that their maximum grade will fall into the Intermediate range. The steep sections on these trails are short and could be averaged out with relatively little grading. The following section details the areas to be graded.

b. Trail Grading

Approximately 20 percent of the developed terrain on Snodgrass Mountain, about 55 acres, will require grading during construction. The areas that will require grading are either trails that are planned to traverse across the fall-line (i.e., skiways), or sections of trails that need to be graded to improve the skiing experience and ensure compliance with maximum grade criteria for a given ability level category. The areas that are planned for grading are shown in Figure 6.1. The following table details the total area and provides a breakout by defined trail segments. The table also identifies the maximum sustained slope gradient of each trail on existing topography, as well as the maximum gradient of the trail after grading.

Table 6-6:
Planned Grading on Snodgrass Mountain – Upgrading Plan

Trail Number	Acres of Grading	Total Run Area	Max Gradient on Existing Terrain	Max Gradient with Grading
S1	3.39	10.3	39%	n/c
S3	1.42	7.8	54%	n/c
S4	2.16	2.2	26%	25%
S6	0.15	4.7	23%	n/c
T1	6.84	18.8	56%	45%
T2	0.2	1.9	22%	n/c
T3	1.78	11.3	57%	45%
T6	0.06	0.9	21%	n/c
T7	1.75	1.8	9%	n/c
T8	0.06	7.2	50%	n/c
T10	0.08	10.2	67%	n/c
T11	0.51	11.2	66%	n/c
Lift T Lift Line	0.05	n/a	n/a	n/a
U1	1.64	5.5	19%	n/c
U5	1.81	2.8	17%	n/c
U6	10.7	20.2	27%	25%
U9	1.36	6.4	36%	n/c
U11	2.01	2.8	48%	45%
U12	0.15	4.7	43%	n/c
U13	3.77	7.3	44%	n/c
U15	5.64	11.4	49%	45%
U16	3.61	14.4	50%	45%
U17	2.93	5.8	30%	n/c

Table 6-6:
Planned Grading on Snodgrass Mountain – Upgrading Plan

Trail Number	Acres of Grading	Total Run Area	Max Gradient on Existing Terrain	Max Gradient with Grading
U21	2.16	2.2	24%	n/c
U22	0.53	2.3	26%	n/c
Lift U Lift Line	0.57	n/a	n/a	n/a
V1	0.17	1.5	15%	n/c
Lift W Lift Line	0.35	n/a	n/a	n/a
TOTAL	**55.85**			

c. *Terrain Distribution*

The previously approved terrain development on the Main Mountain and terrain additions on Snodgrass Mountain are designed to expand CBMR's niche within the ski industry, better accommodate Intermediate level skiers, and to retain destination visitors. Furthermore, terrain improvements will enable CBMR to continue to offer its signature low-density skiing and riding experience while further diversifying its offerings. Table 6-7 compares the existing terrain capacity by skier ability level. The potential distribution of terrain through the full range of skill levels is even closer in-line with the ideal breakdown for the skier market. The last column in this table represents what can be considered the ideal skill level distribution in the relevant skier market and provides a comparison with the upgraded terrain breakdown at CBMR.

Table 6-7:
Terrain Ability Level Distribution by Capacity – Upgrading Plan

Skier/Rider Ability Level		Upgrading Plan* (acres)	Skier Capacity (guests)	Skier Distribution (%)	Skier Market (%)
●	Beginner	5.5	165	2%	5%
●	Novice	111.7	2,011	22%	15%
■	Low Intermediate	177.7	2,488	27%	25%
■	Intermediate	274.0	2,740	30%	35%
◆	Advanced	189.3	1,325	15%	15%
◆	Expert	131.1	393	4%	5%
TOTAL		**889.4**	**9,123**	**100%**	**100%**

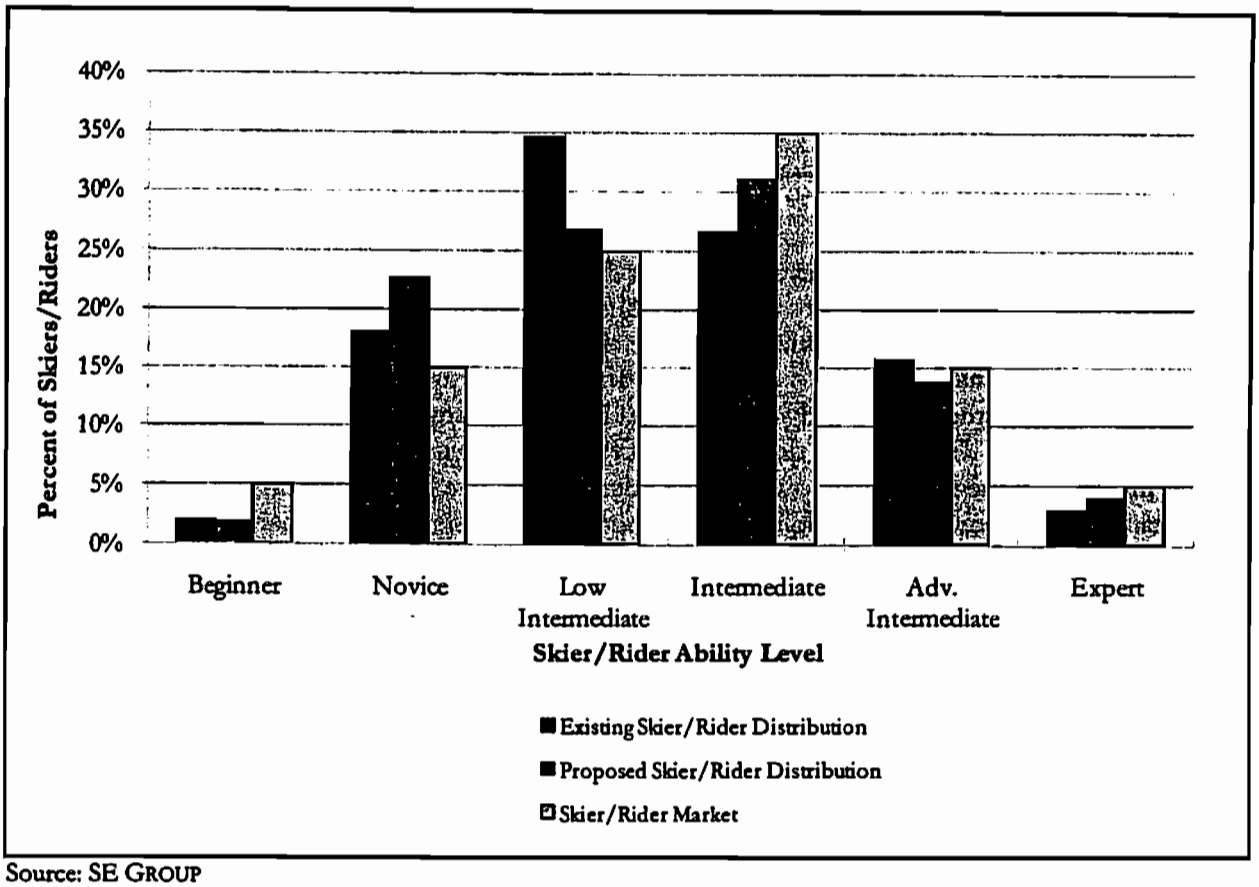
* Includes Existing, Previously Approved, and CBMR upgrade projects
Source: SE GROUP

As shown in Table 6-7 and in Chart 6-2, the CBMR skier/rider distribution at build-out better resembles market standards compared to the existing distribution. Improvements have been made in virtually every ability level category. More importantly, there will be improvements to the quantity and variety of terrain at CBMR across all ability levels.

While the ratio of ability levels is not planned to be brought directly in line with the skier market, the upgrade plan focuses on creating more terrain of all ability levels, with a focus on addressing the

most significant deficiencies – primarily in Intermediate and developed Advanced and Expert level terrain. It can be expected then that the percentages would not change drastically. For a full picture of the improvements, it is important to note the changes in actual acres of terrain. For example, total Intermediate terrain is planned to be increased by over 100 acres – a 65 percent increase.

Chart 6-2:
Terrain Ability Level Distribution by Capacity – Upgrading Plan



Source: SE GROUP

d. Density Analysis

As previously discussed, an important aspect of ski area design is the balancing of uphill lift capacity with downhill trail capacity. Trail densities are derived by contrasting the uphill, at-one-time capacity of each lift system (CCC) with the trail acreage associated with each lift pod. At any one time, skiers are dispersed throughout the resort, while using guest facilities and milling areas, waiting in lift mazes, riding lifts, or enjoying descents.

Trail density is calculated for each lift pod by dividing the number of guests on the trails by the amount of trail area that is available within each lift pod. The trail density analysis compares the calculated trail density for each lift pod to the desired trail density for that pod (i.e., the product of the ideal trail density for each ability level and the lift's trail distribution by ability level).

The trail density analysis considers only the acreage associated with the developed trail network, as described in Section E-1.c. -Terrain Distribution (see Figures 6.0A and 6.0B). The density analysis for the upgraded terrain at CBMR is defined in the following table.

Table 6-8:
Density Analysis – Upgrading Plan

Lift Ref	Daily Lift Capacity	Guest Dispersal				Density Analysis				
		Support Fac / Milling	Lift Lines	On Lift	On Terrain	Terrain Area	Terrain Density	Desired Trail Density	Diff.	Density Index
		(guests)	(guests)	(guests)	(guests)	(acres)	(guests/ac)	(guests/ac)	(+/-)	(%)
Main Mountain Lifts										
A	1,380	345	102	176	757	93.4	8	15	-7	53%
B	180	45	30	26	79	12.1	7	9	-2	78%
C	440	110	54	88	188	32.6	6	7	-1	86%
D	880	220	86	147	427	90.5	5	10	-5	50%
E	290	73	68	39	110	7.9	14	18	-4	78%
F	530	133	143	99	155	73.7	2	9	-7	22%
G	780	195	128	213	244	57.4	4	10	-6	40%
H	800	200	64	153	383	75.9	5	8	-3	63%
I	490	123	128	66	173	50.8	3	14	-11	21%
J	370	93	98	36	143	30.1	5	16	-11	31%
K	160	40	75	32	13	26.5	0.5	7	-7	7%
L	50	13	17	4	16	1.3	12	30	-18	40%
M	140	35	27	36	42	25.7	2	4	-2	50%
N	80	20	19	22	19	2.7	7	30	-23	23%
O	120	30	27	15	48	23.7	2	11	-9	18%
P	150	38	75	31	6	9.5	0.6	3	-2	21%
Snodgrass Mountain Lifts										
S	710	178	135	172	225	39.1	6	10	-4	60%
T	680	170	143	141	226	98.0	2	8	-6	25%
U	1,240	310	170	210	550	136.9	4	10	-6	40%
V	100	25	20	27	28	1.5	19	30	-11	63%
	9,570	2,396	1,609	1,733	3,832	889.4	5	11	-6	46%

Table 6-8 indicates that with the upgrades to the lift system, CBMR will maintain the low densities that are an important part of the CBMR ski experience. The overall density index at 46 percent shows that there will still be desirable low skier densities on the terrain – well below target densities. By keeping uphill capacities low on Snodgrass Mountain lifts, the Snodgrass Mountain terrain will have the same uncrowded feel as the Main Mountain.

e. *Boundary Management*

As discussed in Chapter 4, CBMR maintains an administrative boundary within its SUP area. Thus, the incorporation of Snodgrass Mountain into the developed lift and trail network will result in an administrative boundary being established within the Snodgrass Mountain portion of the SUP area. CBMR's trail map will be revised accordingly, as will signage. The CBMR boundary management policy can be found in the Crested Butte Ski Patrol Procedures Manual.

Likewise, CBMR's uphill access policy will be revised to reflect the incorporation of Snodgrass Mountain in the developed lift and trail system.

CBMR will provide an easement to the Snodgrass Mountain portion of the SUP area for Forest Service and public access. This will be similar to the Prospect Drive Road Easement that is a condition of the Upper Gunnison Basin Land Exchange Record of Decision.

2. Terrain Variety/Alternate Terrain

In terms of a resort's ability to retain guests at the resort, both for longer durations of visitation and for repeat business, one of the more important factors has proven to be variety in terrain. This means having developed runs of all ability levels, some groomed on a regular basis and some not, as well as mogul runs, bowl skiing, tree skiing, backcountry style (hike-to) skiing, and terrain parks and pipes. To provide the highest quality guest experience, resorts should offer some level of all terrain types to the extent it is practical. Even though some of these types of terrain only provide ski opportunities when conditions warrant, terrain variety is increasingly becoming a crucial factor in guests' decisions of ski destinations.

a. *Glades, Bowls, and Backcountry Style Terrain*

CBMR has such an extensive quantity and diversity of glades, bowls and "backcountry" style terrain that not much is included in this upgrading plan. Additionally, the natural terrain of Snodgrass Mountain is not particularly suited to this style of terrain. The notable exceptions are the glade skiing off Lifts S and T and the bowl off Lift U. While glade skiing will be available throughout the Snodgrass Mountain portion of the SUP area, the tree-skiing on the west-facing slopes of Lift T will be particularly desirable. Some of this glade skiing will be at Intermediate level grades, providing important Intermediate glades. The bowl on the U18 trail should also prove to be a popular area, with good snow quality on the north-facing slopes and steep, consistent grade.

Additionally, as previously discussed, the north-facing aspect of Snodgrass Mountain, in the Glory Hole area, has excellent undeveloped ski terrain. As a result of several factors that have been discussed in previous chapters, this terrain will be taken out of CBMR's SUP boundary, thus removing the opportunity to provide controlled alternate-style skiing in this area. However, this area will be available for hike-to terrain through an access point. A hiking trail is planned from the Gothic Road trailhead to a new backcounty access point on the northern boundary of the Snodgrass Mountain SUP area (see Figure 6.0B). This will accommodate backcountry skiers and riders wishing to use the Glory Hole area.

b. *Terrain Parks*

The CBMR upgrading plan does not include any changes to the functionality of the terrain parks at the Main Mountain. Areas not currently designated as having terrain features may have them in the

future. Evaluations will continue to be made throughout the season of features, ability levels, traffic patterns, snow depth, and customer feedback. CBMR also moves terrain features as snow base and customer use dictate. Opportunities for new terrain park features will be located and identified at Snodgrass Mountain. While no final design has been completed, it is likely that at least one terrain park will be maintained on Snodgrass Mountain. The same policies as on the Main Mountain for developing, maintaining, altering, and moving terrain parks and features will apply to Snodgrass Mountain.

F. Skier Services Facilities, Space Use and Food Service Seating

1. Skier Services

There will be three base area staging locations (or portals) at CBMR: the Main Base Area, Prospect at Mt. Crested Butte, and North Village (see Section E-1.a for specific skier services provided by each staging location). Full staging services will be available at the Main Base Area and North Village locations. Limited staging services (ticketing, retail, food service) will be provided at Prospect, to allow for convenient access onto the mountain to guests staying in adjacent accommodations. In addition to providing staging facilities, the Main Base area will also continue to offer commercial skier services that are utilized by skiing guests throughout the day including food services, restrooms, and retail. These commercial skier services will also be available at North Village. Limited food service will be provided at Prospect, again primarily for the convenience of guests staying in adjacent accommodations.

Additional on-mountain skier services will be provided in seven locations – five of these facilities are located on the Main Mountain, and two are located at Snodgrass Mountain.[39] At the Main Mountain, these include: the Ice Bar (approved to be expanded), Paradise Restaurant, Ski Patrol, the Ten Peaks (on private lands) and Red Lady Lodge (previously approved for construction). At Snodgrass Mountain, facilities will be located at the mid-mountain and mountain top.

Sufficient skier service space should be provided to accommodate the upgraded resort CCC. The distribution of the CCC is utilized to determine guest service capacities and spatial requirements for skier services at base area portals and on-mountain facilities. The CCC should be distributed between each guest service facility location according to the number of guests that will be utilizing the lifts and terrain associated with each facility.

In addition to distributing the CCC amongst the base area and on-mountain facilities, guest service capacity needs, and the resulting space sizing recommendations are determined through a process of reviewing and analyzing the current and projected operations to determine specific guest service requirements that are unique to the resort. Based upon an upgraded CCC of 9,570 skiers, Table 6-9 compares the upgraded space use allocations of the visitor service functions to industry standards for a resort of similar market orientation and regional context as CBMR. Square footage figures contained in this table are calculated to illustrate how the ski area compares to industry averages, and should not be considered absolute requirements.

[39] Facility conditions are addressed in the "On-Mountain Facilities" discussion.

Service functions include:

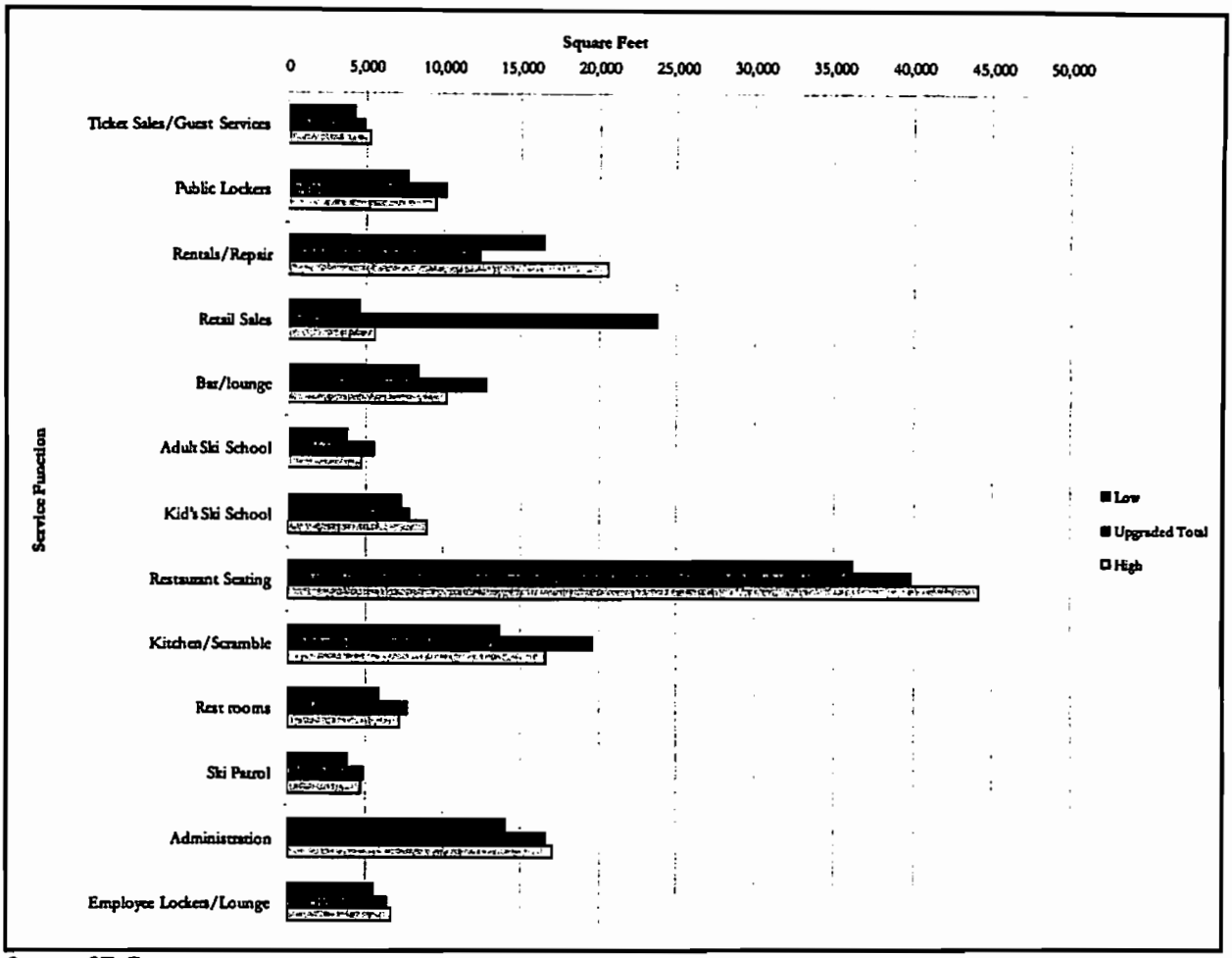
- **Restaurant Seating:** All areas designated for food service seating, including: restaurants, cafeterias, and brown bag areas. Major circulation aisles through seating areas are designated as circulation/waste, not seating space.
- **Kitchen/Scramble:** Includes all food preparation, food service, and food storage.
- **Bar/Lounge:** All serving and seating areas designated as restricted use for the serving and consumption of alcoholic beverages. If used for food service, seats are included in seat counts.
- **Restrooms:** All space associated with restroom facilities (separate women, men, and employees).
- **Guest Services:** Services including resort information desks, kiosks, and lost and found.
- **Adult Ski School:** Includes ski school booking area and any indoor staging areas. Storage and employee lockers directly associated with ski school are included in this total.
- **Kid's Ski School:** Includes all daycare/nursery facilities, including booking areas and lunch rooms associated with ski school functions. Storage and employee lockers directly associated with ski school are included.
- **Rentals/Repair:** All rental shop, repair services, and associated storage areas.
- **Retail Sales:** All retail shops and associated storage areas.
- **Ticket Sales:** All ticketing and season pass sales areas and associated office space.
- **Public Lockers:** All public locker rooms. Any public lockers located along the walls of circulation space are included, as well as the 2 feet directly in front of the locker doors.
- **Ski Patrol/First Aid:** All first aid facilities, including clinic space. Storage and employee lockers directly associated with ski patrol are included in this total.
- **Administration/Employee Lockers & Lounge/Storage:** All administration/ employee/storage space not included in any of the other identified functions.

Table 6-9:
Industry Average Space Use – Upgrading Plan
Resort Total

Service Function	Total (Existing & Upgraded)	Recommended Range	
		Low	High
Ticket Sales/Guest Services	4,834	4,310	5,260
Public Lockers	10,172	7,740	9,480
Rentals/Repair	12,324	16,490	20,610
Retail Sales	23,686	4,610	5,630
Bar/lounge	12,766	8,343	10,194
Adult Ski School	5,540	3,880	4,740
Kid's Ski School and Daycare	7,790	7,320	8,950
Restaurant Seating	39,832	36,170	44,220
Kitchen/Scramble	19,616	13,570	16,590
Restrooms	7,673	5,870	7,190
Ski Patrol	4,889	3,840	4,690
Administration	16,615	14,010	17,110
Employee Lockers/Lounge	6,343	5,510	6,740
TOTAL SQUARE FEET	**172,080**	**131,663**	**161,404**

Source: SE GROUP

Chart 6-3:
Total Space Use And Recommendations – Upgrading Plan



Source: SE GROUP

From a resort-wide perspective, CBMR's guest service space will fall just above the recommended range in the upgrading plan. The surplus is primarily explained by the high amount of retail provided by CBMR. Excess retail is provided to accommodate all resort guests, including non-skiing guests, especially conference groups.

The deficit of restaurant seating under existing conditions has been resolved. The restaurant space provided under the upgrading plan is within the recommended range. The surplus of bar/lounge, kitchen/scramble and restroom space is supplied to accommodate non-skiing guests staying at the resort.

The deficit in rental/repair facilities is supplemented by third party vendors which accommodate needs beyond what CBMR provides.

Neither Table 6-9 and Chart 6-3 indicate whether this balance of space is typical at each base area and on-mountain facility location. Further detail of each individual guest service location is required to illustrate specific locations and amount of additional space recommended throughout the resort

in order to optimize opportunities for improvements to the guest experience. The following tables and text address upgraded space use at each guest service facility.

a. *Base Area Facilities*

Base area facilities at CBMR will include the existing portal at Mountaineer Square, and two new base area portals at Prospect at Mt. Crested Butte and North Village. Mountaineer Square is expected to accommodate staging of the majority of the total skiing/riding guests (75 percent), while Prospect and North Village will accommodate visitors and residents in lodging that will be developed adjacent to, and within, these areas.

Main Base Area

The Main Base Area will continue to be the main staging location at CBMR, and will continue to offer the full complement of guest services including: tickets, lockers, rentals, retail, ski school, food and beverage, and restrooms. These will be offered in a series of existing, as well as new, buildings owned by CBMR including: The Lodge, the Treasury Building, the Grand Lodge, the Cimarron, portions of Axtell Building, the Whetstone Building, and the Emmons and Elevation hotels. The Silver Queen and Red Lady Express lifts serve as the primary access point for skiers/riders of all ability levels.[40] Under the upgrade plan, the Main Base Area portal is anticipated to accommodate approximately 75 percent (or 7,178) of the total guests skiing/riding at CBMR.

Facility upgrades at the Main Base Area include a new pizza place and rental shop in the Treasury Building. A complete inventory of upgraded guest services is located in Table 6-10.

[40] Existing skier services are discussed in detail in Chapter 4.

Table 6-10:
Guest Services – Main Base Area
Upgrading Plan

Service/Function	The Lodge	Axtell	Whetstone	Treasury	Emmons	Grand Lodge	Elevation Hotel	Crimneon	Proposed Total	Recommended Range	
										Low	High
Ticket Sales/Guest Services	1,700	-	-	-	986	-	-	968	3,654	3,230	3,950
Public Lockers	-	-	-	2,801	-	-	-	5,441	8,242	5,810	7,110
Rentals/Repair	-	-	259	-	-	-	-	9,065	9,324	13,490	16,860
Retail Sales	-	-	-	18,480	-	-	-	2,180	20,660	3,750	4,590
Bar/lounge	1,648	-	-	845	-	996	4,500	865	8,854	4,790	5,850
Adult Ski School	1,044	2,100	1,616	-	-	-	-	-	4,760	3,100	3,790
Kid's Ski School and Daycare	-	-	6,330	-	-	-	-	-	6,330	5,860	7,160
Restaurant Seating	-	-	279	4,620	-	1,653	5,000	5,200	16,752	14,190	17,350
Kitchen/Scramble	-	-	-	1,540	-	827	2,800	3,435	8,602	5,320	6,510
Restrooms	910	144	289	623	50	304	802	850	3,972	2,310	2,820
Ski Patrol	-	600	1,045	-	-	-	-	-	1,645	1,690	2,060
Administration	500	4,931	-	-	6,420	1,700	1,600	-	15,151	12,570	15,360
Employee Lockers/Lounge	-	-	1,346	400	-	500	1,500	351	4,097	3,440	4,200
Total Square Feet	**5,802**	**7,775**	**11,164**	**29,309**	**7,456**	**5,980**	**16,202**	**28,355**	**112,043**	**79,550**	**97,610**

Notes:
Rentals space for 3,500 units, or a 75% increase from the existing fleet (existing is 1,731 skis and 301 snowboards). 2,750 units in Main Base Area (750 in North Village).
Whetstone kid's ski school includes 3,004 ski school and 1,710 daycare (and instructors locker space).
Treasury retail oversized due to its service for non-skiers.
Food service numbers provided for Whetstone and Grand Lodge divided between seating (2/3) and kitchen/scramble (1/3).
Ski school locker space divided between adults and kid's ski school.
Treasury includes new (in 2008) Pizza place (2,085sq.ft.) and rental shop (3,882sq.ft.).
Source: SE GROUP

As shown in Table 6-10, facilities will slightly exceed the recommended range, generally due to its function as a main staging area and administration area for the resort, as well as the additional retail facilities accommodating non-skier visitors including conference groups. In addition to the CBMR-operated services, additional third party retail and food service are supplied by a number of private facilities and are not included in this analysis.[41]

Prospect at Mt. Crested Butte

As a part of the CBMR's 2008 Comprehensive Development Plan, facilities designed to provide a quality experience for resort guests and the general public have been approved on private land in Prospect at Mt. Crested Butte PUD III (see Section H-3 for further details regarding the Prospect at Mt. Crested Butte private land development). Although there is not a specific design for services at Prospect, facilities will reflect the needs and desires of various recreational and other resort users on a year-round basis providing food service, limited retail, ticketing, and restrooms. Note that not all of the facilities at Prospect at Mt. Crested Butte will be for public use.

The Prospect at Mt. Crested Butte base area is designed specifically to accommodate visitors staying in this area, and will not function as a traditional day-use base area for the Main Mountain. The 1998 Decision Notice approved a day lodge in this area including a Beginner ski area, ticket sales, equipment rental, ski school and restrooms. Visitors will access the Main Mountain via the existing Gold Link Lift. The Prospect at Mt Crested Butte portal is anticipated to accommodate the staging of 6.5 percent –or approximately 622 guests– of the total guests skiing at CBMR.

As part of the Prospect at Mt. Crested Butte development, base area facilities will provide limited skier services for guests staying in the adjacent real estate development, as shown in the following table.

[41] Additional third party retail supplied at The Lodge, Treasury, Grand Lodge, Elevation Hotel, Mountaineer Square North (not included in Table 6-10). Additional third party food service supplied at The Lodge and Mountaineer Square North (not included in Table 6-10).

Table 6-11:
Industry Average Space Use – Upgrading Plan
Base Area – Prospect at Mt. Crested Butte

Service Function	Recommended Range	
	Low	High
Ticket Sales/Guest Services	280	340
Public Lockers	500	620
Rentals/Repair	-	-
Retail Sales	90	110
Bar/lounge	140	170
Adult Ski School	-	-
Kid's Ski School	-	-
Restaurant Seating	1,140	1,390
Kitchen/Scramble	430	520
Restrooms	180	230
Ski Patrol	-	-
Administration	270	330
Employee Lockers/Lounge	180	220
TOTAL SQUARE FEET	**3,210**	**3,930**

Source: SE GROUP

North Village

As noted, an interconnect gondola between the Main Mountain and Snodgrass Mountain will serve as the primary mountain access point for the Snodgrass Mountain. The North Village Gondola will transport guests from North Village to either the Main Mountain (via the Gold Link Lift) or Snodgrass Mountain. The area surrounding the gondola loading terminal at North Village will provide basic skier service functions for North Village residents and guests (rental/repair/retail shops, ticketing, restrooms, a restaurant and a post office). The North Village portal is anticipated to accommodate 18.5 percent –or 1,770– of the total guests skiing at CBMR.

In addition to the basic skier services provided adjacent to the gondola terminal, the North Village commercial development will be designed to support the 1,100 year-round and second home residential units as part of the Planned Unit Development described in the 2008 Comprehensive Development Plan. The plan is in the conceptual stages, but may include the following services: restaurants, restrooms, town hall, residential services and retail shops (see Section G-5 for details regarding the North Village private land development).

The recommended ranges of guest service facilities at North Village are provided in the Table 6-12. While the majority of these services are envisioned to be provided in the gondola terminal area, it is likely that some services – particularly food service, retail and rentals – will be provided by additional third party venues located in the North Village commercial area.

Table 6-12:
Industry Average Space Use – Upgrading Plan
Base Area – North Village (Gondola Area)

Service Function	Recommended Range	
	Low	High
Ticket Sales/Guest Services	800	970
Public Lockers	1,430	1,750
Rentals/Repair	3,000	3,750
Retail Sales	340	410
Bar/lounge	1,020	1,240
Adult Ski School	780	950
Kid's Ski School	1,460	1,790
Restaurant Seating	3,790	4,630
Kitchen/Scramble	1,420	1,740
Restrooms	620	750
Ski Patrol	420	510
Administration	680	830
Employee Lockers/Lounge	900	1,110
TOTAL SQUARE FEET	**16,660**	**20,430**

Note:
Rentals assume 750 units.
Source: SE GROUP

b. On-Mountain Skier Services Facilities

Red Lady Lodge

The previously approved Red Lady Lodge will support daytime use, as well as night and special event use.

Table 6-13:
Industry Average Space Use – Upgrading Plan
On-Mountain – Red Lady Lodge

Service Function	Upgraded Total	Recommended Range	
		Low	High
Ticket Sales/Guest Services	-	-	-
Public Lockers	-	-	-
Rentals/Repair	-	-	-
Retail Sales	-	-	-
Bar/lounge	505	420	520
Adult Ski School	-	-	-
Kid's Ski School	-	-	-
Restaurant Seating	2,948	2,820	3,450
Kitchen/Scramble	1,673	1,060	1,290
Restrooms	588	460	560
Ski Patrol	-	310	380
Administration	114	110	130
Employee Lockers/Lounge	134	90	110
TOTAL SQUARE FEET	**5,962**	**5,270**	**6,440**

Notes:
Numbers taken from 04/08 spreadsheet from CBMR.
Kitchen/scramble includes 1,806sq.ft. F&B storage.
Source: SE GROUP

Ski patrol will not be located within the Red Lady Lodge because it is already centrally located out of other facilities on the mountain. The other resources located within the facility serve the current need. The indoor and outdoor restaurant seating will provide an alternative on-mountain dining facility.

Ten Peaks Lodge

Guest services will be provided at the Ten Peaks Lodge (located on private land at Prospect at Mt. Crested Butte) to accommodate users in the area of Gold Link, Prospect and Painter Boy lifts. Services will be developed in the Ten Peaks Lodge to accommodate restaurant and bar/lounge amenities, ski patrol, retail and administrative uses. This lodge will disperse users more evenly between the north and south sides of the Main Mountain.

Table 6-14:
Industry Average Space Use – Upgrading Plan
On-Mountain – Ten Peaks Lodge

Service Function	Recommended Range	
	Low	High
Ticket Sales/Guest Services	-	-
Public Lockers	-	-
Rentals/Repair	-	-
Retail Sales	340	410
Bar/lounge	420	520
Adult Ski School	-	-
Kid's Ski School and Daycare	-	-
Restaurant Seating	2,670	3,270
Kitchen/Scramble	1,000	1,230
Restrooms	430	530
Ski Patrol	290	360
Administration	270	330
Employee Lockers/Lounge	720	880
TOTAL SQUARE FEET	**6,140**	**7,530**

Source: SE GROUP

Ice Bar Restaurant

The Ice Bar is currently undersized for its popular central location at mid-mountain, and the amount of use it receives. The Ice Bar restaurant has been approved to be expanded by up to 1,200 square feet to provide more seating and kitchen space. The current plans call for the demolition of the existing structure and replacing it with a new 2,200 square foot facility.

Table 6-15:
Industry Average Space Use – Upgrading Plan
On-Mountain – Ice Bar

Service Function	Existing	Upgrading Plan	Recommended Range	
			Low	High
Ticket Sales/Guest Services	-	-	-	-
Public Lockers	-	-	-	-
Rentals/Repair	-	-	-	-
Retail Sales	-	-	-	-
Bar/lounge	144	230	140	170
Adult Ski School	-	-	-	-
Kid's Ski School	-	-	-	-
Restaurant Seating	886	1,286	1,240	1,520
Kitchen/Scramble	300	498	470	570
Restrooms	100	186	200	250
Ski Patrol	-	-	-	-
Administration	-	-	-	-
Employee Lockers/Lounge	10	-	-	-
TOTAL SQUARE FEET	**1,440**	**2,200**	**2,050**	**2,510**

Notes:
Numbers taken from 04/08 spreadsheet from CBMR.
Food Service space provided divided between seating (2/3) and Kitchen/scramble (1/3).
Source: SE GROUP

As shown in Table 6-15, the replacement plan for Ice Bar will bring the skier service functions to within, or very close to, the recommended range.

Paradise Restaurant

The Paradise building is in good condition and is well situated to take advantage of the surrounding views. The cafeteria and restaurant amenities, ski patrol, retail and administrative services are sufficient to support current and expected visitation. In consideration of the new full service restaurant at the Red Lady Lodge and the expansion of the Ice Bar, CBMR is contemplating removal of the full service restaurant, Rustica, at the Paradise Lodge, and expanding the cafeteria at this location.

Table 6-16:
Industry Average Space Use – Upgrading Plan
On-Mountain – Paradise

Service Function	Existing Total (retained)	Recommended Range	
		Low	High
Ticket Sales/Guest Services	-	-	-
Public Lockers	-	-	-
Rentals/Repair	-	-	-
Retail Sales	96	90	110
Bar/lounge	384	280	340
Adult Ski School	-	-	-
Kid's Ski School and Daycare	-	-	-
Restaurant Seating	4,543	4,280	5,230
Kitchen/Scramble	3,057	1,600	1,960
Restrooms	747	690	850
Ski Patrol	64	470	570
Administration	100	110	130
Employee Lockers/Lounge	182	180	220
TOTAL SQUARE FEET	**9,173**	**7,700**	**9,410**

Notes:
Numbers taken from 04/08 spreadsheet from CBMR.
Third party retail supplied at Paradise (96sq.ft.).
Kitchen/scramble includes 1,651sq.ft. F&B storage.
Source: SE GROUP

Ski Patrol

At 1,600 square feet, the existing Main Mountain ski patrol headquarters and two satellite stations (at the top of the East River Express and Gold Link) are sufficient to serve existing terrain. Note: New Snodgrass Mountain ski patrol space is included in guest service facilities at the top of Snodgrass Mountain.

Snodgrass Mountain

Two on-mountain restaurant locations will be located on Snodgrass Mountain. One facility will be located south of the Lift T top terminal near the summit of Snodgrass Mountain and the other will be located between the top terminals of the Gondola and the surface lift (identified as "F" and "G," respectively on Figure 6.1). Each facility will provide restaurant, bar/lounge, ski patrol and restroom facilities. Outdoor decks will provide additional seating to supplement indoor seating space.

Table 6-17:
Industry Average Space Use – Upgrading Plan
On-Mountain – Snodgrass Top-Mountain

Service Function	Recommended Range	
	Low	High
Ticket Sales/Guest Services	-	-
Public Lockers	-	-
Rentals/Repair	-	-
Retail Sales	-	-
Bar/lounge	313	383
Adult Ski School	-	-
Kid's Ski School and Daycare	-	-
Restaurant Seating	1,670	2,040
Kitchen/Scramble	630	770
Restrooms	270	330
Ski Patrol	180	220
Administration	-	-
Employee Lockers/Lounge	-	-
TOTAL SQUARE FEET	**3,063**	**3,743**

Source: SE GROUP

Table 6-18:
Industry Average Space Use – Upgrading Plan
On-Mountain – Snodgrass Mid-mountain

Service Function	Recommended Range	
	Low	High
Ticket Sales/Guest Services	-	-
Public Lockers	-	-
Rentals/Repair	-	-
Retail Sales	-	-
Bar/lounge	819	1,001
Adult Ski School	-	-
Kid's Ski School and Daycare	-	-
Restaurant Seating	4,370	5,340
Kitchen/Scramble	1,640	2,000
Restrooms	710	870
Ski Patrol	480	590
Administration	-	-
Employee Lockers/Lounge	-	-
TOTAL SQUARE FEET	**8,019**	**9,801**

Source: SE GROUP

2. Food Service Seating

To address restaurant seating and restroom space deficits identified in the existing conditions discussion (Chapter 4), seating and restroom space will be increased and provided in the base area facilities at Prospect at Mt. Crested Butte and North Village, and on-mountain at Red Lady Lodge, Ten Peaks Lodge, the Ice Bar, Snodgrass Top-Mountain, and Snodgrass Mid-Mountain. Restaurant seating space will be within the recommended range. Food service is also available in CBMR bar/lounge venues. In addition, privately owned restaurants and restrooms located in the base area further accommodate visitors, as will the CBMR extended base area locations Woodstone, Deli, and Trackers.

A key factor in evaluating restaurant capacity is the turnover rate of the seats. A turnover rate of two to five times is the standard range utilized in determining restaurant capacity. Sit-down dining at ski areas typically results in a turnover rate of between two and three, while "fast food" cafeteria style dining is characterized by a higher turnover rate. Furthermore, weather has an influence on turnover rates at ski areas, as on snowy days skiers spend more time indoors than on sunny days. Due to the mix of restaurant types and the typically good weather, turnover rates between 2.5 and 3.5 were used.

The following table summarizes the seating requirements at CBMR, based on a logical distribution of the CCC to each service building/location.

Table 6-19:
Recommended Restaurant Seating – Upgrading Plan

	Main Base Area	Prospect at MCB	North Village (Gondola Area)	Red Lady Lodge	Ten Peaks Lodge	Ice Bar	Paradise	Snodgrass Top Mountain	Snodgrass Mid-mountain	Total Resort
Lunchtime Capacity (CCC)	3,943	316	1,052	784	743	345	1,188	464	1,214	10,049
Average Seat Turnover	3	3	3	3.5	2.5	2.5	3	3	3.5	-
Existing Indoor Seats	840	-	-	-	-	40	281	-	-	1,161
Proposed Indoor Seats	-	67	350	236	333	75	-	75	200	1,336
Total Indoor Seats	*840*	*67*	*350*	*236*	*333*	*115*	*281*	*75*	*200*	*2,497*
Required Seats	1,314	105	351	224	297	138	396	155	347	3,327
Difference	-474	-38	-1	12	36	-23	-115	-80	-147	-830
Existing Outdoor Seats	350	-	-	-	-	60	260	-	-	770
Proposed Outdoor Seats	100	25	-	232	100	-	-	100	200	657
Total Outdoor Seats	450	25	-	232	100	60	260	100	200	1,427
TOTAL SEATS (Indoor and Outdoor)	*1,290*	*92*	*350*	*468*	*433*	*175*	*541*	*175*	*400*	*3,924*
Required Seats	1,314	105	351	224	297	138	396	155	347	3,327
Difference	-24	-13	-1	244	136	37	145	20	53	597

Notes:
Outdoor Seats are counted toward overall seating capacity, assuming that the resort will meet capacity on fair weather days when they may be utilized.
Main Base Area includes Butte 66 (117 indoor, 150 out), Elevation hotel (185 indoor/200 out), Pizza (133 indoor) and Cimmeron restaurant (347 indoor/100 outdoor) and bar (58).
Paradise includes cafeteria (195 indoor and 260 outdoor) and Rusticas (86 indoor).
Red Lady Lodge seating includes Great Room (125), Bar/Lounge (34), Kids Zone (77) and Deck (232).
Non CBMR restaurant seating (not included) = 394 indoor seats and 103 outdoor (Django's, Fire House and Substation, Camp 4, Avalanche, Brown Lab Pub).
CBMR restaurant seating (extended base area location - not included due to distance from base lifts) = 107 indoor and 25 outdoor (Woodstone, Deli, Trackers).
Source: SE GROUP

As shown in the previous table, there is a deficit of indoor seating capacity overall. However, seating capacity is typically reached on good weather days and the overall deficit is more than offset by the supply of outdoor seating.

3. Restroom Fixtures

Restroom fixtures are directly related to the distribution of the resort's capacity to the guest service facilities located on-mountain and in the base area. As shown in Table 6-20, the on-mountain deficit of restroom fixtures under existing conditions would be improved with facility upgrades at Paradise. Under proposed conditions, the surplus of restroom fixtures at Ice Bar and the existing fixtures at Ski Patrol, the top of Painter Boy Lift, and on-mountain outhouses would eliminate the on-mountain restroom deficit. The Snodgrass Mountain facilities would be built to accommodate guest's needs.

Table 6-20:
Recommended Restroom Fixtures

	Base Area Facilities			On-Mountain Facilities						
	Main Base Area	Prospect at MCB	North Village (Gondola Area)	Red Lady Lodge	Ten Peaks Lodge	Ice Bar	Paradise	Snodgrass Top Mountain	Snodgrass Mid-Mountain	Total Resort
Lunchtime Capacity	2,922	316	1,052	784	743	265	1,268	464	1,214	10,049
Existing										
Men's toilets	27	-	-	-	-	1	6	-	-	34
Men's urinals	22	-	-	-	-	1	8	-	-	31
Women's toilets	42	-	-	-	-	1	12	-	-	55
Proposed										
Men's toilets	6	1	3	3	2	1	-	2	2	19
Men's urinals	6	1	1	6	4	1	-	2	4	24
Women's toilets	15	1	4	8	6	3	-	6	12	54
Total										
Men's toilets	33	1	3	3	2	1	6	2	2	53
Men's urinals	28	1	1	6	4	1	8	2	4	55
Women's toilets	57	3	4	8	6	1	12	6	12	109
Recommended										
Men's toilets	24	1	3	2	2	1	2	2	2	39
Men's urinals	24	1	1	4	4	1	4	2	4	45
Women's toilets	64	3	4	6	6	2	12	6	12	115
Difference										
Men's toilets	9	-	-	1	-		4	-	-	14
Men's urinals	-2	-	-	2	-		4	-	-	4
Women's toilets	-22	-	-	2	-	+1		-	-	-21

Notes:
Additional on-mountain facilities are located at the Ski Patrol facility (1 men's toilet, 1 urinal, 1 women's toilet) and at the top of Painter Boy Lift (1 men's toilet, 1 urinal, 1 women's toilet). Outhouses (1 at East River top terminal, 1 at East River bottom terminal, 1 at Peachtree top terminal, and 2 at Teocalli top terminal).
Source: SE GROUP

Although there is enough restroom space (square feet) in the base area (shown in Table 6-10), Table 6-20 shows a deficit of women's toilet fixtures in the base area and Resort Wide. On-mountain fixtures are sufficient for guest's needs. The expansion at Ice Bar and the new Red Lady lodge provide several fixtures beyond the recommended range, which accommodate the continued deficit at the Ice Bar.

G. Access and Parking

As indicated in Chapter 4, parking is currently available at pay and free lots located at the Main Mountain and in the Town of Crested Butte. There is an existing surplus of day skier parking because the base area parking lots rarely fill to capacity. In the future, private land development may impact the Inn site lot and the lot south of the Plaza building, however CBMR is committed to providing sufficient day skier parking at CBMR's main parking lot (425 spaces), with additional planned parking spaces in Prospect at Mt. Crested Butte, if necessary.

CBMR's main base area redevelopment includes the Cimarron Building that is located slope side, and Mountaineer Square North which will be located on the site of the main parking lot. The Cimarron Building will provide parking for the residential units in the building and a limited number (12 spaces) of public parking. The Mountaineer Square North development will retain the 425 public parking spaces and will also have an additional 342 parking spaces for residential and commercial uses. Because all of this parking is contained within a parking structure it will not be impacted by snow and will be efficiently utilized.

In the future, guest access to Snodgrass Mountain will be provided by lifts and public transportation. CBMR does not have plans to develop skier parking facilities at Snodgrass Mountain or North Village. While there will be metered, on-street parking in the commercial core of North Village for retail, it is not intended to accommodate day skier parking. It is intended that day skiers or guests not staying in the North Village will start their day at Mountaineer Square – arriving by bus or parking in the day skier parking lot. From there they can choose to ride the interconnect gondola (thus requiring them to ride the Red Lady and Painter Boy Lifts first) to North Village and then Snodgrass Mountain, or take a transfer bus from Mountaineer Square to North Village. A northern transit center is planned at the Town Square and is within a five minute walk of 95 percent of the development and two minutes to the NV Gondola plaza. Bus stops for guests and residents of the Main Mountain and the Town of Crested Butte who prefer to utilize mass transit are planned for North Village.

All development included in this upgrading plan will have sufficient parking associated with each unit. As a result, the only question when it comes to parking is supplying enough parking for day skiers. The following table details the upgraded parking situation.

Table 6-21:
Parking Capacity – Upgrading Plan

	Multiplier	Units	Totals
CCC			9,570
Number of Guests in Existing Lodging/Homes			4,752
Skiing Guests in Future CBMR Units			2,871
Planned Units in Crested Butte (not CBMR developed)		500	
Skiing Guests in Planned non-CBMR Units			160
Total Destination or Resident (non-parking) Guests			7,783
Total Guests Requiring Parking (CCC - non parking guests)			1,787
Average Guests per Car	2.5		
Number of required parking spaces			715
Number of resort-owned parking spaces		425	
Number of town-owned parking spaces		230	
Planned parking spaces in Prospect		200	
Total available parking spaces			855
Surplus parking spaces (Available spaces - required spaces)			140

Notes:
All assumptions and calculations in this table are intended to reflect and model a day where actual visits match CCC.
Number of guests in Existing Lodging/Homes is 80% of Existing CCC, see Chapter 4 for analysis.
Skiing guests in future CBMR units calculated in Table 6-6.
Source: CBMR

Table 6-21 indicates that the capacity of existing parking (resort-owned and town-owned) lots is nearly sufficient to support the projected increased number of day skiers. Additionally, there are approvals for up to 200 parking spaces to be built in conjunction with the Prospect at Mt. Crested Butte development. It is currently anticipated that these parking spaces will be built on an as-needed basis when demand dictates. Note that these spaces are planned for the Prospect area, an area which has under-utilized out-of-base capacity, as previously described. This will further help to balance the access capacities of the various parts of the resort. It is important to note that the percentage of destination skiers is predicted to increase over existing conditions, as calculated in the Table 6-21, from the existing 80 percent up to roughly 83 percent. It is reasonable to assume that the number of day skiers will increase, due to growth in Gunnison and neighboring communities, and the increased attractiveness of the resort with the addition of Snodgrass Mountain; an increase that is reflected in the above calculations which reflect an approximate increase of 450 day skiers per day. However, the increase in percentage of skiers using lodging and mass transit systems reflects the development philosophy of the resort. While it is reasonable to assume that the number of day skiers at CBMR will increase due to implementation of projects contained in the upgrading plan, the pool of potential day skiers in surrounding communities would not likely increase to that same degree (i.e., 20 percent), meaning that the total percentage of day skiers will likely be less. Similarly, it is reasonable to assume that the percentage of destination skiers will increase along with increased length of visits, in conjunction with the upgrades on the mountain, base village, skier services, and

lodging options. Therefore, it is likely that the percentage of day skiers will decrease and that the existing surplus of parking will be sufficient to accommodate the increase in day skiers. However, the planned surplus in parking due to the Prospect at Mt Crested Butte parking option will easily accommodate any future change in these assumptions, including any possible changes in use of the Town lots.

It should be noted that CBMR's philosophy is to see day skiers and employees not drive to the resort but instead use the well developed public transportation system that is currently available. CBMR feels this is a better solution to handling future parking demand than building a parking lot at Prospect. This alternative has other benefits as well, including lowering traffic on area roads. The Upper Gunnison Valley Transportation Plan provides the guidance for managing future traffic and parking issues including the development of Park and Ride Lots and expanded transit service.

1. Gothic Road Trailhead

The Gothic Road Trailhead was proposed during conceptual planning and design for the future amended North Village PUD and was formalized as a Condition of Approval in Resolution No. 6, Series 2007 by the Town of Mt. Crested Butte as part of the Promontory Preliminary Plan in 2007. Condition #4, states "That the applicant adequately address the parking lot improvements at the Gothic Road trailhead as part of the major alteration to the North Village PUD to the satisfaction of the Planning Commission." The Gothic Road Trailhead includes the following design concepts:

- Provide appropriate turning radius to accommodate Mountain Express buses planned for a "northern loop" in North Village and the Gothic Road trailhead.
- Provide approximately 40 parking spaces, including Americans with Disabilities Act (ADA) compliant access and long-term parking for RMBL and short-term parking for visitors for year-round use.
- Incorporate adequate space for future restroom facilities and Forest Service signage.
- Allow and provide space for a future RMBL "interpretive" center.

The Gothic Road trailhead allows for existing and future use of Snodgrass Mountain for recreational purposes. In addition to summer use, the trailhead is used, and will continue to be used, for winter recreation access including snowshoeing and backcountry skiing access to the Glory Hole area. The Gothic Road trailhead is shown on most Chapter 6 figures, including Figure 6.4B. As depicted on Figure 6.0B, a backcountry access trail is planned between the Gothic Road trailhead and a new access point on the northern boundary of the Snodgrass Mountain SUP area.

H. Private Lands Development

As CBMR continues to upgrade on-mountain facilities, the resort will be complemented by an increase in base area and visitor support facilities/services on private land, as well as full-time and second home residences. Base area planning within CBMR's 2008 Comprehensive Development Plan ("CDP") compliments on-mountain projects discussed in this upgrading plan. A summary of projects included in the 2008 CDP is provided here.

In addition to improving the balance of visitor support facilities at CBMR, key objectives of base area planning are to integrate the mountain with the base area and to create an attractive, year-round pedestrian-oriented development. This will be achieved by improving pedestrian, automobile, and mass-transit circulation between existing and proposed overnight accommodations and commercial areas at the base of the mountain. The 2008 CDP also includes many public and community amenities envisioned for the future of Mt. Crested Butte as a resort and a successful mountain community. These include: addressing the need for affordable housing in the upper valley, providing a community aquatic/recreational center, creating a community center in North Village based on Traditional Neighborhood and Smart Growth principles and providing a location for a local post office and town hall.

The following five development areas are included in the 2008 CDP:

1. Town Center/Mountaineer Square
2. Mountaineer Square North
3. Prospect at Mt. Crested Butte
4. Promontory at Mt. Crested Butte
5. North Village PUD III

All five areas are identified on Figure 6.0, 6.0A and 6.0B.

1. Town Center/Mountaineer Square

Mountaineer Square has been designed as a mixed-use hub of resort activity and is dedicated primarily to four-season mountain enthusiasts and their families. Skier services, resort retail and public transit uses are located on the ground floors with resort residential above. This area will provide convenient access to CBMR's primary skier and mountain services. Two key planning elements include: 1) providing a pedestrian connection to the ski slopes; and 2) creating a transit center and visitor drop-off zone in close proximity to restrooms and ticketing. Small shops and outdoor cafés, a bank, and kiosks will enliven the plaza and will support year-round use of the Town Center.

2. Mountaineer Square North

Within the current Town Center PUD, the 8.8-acre Mountaineer Square North portion consists of two parcels that are owned by the Town of Mt. Crested Butte. A 1-acre Aquatic Recreation Center parcel consists of 45,500 square feet of civic/recreational use, residential development and/or retail and could accommodate up to 67 dwelling units. The Inn Site consists of approximately 1 acre across Treasury Road and has been identified for future residential development property. Currently allowed are 60 residential units and 4,038 CRFA.

The remaining parcel known as MSN-1 consists of 11 proposed buildings that includes the following: 41,354 square feet of retail, 13,222 square feet of hospitality, 22,680 square feet of conference, 218,610 square feet of market units or 305 unit modules and 30 units of community housing. The new site plan for MSN utilizes the historic entrance into the site from Treasury Road

and formalizes the existing Emmons Road as the main thoroughfare of Mt. Crested Butte. Day skier traffic will enter the site into an underground parking structure that can accommodate up to 834 vehicles for multi-use and resident parking. An interior streetscape is also provided within the site, lined with commercial, retail and conference uses. This central space will capitalize on solar exposure year-round and can serve as a multi-use plaza for events, concerts and other resort activities.

3. Prospect at Mt. Crested Butte

This 400-acre site was the subject of a land exchange with the Forest Service in the late 1990s. It was subsequently annexed into the Town of Mt. Crested Butte and permitted as a Planned Unit Development. Prospect at Mt. Crested Butte PUD III (formally know as the East Trade Parcel) gained approval from the Town of Mt. Crested Butte in 2001. The current PUD III Guide was amended in 2006 to allow 45 affordable housing units within Prospect.

Development Areas A, C, D and the first phase of E have attained Final Approved by the Town of Mt. Crested Butte. Future phases include the 80-unit Ten Peaks Lodge at the crest of the Painter Boy and Gold Link lifts. Development Area B at the base of Gold Link allows mixed-use opportunities with a small base area development at the cross roads of the Main Mountain and North Village. Other services being considered for future phases in the Prospect at Mt. Crested Butte development include small retail, food service, Alpine Club, and Nordic and Alpine ski trails. Parking lots or a parking structure and mass transit shelters and bus access would be developed as necessary.

4. Promontory at Mt. Crested Butte

Promontory at Mt. Crested Butte Subdivision (formally known as The Reserve) originally gained Preliminary Plan approval from the Mt. Crested Butte Town Council in 1998 for 48 single-family residential lots – reduced from the original planned 59 single-family lots. Proposed zoning will change significantly from the existing zoning which currently allows Business District, High Density Multiple-Family and Low Density Multiple-Family up to approximately 360 units. Promontory contains approximately 95 acres located on the east flank of Snodgrass Mountain, north of the North Village PUD and west of Gothic Road, within the municipal boundaries of Mt. Crested Butte.

The Amended Preliminary Plan includes a reduction of proposed residential lots from 48 to 30 and reflects the conservation easement granted by CBMR Real Estate, LLC to Colorado Open Lands on the northern portion of the property. The conservation easement was required as part of the settlement agreement with High Country Citizens Alliance on their appeal of the ski area land exchange with the Forest Service for the East Trade parcel. The Reserve Conservation Easement consists of approximately 44.1 acres of land, with 9.1 acres of wetlands.

5. North Village PUD III

North Village is located in the northwest corner of the municipal boundary of Mt. Crested Butte in a south facing bowl between Gothic Road and Snodgrass Mountain. Promontory is located to the north of the property with the Gold Link and Prospect development to the east.

The land is presently owned by CBMR (which owns approximately 132 acres) and the Town of Mt. Crested Butte (which owns 17.8 acres). A Planned Unit Development (PUD III) was approved in 1985 for 1,800 condominium and hotel units as well as 200,000 square feet of commercial space.

North Village is envisioned as a sustainable community with the town of Mt. Crested Butte where locals and visitors alike can enjoy a traditional neighborhood atmosphere in the context of a world-class mountain resort. While this area will be a link between the Main Mountain and Snodgrass Mountain, it is a planned unit development that will move forward regardless of the future of Snodgrass Mountain and is not proposed as a traditional "base area development." Thus, incorporation of Snodgrass Mountain into CBMR's developed lift and trail network and development of North Village are independent of each other, and North Village will be developed and have a gondola connection to the Main Mountain whether or not Snodgrass Mountain is developed. As a result of its inherent location, however, it will provide basic skier service functions surrounding the transportation gondola loading station.

The overall maximum density for the proposed North Village will not exceed 1,100 residential dwelling units – a reduction of 700 units from the current approved plan. Residential dwelling units include both homes for permanent residents as well as units for resort guests and second homeowners, including a minimum of 15 percent deed restricted affordable housing, plus an additional 10 percent of "locals" housing. A maximum of 100,000 square feet of commercial space is proposed in North Village for restaurant, neighborhood oriented personal service, small retail, and office. These non-residential uses will be located within mixed-use buildings or in small single use buildings in close proximity to supporting residential use. An additional 12,000 square feet of civic uses, including the Town Hall and Post Office, community and recreational buildings, churches, or schools can be provided on designated civic sites and are not include in the maximum non-residential floor area allowed.

Residences will be distributed within a range of building types, including single-family detached houses, duplexes, row houses, and small multi-family structures. A variety of home sizes will be employed to address the needs of different households and no home shall exceed 2,800 square feet in size. The overall goal is to provide a diversity of housing options and encourage a wide range of composition, age and income to create a socially vibrant and interesting community in Mt. Crested Butte.

I. SKI AREA OPERATIONS

1. Ski Patrol and Snow Safety

CBMR will expand its ski patrol operations, as necessary, to account for the incorporation of Snodgrass Mountain into the developed lift and trail network. A ski patrol outpost will be located at the summit of Snodgrass Mountain in proximity to, or in conjunction with, restaurant facilities or the top terminal structure of Lift T. Snow safety activities will likewise be expanded to accommodate new terrain on Snodgrass Mountain.

Details of ski patrol operations and protocols, including snow safety, on Snodgrass Mountain are beyond the scope of this Resort MDP. These activities will be addressed in detail in subsequent Winter Operating Plans, including CBMR's Explosives Security Plans, which are submitted annually to the GMUG.

2. Snowmaking

CBMR currently provides manmade snow coverage on approximately 327 acres of terrain at the Main Mountain. In addition, approximately 50 acres of new snowmaking was approved for the Main Mountain in the 2008 Decision Notice. CBMR holds sufficient water rights to accommodate existing and future snowmaking (see Section H-Water Rights).

Under the upgrading plan, snowmaking coverage will occur on new trails on Snodgrass Mountain, covering approximately 102 acres (see Figure 6.2B and Table 6-22).

Table 6-22:
Upgraded Snowmaking Coverage[a]

Trail (#)	Trail Name	Acreage (acres)
47	Canaan	17.4
81	Prospect	14.0
30	Roller Coaster	2.3
40	Bubba's Way	3.2
35	Peanut Access	0.6
43	Meander	1.1
31	Lower Twister	21.5
5	Buckley	7.1
8	International	25.1
38	Lower Keystone	14.0
21	Upper Keystone	16.6
	Keystone Bottom	10.6
45	Lower Ruby Chief	15.2
68	Splains Gulch	5.4
41	Bushwaker	15.5
51	Treasury	14.7
48	Upper Treasury	4.0
56	Paradise Bowl	12.6
46	Forest Queen	6.2
34	Houston	18.3
50	Daisy	5.0
57	Resurrection	13.1
64	Cascade	19.3
36	Upper Smith Hill	5.2
36	Lower Smith Hill	2.3
11	Championship	9.7
69	Little Lizzie	6.1
7	North Star	2.9
23	Twister Connector	0.6
4	High Tide	4.4
	Peach Tree Connector	0.6
10	Silver Queen Connector	2.7
61	Red Lady Bend	2.2

Table 6-22:
Upgraded Snowmaking Coverage[a]

Trail (#)	Trail Name	Acreage (acres)
	R	0.3
	Q	1.1
	DC Super Pipe	23.3
2	Rustler's Gulch	0.3
19	Crystal	0.9
32	Mineral Point	0.6
9	Ruby Road	0.9
33	*Poverty Gulch*	*6.4*
10	*Silver Queen Road*	*1.4*
60	*Red Lady*	*7.5*
23	*Upper Twister*	*8.4*
20	*Jokerville*	*6.9*
19	*Crystal*	*7.8*
11	*Championship*	*12.7*
70	*Gunsight Pass*	*3.2*
S1	*New Run*	*1.5*
S2	*New Run*	*5.3*
S3	*New Run*	*0.9*
S4	*New Run*	*2.2*
S5	*New Run*	*5.9*
S8	*New Run*	*5.1*
T1	*New Run*	*18.2*
T7	*New Run*	*1.8*
T8	*New Run*	*5.4*
T9	*New Run*	*8.3*
T10	*New Run*	*0.6*
T11	*New Run*	*0.5*
U1	*New Run*	*1.8*
U5	*New Run*	*2.8*
U6	*New Run*	*18.7*
U7	*New Run*	*0.3*
U9	*New Run*	*6.2*
U15	*New Run*	*14.1*
U16	*New Run*	*1.1*
V1	*New Run*	*1.4*
TOTAL		**483**

[a] Existing, previously approved, and snowmaking contained in the upgrading plan combined.

Note: Italics denote trails that are previously approved or planned for snowmaking in the upgrading plan.

As discussed in the Water Rights section, water for the snowmaking system is planned to come from Crescent Lake. A pumphouse facility would likely be required in the immediate vicinity of the lake, to serve both the Main Mountain and Snodgrass Mountain. It is likely that an additional pump station would be required at some location on Snodgrass Mountain to enable sufficient water pressure to make snow at the upper western reaches of the mountain.

3. Grooming

Upon implementation of the upgrading plan, the skiable terrain at CBMR will total approximately 890 acres. Of this acreage, between 450 and 550 acres will be regularly groomed including the Beginner through Intermediate ski trails and selected Advanced/Expert terrain. Much of the developed terrain network on Snodgrass Mountain will be groomed on a regular basis. While no immediate change in grooming practices is scheduled for the Main Mountain, future considerations will be made in order to satisfy CBMR's goals as a mountain resort.

4. Ski School and Day Care

Ski school operations at the Main Mountain will not change under the upgrading plan.

Depending on the level of skier or rider, Snodgrass Mountain ski school activities will function in conjunction with, or completely isolated from, the Main Mountain. There will be a ski school desk located conveniently in North Village. First time skiers and riders who wish to be on Snodgrass Mountain terrain will be required to stage through North Village, as they will not be able to navigate riding the Red Lady Express and then descend green and blue terrain to the bottom of the Gold Link Express, where the interconnect gondola terminal will be located. Beginners will thus need to take a bus/shuttle from the Main Mountain to North Village, or they would be expected to be staying in accommodations in North Village.

5. Maintenance and Storage Facilities

Maintenance and operations for CBMR are located in a new building just north of the Gold Link area, well isolated from skiing and visitor activity. The facility can be accessed from Gothic Road. Snowcats have ready access to the developed ski trail network via the Gold Link Lift pod. Maintenance vehicles and snowcats will cross Gothic Road to access Snodgrass Mountain. The facility serves as the primary shop for maintaining the snow grooming equipment, other mountain utility vehicles, lifts and buildings. No additional maintenance facilities are currently envisioned to be required for Snodgrass Mountain. The new building location is actually closer to Snodgrass Mountain than the Main Mountain, so is in a convenient and central location to serve the whole resort. In addition, this facility will provide administrative storage space for Snodgrass Mountain.

6. Mountain Roads

Summer vehicular access to mountain facilities is necessary for off-season maintenance operations and fire protection. Existing mountain roads provide summer access for rubber tire vehicles to all Main Mountain buildings and lift terminal locations, except High Lift. CBMR intends to maintain use of the existing Snodgrass Road for construction of lifts, trails, snowmaking and facilities, as well as for on-going maintenance and fire protection (see Figure 6.3). While this road is in need of repair for unmaintained drainage and spot widening, no major rerouting/realignments or widening will be required. Consistent with Snodgrass Mountain's status within an Inventoried Roadless Area (the

Gothic IRA), this existing road will serve as access for construction and maintenance to the top terminals of lifts T, U, and W with no necessary spurs. Access will be from the existing Snodgrass Road to Lift S and the bottom terminal of Lift U, for construction and maintenance, along constructed skiway platforms, which will be used as ski runs during the ski season. Because of the remote location of the planned Lift T pod on the western flank of Snodgrass Mountain, a short access route is planned between Washington Gulch Road and the bottom terminal of Lift T (see Figure 6.3). This will accommodate construction, maintenance, and emergency access. The existing Snodgrass Road, the ski runs used for summer maintenance, and the new access spur off the Washington Gulch Road are all shown on Figure 6.3.

J. WATER RIGHTS

CBMR holds rights to 11 cubic feet per second (cfs) flow from the East River, 6 cfs are used for snowmaking on the Main Mountain, and 5 cfs is dedicated to use on Snodgrass Mountain, which will provide sufficient water for the planned snowmaking coverage. The existing Snowflake Control Building will continue to be used as the snowmaking control facility on the Main Mountain. New snowmaking infrastructure will be required for snowmaking on Snodgrass Mountain. CBMR also holds rights to 0.155 cfs for domestic and commercial uses, 0.10 cfs on the Main Mountain, and 0.055 cfs for use on Snodgrass Mountain. These rights would accommodate new and upgraded guest facilities.

In 2006 CBMR applied for Storage Water Rights to 160 acre feet of conditional water rights to allow them to fill and refill Crescent Lake for use during snowmaking. The goal is to expand existing and future snowmaking system capacities for both mountains in order to complete trail coverage as quickly as possible during the snowmaking season (November to January). Water storage would increase snowmaking efficiency, maximizing snowmaking during ideal environmental conditions to improving snow coverage on higher traffic areas and during early season and low snow years. CBMR has not received approval for Crescent Lake water storage.

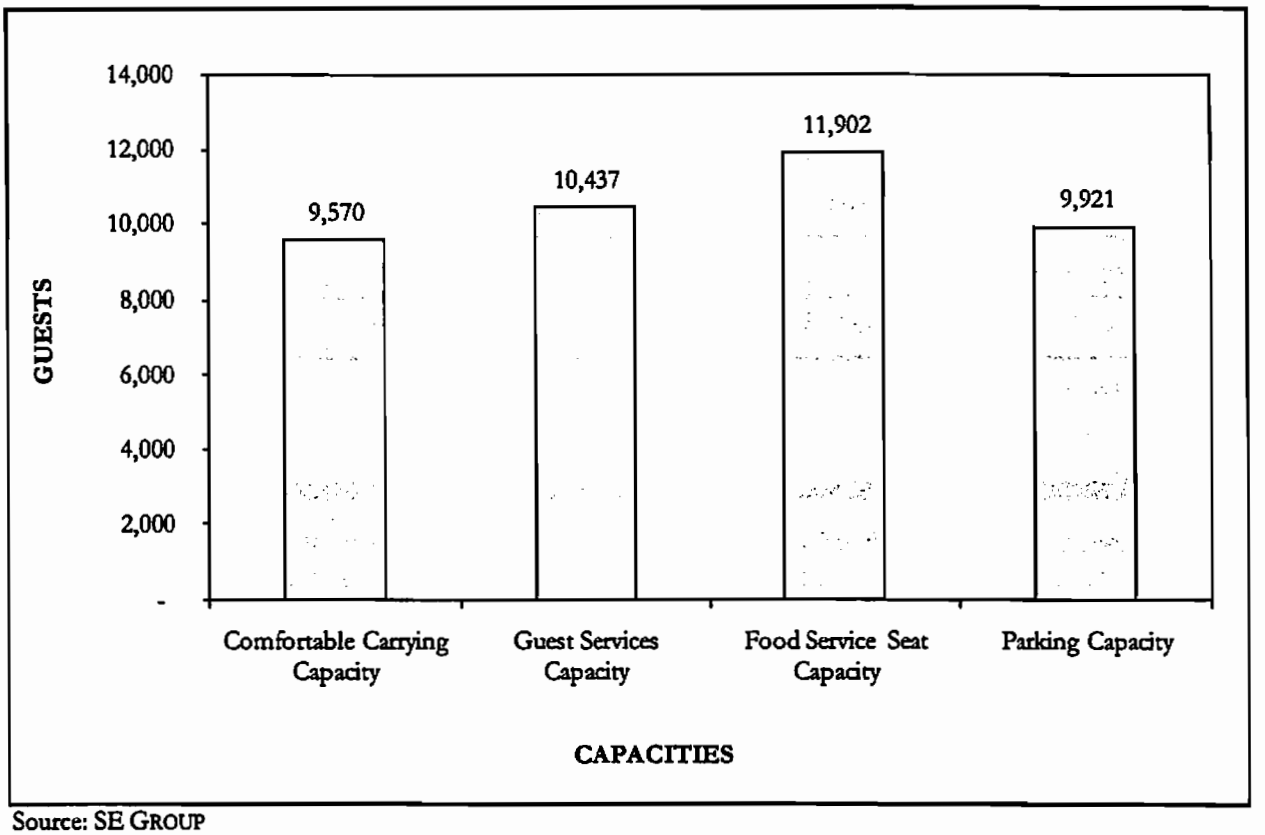
K. UTILITIES

Utilities including water, sewer, power, communications, and fuel storage on Snodgrass Mountain will be installed commensurate with projects on Snodgrass Mountain. Using the industry standard of 10 gallons per person per day of demand (calculated for peak day demand) for both water and sewer, a capacity of approximately 34,000 gallons per day will be required for the entire Snodgrass Mountain area. Of that total, approximately 21,000 gallons per day will be required for the on mountain facilities, with the remainder being allocated to the skier services and restaurants in the North Village area. Power and communications lines will be installed in conjunction with the lift, trail, and facilities construction. It is anticipated that all lifts will be top-drive (with the possible exception of Lift S), so power location requirements will be conveniently located off the existing Snodgrass Road. Fuel storage is anticipated to be accommodated at the existing maintenance facility.

L. BALANCE OF FACILITIES

The overall balance of the existing ski area is evaluated by calculating the capacities of the resort's various facilities and comparing those facilities to the resort's CCC. The discussed capacities are shown in the following chart.

Chart 6-4:
Resort Balance – Upgrading Plan



Source: SE GROUP

A review of the balance of facilities and the guest capacities indicates that the upgrading plan will bring the skier service facilities into balance with the mountain capacity. The skier service capacities are generally balanced to a number that includes the Alpine CCC plus additional non-skiing guests. The high food service seating capacity is a result of including all the outdoor seats included in the upgrading plan, which aren't always used during periods of inclement weather. In fact, the upgrading plan includes sufficient indoor seats to nearly meet the demand for seating without counting any outdoor seats. There are only about 530 seats less than the recommended amount, a number which is closely matched by the number of available seats in existing privately-owned restaurants in the base area. The implication of this is that there should be sufficient seating capacity for all resorts guests even during periods of inclement weather. The parking capacity is slightly higher than the mountain capacity; this number reflects a scenario where the allowed additional 200 parking spaces in the Prospect at Mt. Crested Butte development would be built out. As discussed, these will only be built as necessary.

M. PROJECTED ANNUAL SKIER VISITATION AT CBMR

Table 6-23 includes *projected* annual skier visitation across an eight-year planning horizon, broken down by destination, passholder, and comp skiers. It also projects the average length of stay and number of resort guests. These are projections only, and are subject to many variables including economic and climatic conditions.

Table 6-23:
Projected Growth In Visitation With Implementation of the Resort MDP

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Destination Guest Skier Days	158,498	172,982	190,280	211,211	236,857	285,000	340,000	358,000
Pass & Comp Skier Days	206,502	207,019	213,775	220,761	228,092	232,000	235,000	242,000
Projected Annual Skier Visits	365,000	380,001	404,055	431,972	464,949	517,000	575,000	600,000
Average Length of Stay	3.4	3.6	3.8	4.1	4.2	4.8	5.0	5.0
Resort Guests	46,617	48,051	50,074	51,515	56,395	59,375	68,000	71,600

Source: CBMR, 2009

N. Additional Recreational Opportunities and Activities at Snodgrass Mountain

As discussed in Chapter 4, CBMR offers a variety of organized and dispersed summer recreational activities on the Main Mountain including lift supported mountain biking and hiking, disk golf, nature viewing, and public access to the summit of Crested Butte Mountain. This upgrading plan does not include any additional recreation activities or opportunities at the Main Mountain, beyond what has already been approved in the 2005 MIP or discussed previously in this Chapter. Current public uses of Snodgrass Mountain are limited to dispersed recreational activities such as hiking, mountain biking, backcountry skiing, and snowshoeing. Upgraded alternate winter and non-winter activities are illustrated for the Main Mountain and Snodgrass Mountain in Figures 6.4A and 6.4B, respectively.

As depicted on Figure 6.0B, a backcounty access trail is planned from the Gothic Road trailhead to a new access point on the northern boundary of the Snodgrass Mountain SUP area. This will accommodate skiers and riders wishing to use the Glory Hole area on the northern flank of Snodgrass Mountain.

With the exception of the North Village gondola connection to the Mid-Mountain restaurant, there are no plans to operate lifts during the summertime on Snodgrass Mountain. As North Village is developed in the long-term future, it is envisioned that having an on-mountain restaurant with summer lift access will provide an excellent amenity for the public to enjoy the amazing views looking back to Mt. Crested Butte. Beyond summer sightseeing and on-mountain dining, this will provide an on-mountain venue for hosting weddings and events.

Summer trails and activities on Snodgrass Mountain will offer an additional experience and variety for visitors and residents. Additional hiking and biking trails may be planned within the SUP area, but unlike the Main Mountain will retain a secluded, passive character which will focus on light impacts such as cross-country single track mountain biking, segregated nature hiking trails and horseback riding. It is conceivable that bikes will be allowed to load on the North Village gondola where guests can enjoy lunch on the mountain and ride on the existing and proposed bike trails. However, this will only be possible if there is an egress trail that is appropriate for Beginner bikers.

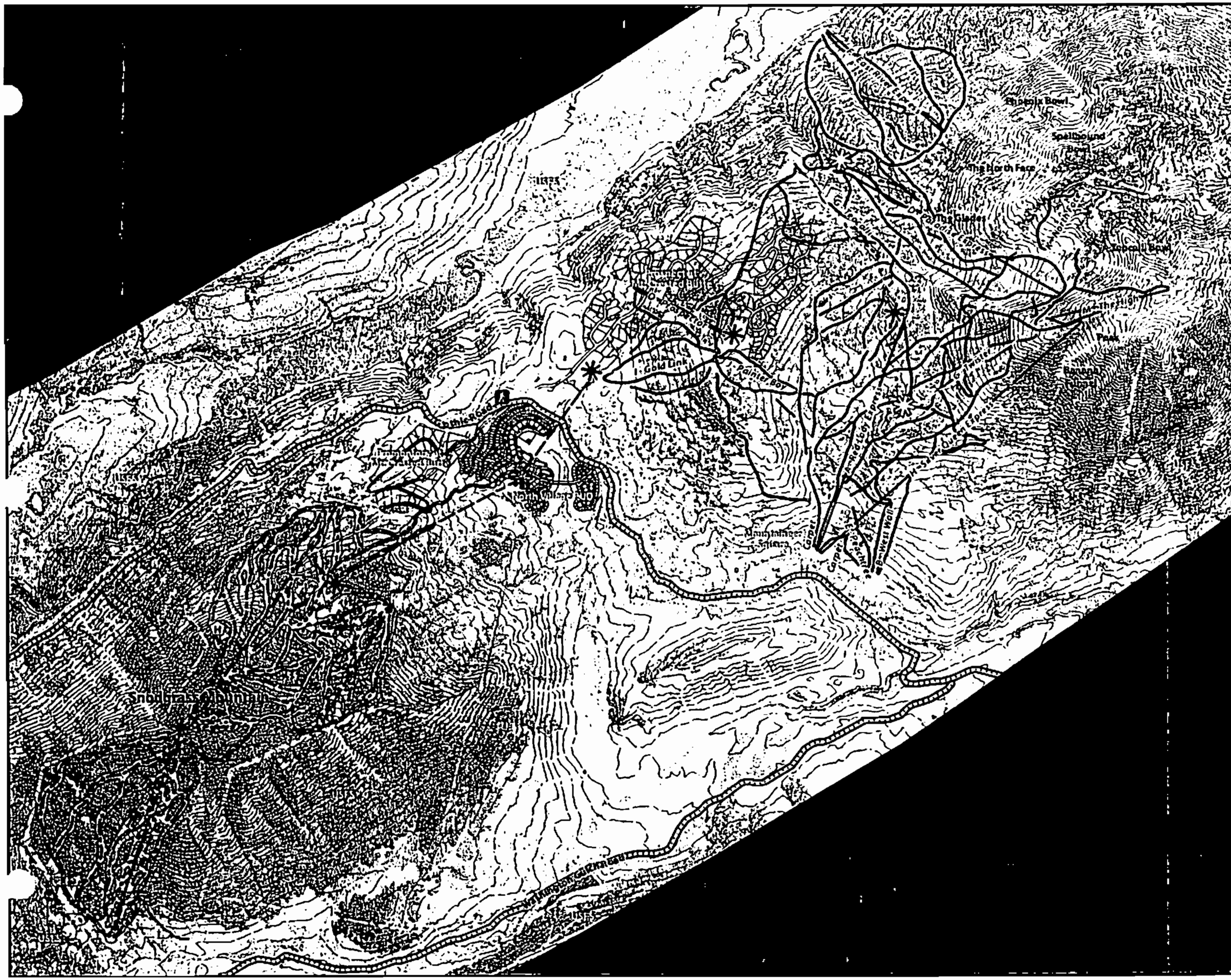
In short, the Snodgrass Mountain lifts will not operate during the summer, and the bulk of CBMR's summer activities (including lift service) will remain concentrated at the Main Mountain.

O. Concessionaires and Outfitters

As noted in Chapter 4, CBMR has several concessionaires that work on a contract basis within the SUP area, including: Case Photography, Fantasy Ranch (horseback rides), and the Adaptive Sports Program. Crested Butte Mountain Guides operates within CBMR's SUP area under a Forest Service-issued Outfitter and Guide Permit, offering mountain climbing programs in the summer season on the peak of Crested Mountain and backcountry skiing and avalanche training courses on the Snodgrass Mountain. The extent to which the upgrading plan for Snodgrass Mountain will affect concessionaires and outfitters/guides within the SUP area is not known.

P. Resort Architectural Character

It is the intent of CBMR to carry its architectural motif forward to future ski area development projects. All on-mountain structures (on NFS lands) will be designed consistent with the Rocky Mountain Province discussed in the Forest Service's Built Environment Image Guide (BEIG). By doing so, CBMR will maintain a consistent architectural character that will be in line with the goals of the Forest Service in the management of public lands.



CRESTED BUTTE
MOUNTAIN RESORT
COLORADO

MASTER DEVELOPMENT PLAN
FIGURE 6.0
Overall CBMR Upgrading Plan

LEGEND

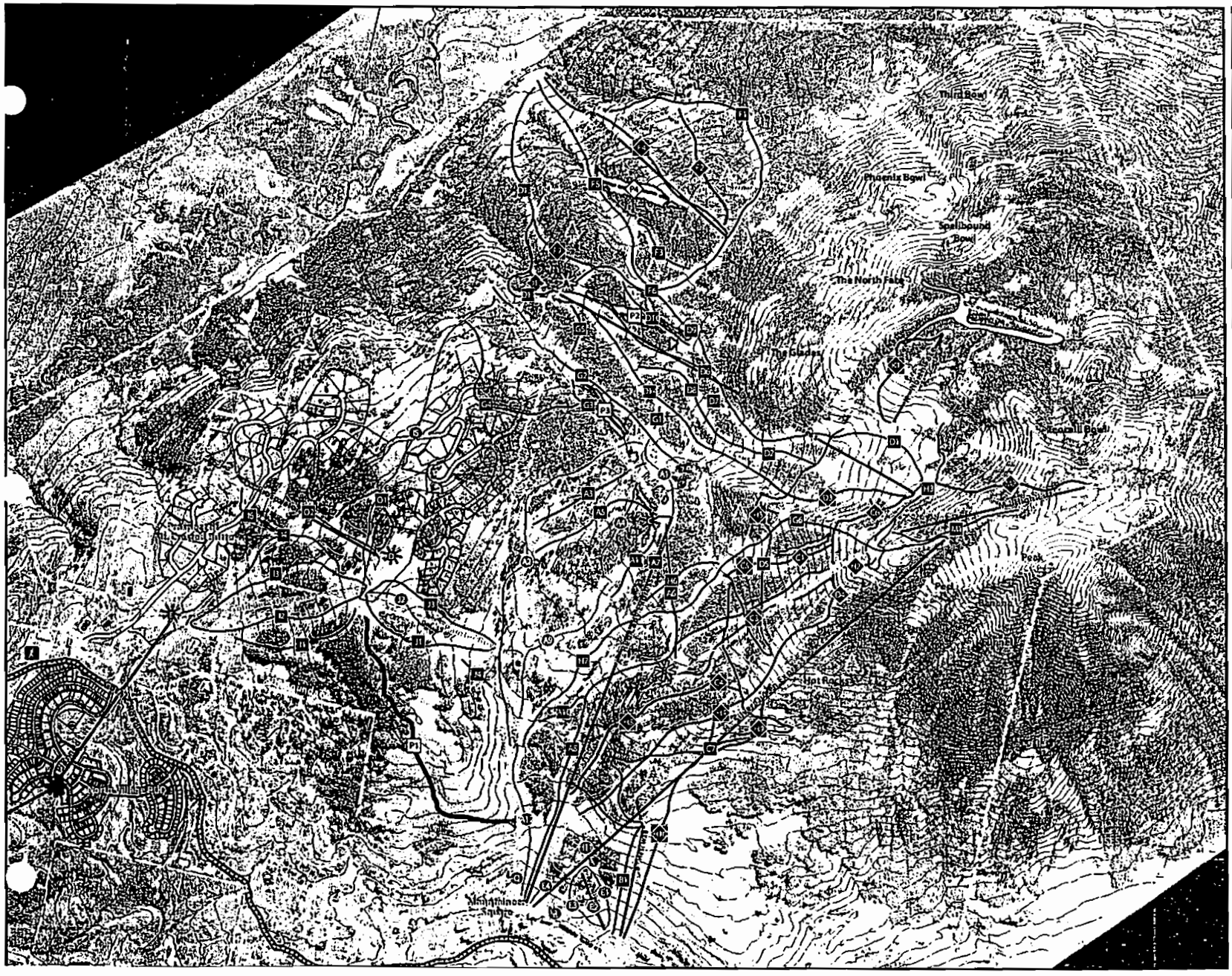
- USFS Special Use Permit Boundary
- Property Boundary
- Existing Major Roads
- Planned Lift
- Approved Lift
- Approved Lift Upgrade / Realignment
- Existing Lift
- Existing Trail Centerlines
- Planned Trail Centerlines
- Trail Edges
- Tree Skiing
- Planned Mountaineer Square/ Mountaineer Square North Buildings
- Geologic Hazard Avoidence Areas
- Planned Backcountry Access Point
- Gothic Trailhead
- North Village Gondola Mid-Station

GUEST SERVICES

- Existing Guest Services
- Planned Guest Services

DATE: MAY 2009
0 1,000 2,000 4,000

PRODUCED BY: SE GROUP



CRESTED BUTTE
MOUNTAIN RESORT
COLORADO

MASTER DEVELOPMENT PLAN
FIGURE 6.0 A
Main Mountain Upgrade Plan

LEGEND

- USFS Special Use Permit Boundary
- Property Boundary
- Existing Major Roads
- Planned Lift
- Approved Lift
- Approved Lift Upgrade / Realignment
- Existing Lift
- Approved Intermediate Trail Centerlines
- Approved Expert Trail Centerlines
- Existing Beginner Trail Centerlines
- Existing Intermediate Trail Centerlines
- Existing Advanced Trail Centerlines
- Existing Expert Trail Centerlines
- Approved Trail Projects
- Tree Skiing
- Planned Mountaineer Square/ Mountaineer Square North Buildings
- Gothic Trailhead
- North Village Gondola Mid-Station

GUEST SERVICES

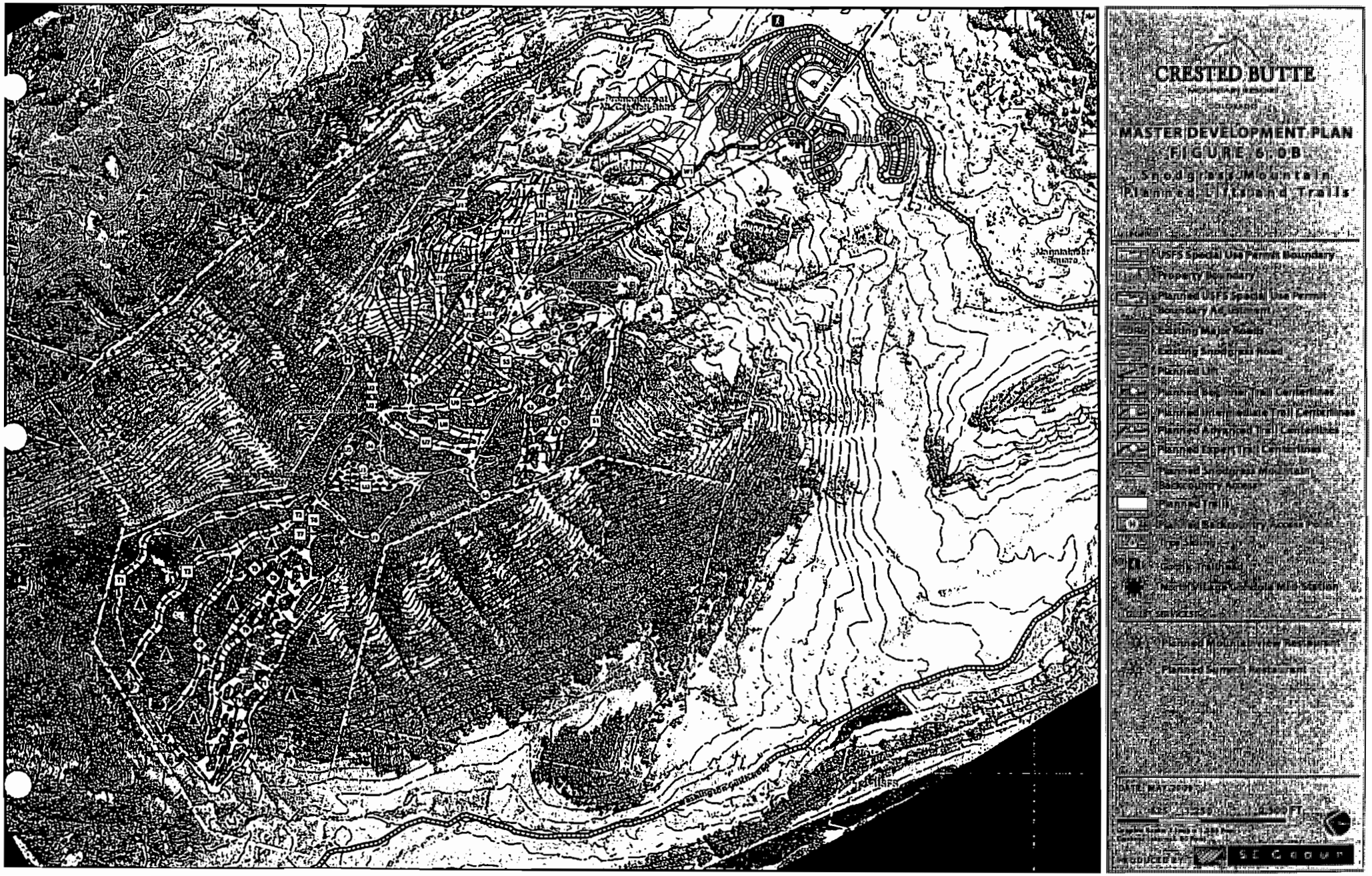
- Existing Paradise Warming House
- Approved Ice Bar and Restaurant Expansion
- Approved Red Lady Restaurant
- Planned Prospector Lodge
- Planned Prospector Junction

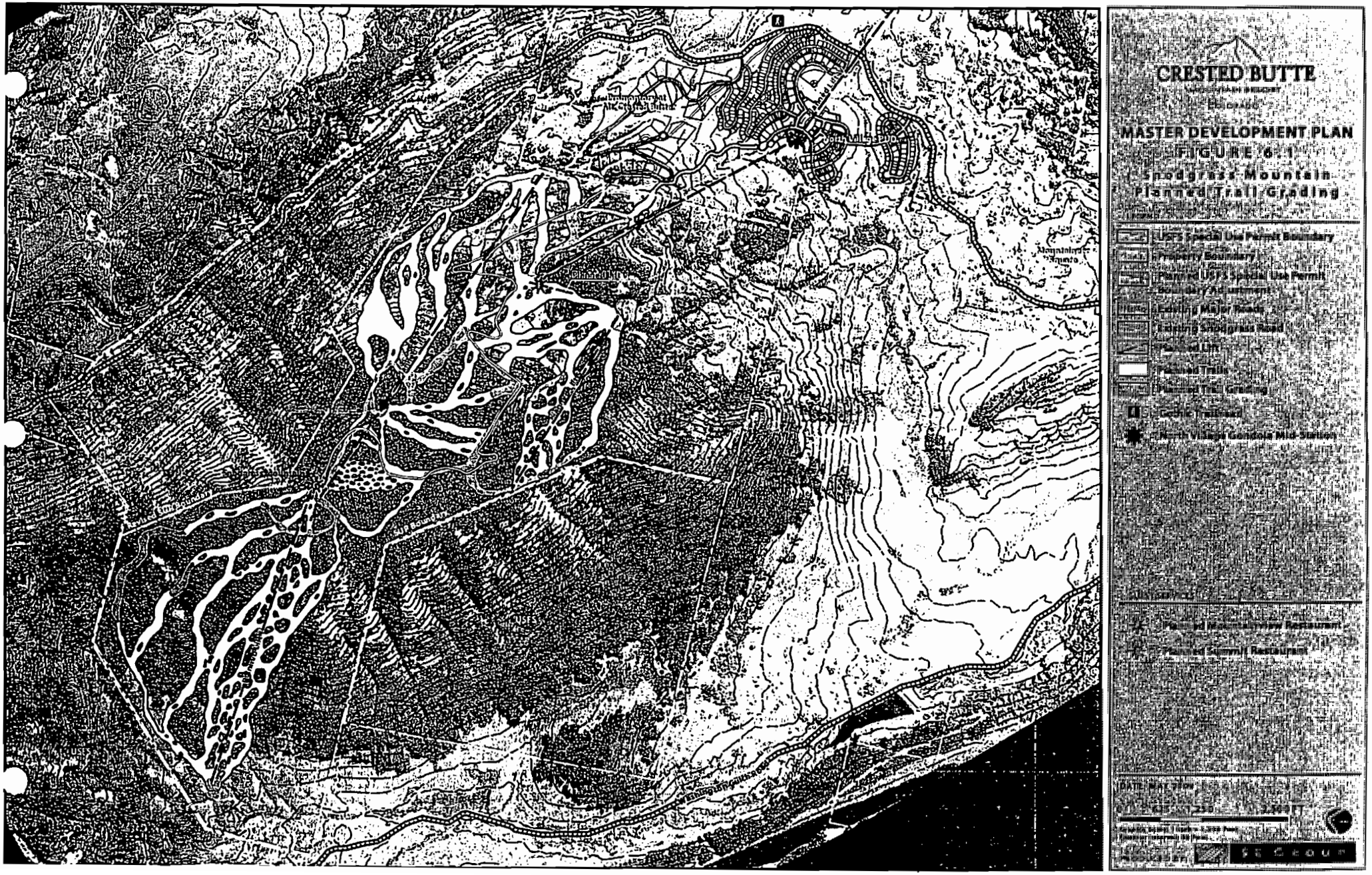
DATE: MAY 2009

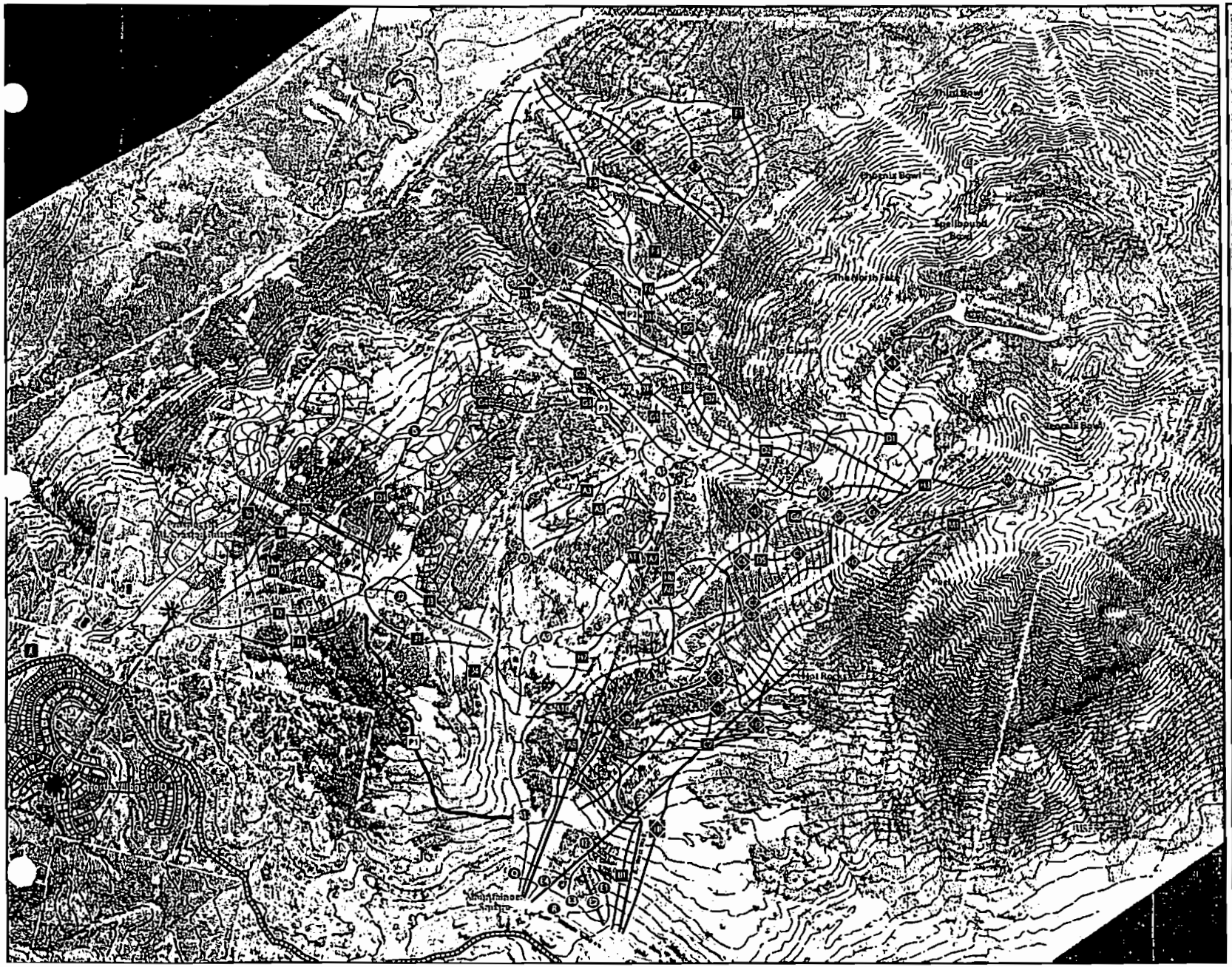
0 625 1,250 2,500 FT

Graphic Scale: 1 Inch = 1250 Feet
Contour Interval: 80 Feet

PRODUCED BY: SE GROUP


CRESTED BUTTE
MASTER DEVELOPMENT PLAN
FIGURE 6.0B
Snodgrass Mountain
Planned Lifts and Trails
USFS Special Use Permit Boundary
Property Boundary
Planned USFS Special Use Permit Boundary Adjustment
Existing Major Roads
Existing Snodgrass Road
Planned Lift
Planned Easy (Green) Trail Centerlines
Planned Intermediate (Blue) Trail Centerlines
Planned Advanced Trail Centerlines
Planned Expert (Black) Trail Centerlines
Planned Snodgrass Mountain Backcountry Access
Planned Trailhead
Planned Backcountry Access Point
Planned Mountaintop Restaurant
Planned Summit Restaurant
SE Group


CRESTED BUTTE
MASTER DEVELOPMENT PLAN
FIGURE 6.1
Snodgrass Mountain
Planned Trail Grading
USFS Special Use Permit Boundary
Property Boundary
Planned USFS Special Use Permit
Boundary Adjustment
Existing Major Roads
Planned Snodgrass Road
Planned Lift
Planned Trails
Planned Trail Grading
Gothic Trailhead
North Village Gondola Mid-Station
Planned Mountaintop Restaurant
Planned Summit Restaurant



CRESTED BUTTE
MOUNTAIN RESORT
COLORADO

MASTER DEVELOPMENT PLAN

FIGURE 6-2A

Main Mountain Snowmaking Upgrades

LEGEND

- USFS Special Use Permit Boundary
- Property Boundary
- Existing Major Roads
- Existing Lifts
- Approved Lift Upgrade / Realignment
- Approved Lift
- Planned Lift
- Approved Intermediate Trail Centerlines
- Approved Expert Trail Centerlines
- Existing Beginner Trail Centerlines
- Existing Intermediate Trail Centerlines
- Existing Advanced Trail Centerlines
- Existing Expert Trail Centerlines
- Approved Trail Projects
- Existing Snowmaking
- Approved Snowmaking
- Planned Mountaineer Square/ North Building
- Gothic Trailhead
- North Village Gondola Mid-Station

GUEST SERVICES

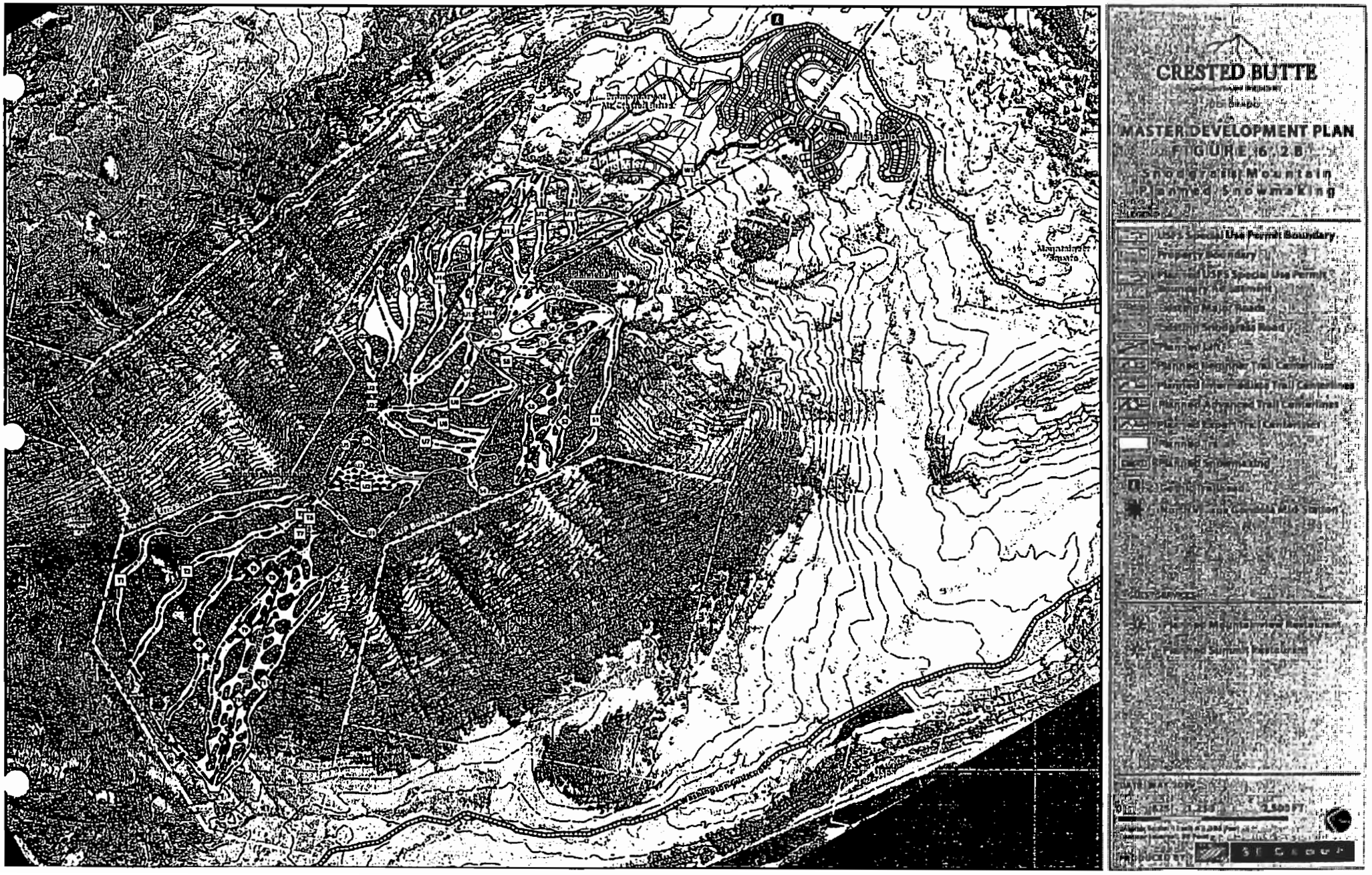
- Existing Paradise Warming House
- Approved Ice Bar and Restaurant Expansion
- Approved Red Lady Restaurant
- Planned Prospect Lodge
- Planned Prospect Junction

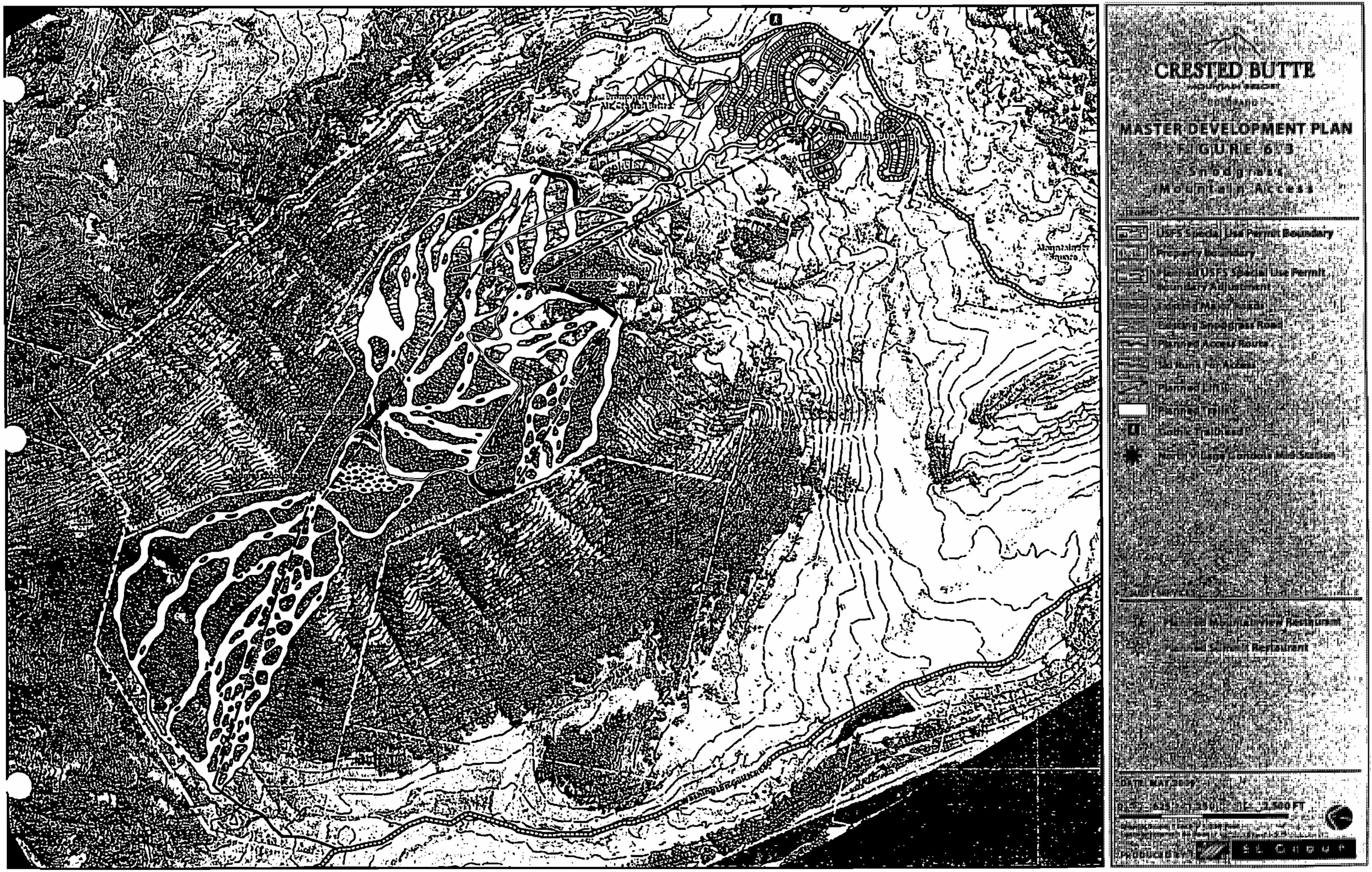
DATE: MAY 2009

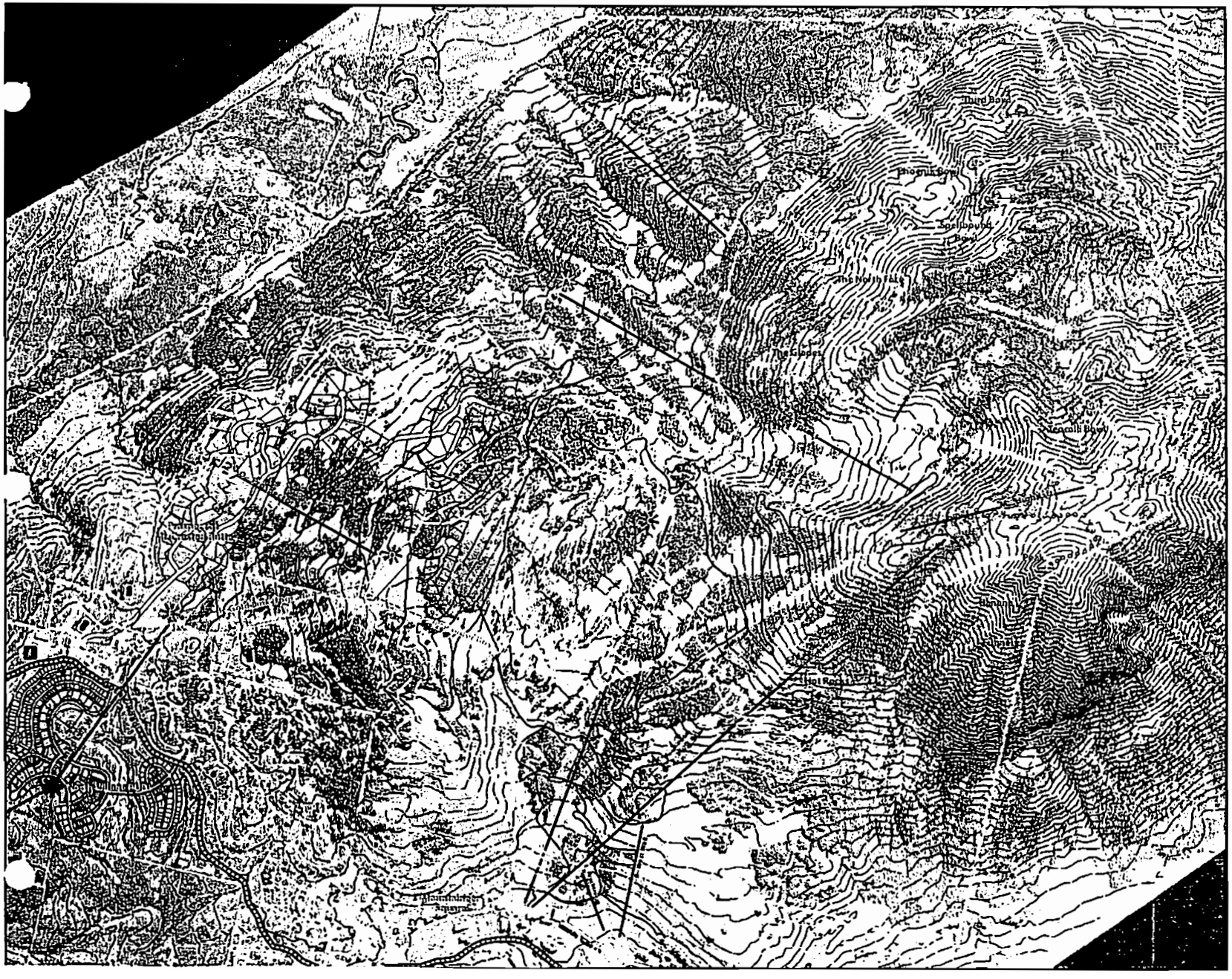
0 625 1250 2,500 FT

Graphic Scale 1 inch = 1,250 Feet
Contour Interval = 50 Feet

PRODUCED BY: SE GROUP


CRESTED BUTTE
MASTER DEVELOPMENT PLAN
FIGURE 6.2B
Snodgrass Mountain
Planned Snowmaking


CRESTED BUTTE
MASTER DEVELOPMENT PLAN
FIGURE 6.3
Snodgrass Mountain Access
USFS Special Use Permit Boundary
Property Boundary
Planned USFS Special Use Permit Boundary Adjustment
Existing Snodgrass Road
Planned Access Route
Planned Lifts
Planned Trails



CRESTED BUTTE

MOUNTAIN RESORT

COLORADO

MASTER DEVELOPMENT PLAN

FIGURE 6.4A

Main Mountain Alternate Winter and Non-Winter Activities

LEGEND

- USFS Special Use Permit Boundary
- Property Boundary
- Existing Major Roads
- Existing Lifts
- Existing Main Mountain Multi-Use Trails
- Existing Main Mountain Hiking Only Trails
- Planned Lift
- Approved Lift
- Approved Lift Upgrade / Realignment
- Approved Multi-Use Trails
- Approved Nordic Trails
- Planned Mountaineer Square/ North Buildings
- Gothic Trailhead
- North Village Gondola Mid-Station

GUEST SERVICES

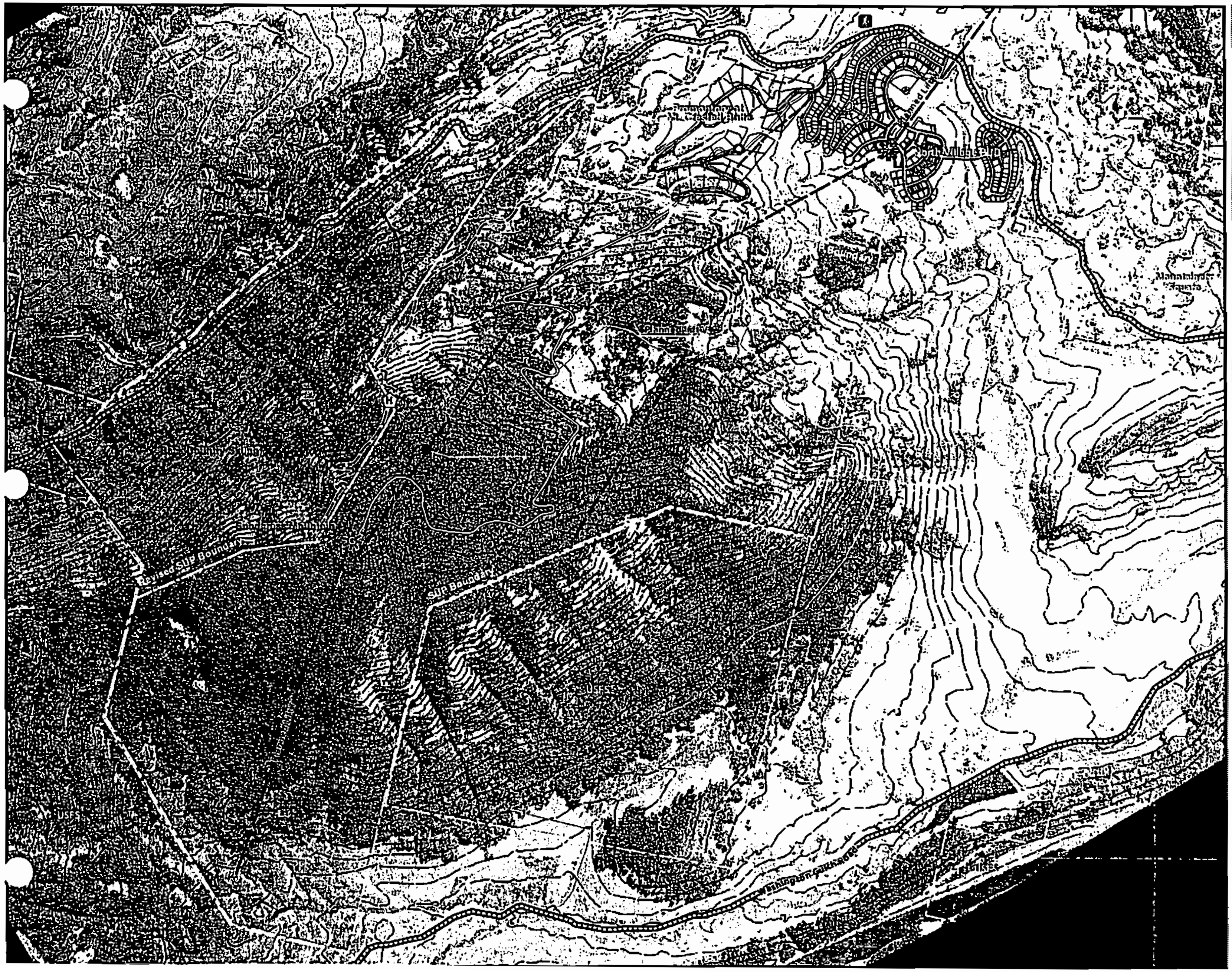
- Existing Paradise Warming House
- Approved Ice Bar and Restaurant Expansion
- Approved Red Lady Restaurant
- Planned Prospector Lodge
- Planned Prospector Junction

DATE: MAY 2009

0 625 1,250 2,500 FT

Graphic Scale 1 Inch = 1,250 Feet
Contour Interval: 50 Feet

PRODUCED BY: SE GROUP



CRESTED BUTTE

MASTER DEVELOPMENT PLAN

FIGURE 6-4B

Snodgrass Mountain
Planned Alternate Winter and Non-Winter Activities

Legend

USFS Special Use Permit Boundary
Property Boundary
Planned USFS Special Use Permit Boundary Adjustment
Proposed Lift

CRESTED BUTTE

MOUNTAIN RESORT

2009 RESORT MASTER DEVELOPMENT PLAN

APPENDICES

CRESTED BUTTE

MOUNTAIN RESORT

2009 Resort Master Development Plan

Appendix A: Architectural Themes

EXTERIOR ARTICTECTUAL SENSORY MAPPING

ROOF LINES

TEXTURE

COLOR

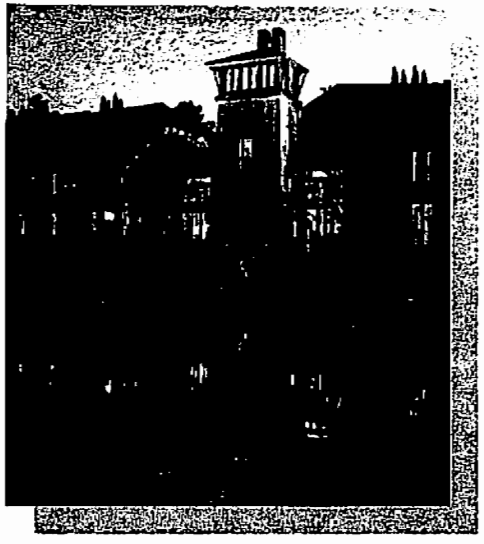
DETAILS

HIGH PERFORMING ROOF LINES

Varied roof lines

Different shapes

Different heights

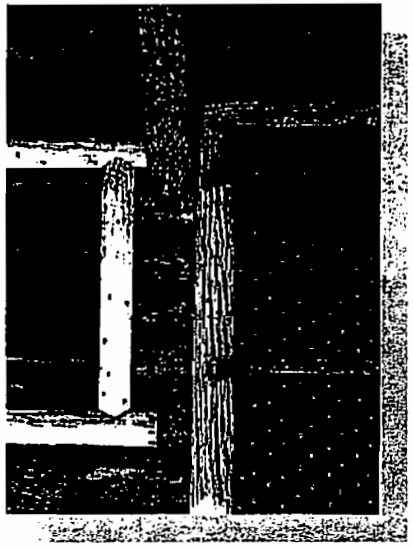


Roof line helped give an inviting scale at the three story level

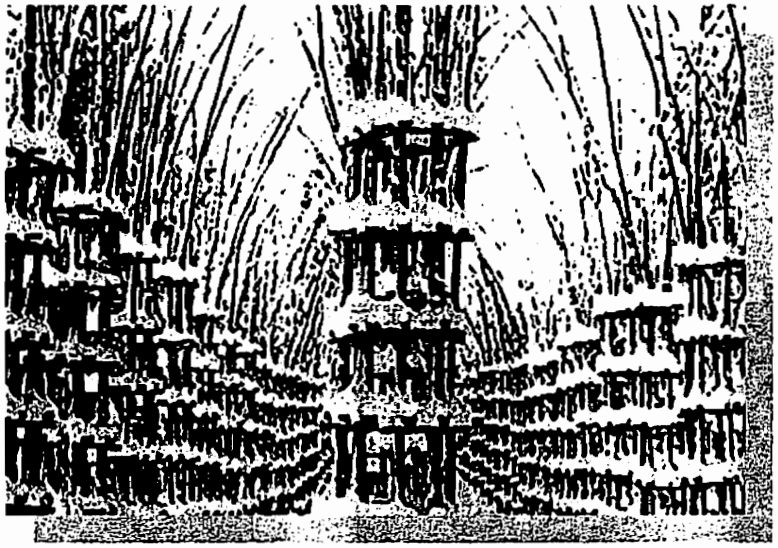
Multi-level roof appealing

Weathering is good but multi-colored roof rust would be even better

HIGH PERFORMING TEXTURE

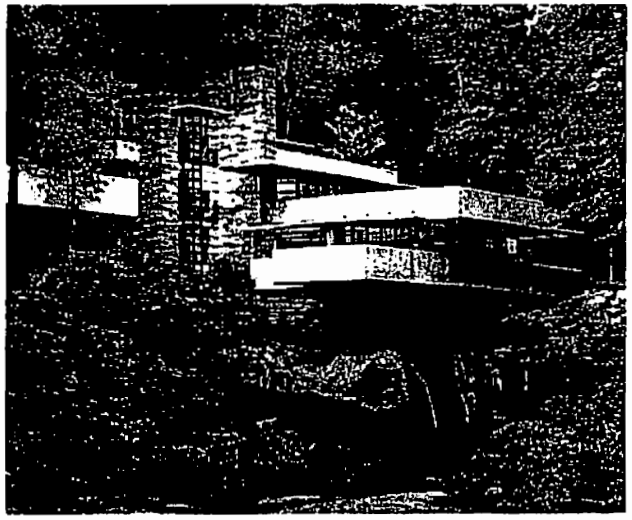


Well finished



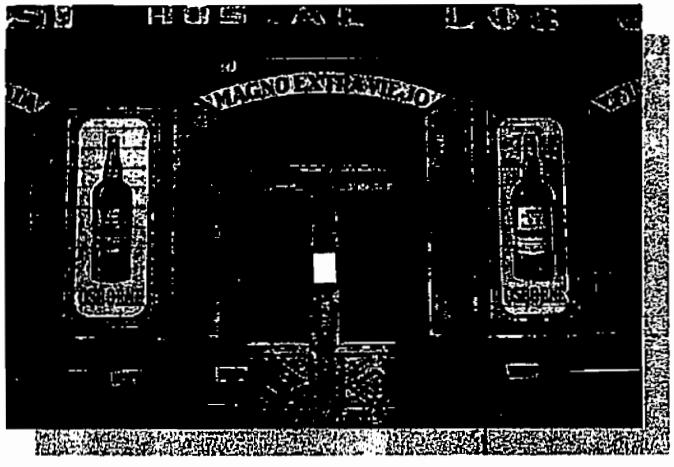
Excellent use of metal and natural elements

Texture changes with weather



Beautiful marriage of architecture, texture, color with the environment

HIGH PERFORMING COLOR

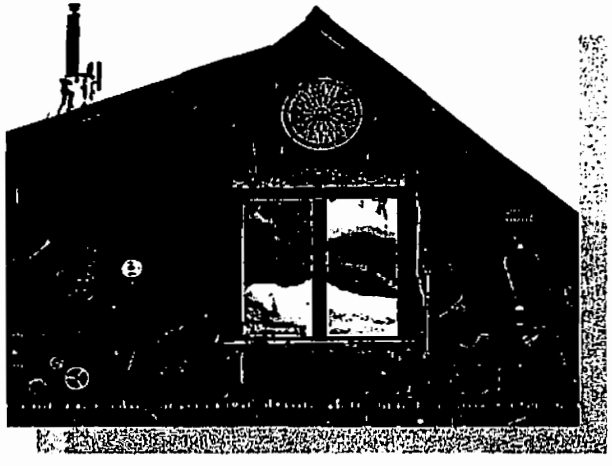


Exhilarating due to contrast

Modulated color

Color adds character

Rich in texture and appealing dimensional variety in authentic artifacts



Very different colors

Natural

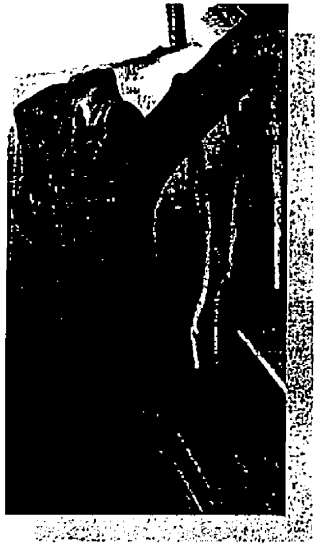
Weathered look

Muted colors

Gold tones

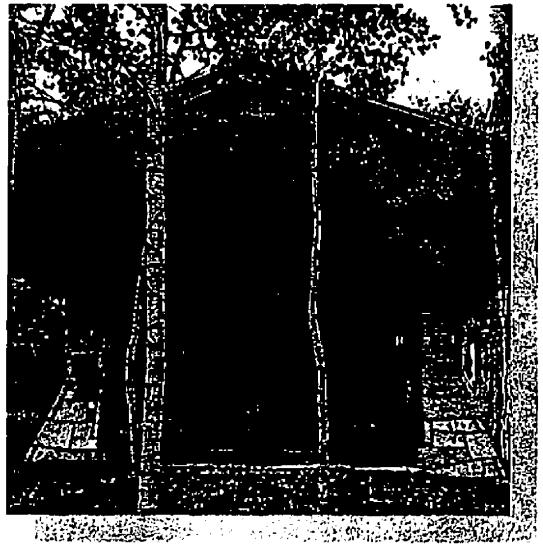
Modulated color

HIGH PERFORMING DETAILS



Connects organic with man made

Exterior element indoors



Connects to nature

Expressive

Connection of organic and man made

Different

Free form

Genuine

Hand made

Expressive

Expressive

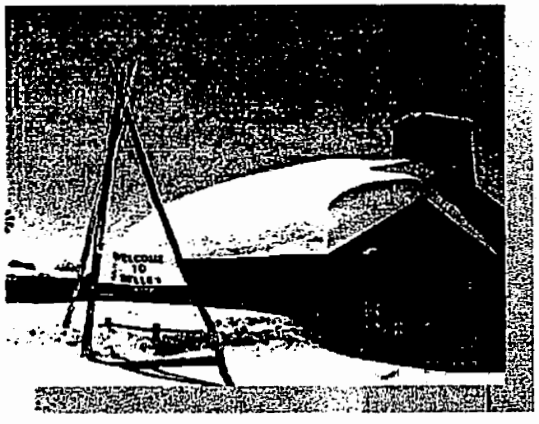
Beams

Different size stones

All connected

HIGH PERFORMING COMPETITIVE ARCHITECTURE

TEAM B



Authentically historic

Integrated stone

Good integration with nature

Interesting

architectural scale

and texture

Nice variety in roof lines, color and scale

Good use of contrasting colors

Nice use of color, glass, metal

Natural look and feel

CRESTED BUTTE

MOUNTAIN RESORT

2009 Resort Master Development Plan

Appendix B: Upper Gunnison Valley Transportation Plan - 2008

Upper Gunnison Valley Transportation Plan

2008 Update

December 2008

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Table of Contents

Appendix Items

Table of Contents

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Introduction

This 2008 Update is a targeted update to the Upper Gunnison Valley Transportation Plan, originally completed in 1999. As a targeted update, this effort supplements (but does not replace) the original Plan by addressing changed conditions and objectives affecting the Valley's transportation system, particularly key issues raised by the community and stakeholders.

As with the original Plan, this process was a collaborative effort involving community residents, stakeholders, staff, and elected officials. The project was managed by the Gunnison Valley Rural Transportation Authority (GVRTA), with funding and other support provided by Gunnison County, the City of Gunnison, and the towns of Crested Butte and Mt. Crested Butte.

Since 1999, the Valley has made great strides in implementing the original Plan, with the most tangible accomplishment being the formation of the GVRTA and its funding and implementation of regional transit service year-round between Gunnison and Mt. Crested Butte. Conversely, some potential opportunities, such as gondola service, have likely been lost. At the same time, current macro economic conditions, such as record oil and fuel prices and reduced consumer spending and sales tax revenue collections, are affecting local transportation in ways not envisioned in 1999.

It is within this context that this 2008 Update has been prepared. With a limited timeframe and budget compared to the original Plan, the objective of this process was to address the highest-priority issues identified by the community. Other issues that could not be addressed in this process remain in the original Plan. Accordingly, this 2008 Update incorporates the 1999 Plan with the intent that both documents together comprise the Upper Gunnison Valley Transportation Plan.

Community Engagement

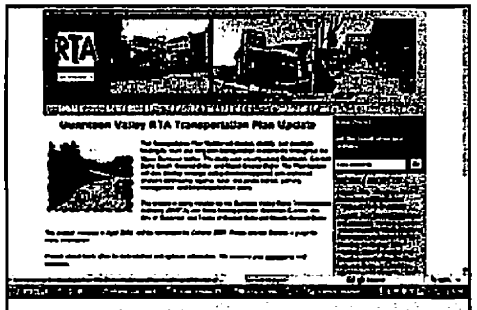
Collaboratively engaging the local community was the most important component of this effort. While the limited planning process timeframe and project budget somewhat constrained community outreach, every effort was made to reach out to the community, stakeholder, staff, and elected officials. The planning process was specifically structured so that community engagement guided the technical analysis. In this way, ultimate ownership of the planning process and results resided with the community. The following tools, efforts, and strategies were used to engage local residents, stakeholders, staff, and elected officials in identifying priority issues and developing and reviewing potential solutions:

- Meetings: A total of 10 meetings were held between April and October with the community, stakeholders, municipal staff, and the GVRTA Board. Summaries of each meeting are located in Appendix A. Meetings were held at each end of the Valley (in Gunnison and Crested Butte) for convenience and to tailor the discussion of issues unique to each area. In addition, numerous one-on-one conversations (meetings or phone calls) were held with residents, stakeholders, staff, and others who could not attend the organized meetings.

- Stakeholders and Staff: A key part of the community engagement process was reaching out to local government staff in each jurisdiction as well as stakeholders representing local transportation providers, lodgers/hoteliers, Crested Butte Mountain Resort, business interest, neighborhood associations, and other business and community interests. As noted above, meeting were held at key points in the process at each end of the Valley to identify key issues and discuss potential solutions.

- Project Website: The project website, www.RTAPlan.com, was instrumental in disseminating information and project updates, explaining the project's purpose and objectives, and fostering two-way communication between the project consultant and the local community to informally exchange ideas and information throughout the process. A comment form facilitated valuable input from those who could not attend meetings or were away from the area. A mailing list populated by GVRTA's contacts list and by those joining the list via the website also facilitated project communication.

Public Workshop in Mt. Crested Butte



Project Website - www.RTAplan.com

By serving as a repository of information and a medium for communication, the website also promoted transparency and openness in the planning process.

- Media Outreach: GVRTA staff worked with local media throughout the process to promote the meetings and planning process. This included earned media and advertisements, particularly in the Gunnison Country Times and the Crested Butte News, as well as online discussions and other strategies. The project website also featured a voluntary mailing list which was used to provide direct project notifications and updates, as was the GVRTA's mailing list.

- Online Survey: An online survey (using SurveyMonkey.com) was conducted to seek input regarding priority issues and potential solutions. The survey results are also included in Appendix A. While not scientific, the survey was invaluable in gauging general community opinions and the level of support (or not) for potential transportation investments and strategies. Survey results were also examined by city/town of residence, allowing for a deeper understanding of how issues, priorities, and preferences are both similar and change by geographic location.

As noted previously, the community engagement process was instrumental to identify priority issues and develop and review potential solutions. More specifically, the community was asked to identify transportation successes in the Valley since the original Plan was adopted as well as what challenges currently prevent further progress, and which of a range of potential solutions would be most feasible and appropriate in addressing the challenges.

The community indicated that the greatest transportation success was the formation of the GVRTA and implementation of regional bus service. Having regional bus service has improved mobility and safety in traversing Highway 135 as well as strengthened regional planning and cooperation.

In terms of challenges, it is important to note that there are technically-oriented challenges as well as community-oriented ones. Some of the former include issues relating to parking, transit funding, service and operations, and growth/development impacts. Regarding community-oriented challenges, the most significant issue raised, and one of the major impetuses for this Plan Update, is how to provide better transit service to CB South and adjacent neighborhoods.

The community engagement process identified a multitude of major and minor issues of interest and concern. Recognizing that this targeted Plan Update could not address every issue raised - particularly concerns about development construction and potential mining-related traffic - the following priority issues were identified for further analysis: As shown in Table 1.1, major issues are sorted by

Table 1.1

Major Transportation-Related Community Issues

Location	Roadway	Transit	Parking	Bike/Pedestrian	Growth & Development
Gunnison	Potential Bypass	Feasibility of local bus circulator	Downtown parking management	Pedestrian connections, safety enhancements	Traffic impacts of new development
CB South	Cement Creek intersection (safety, alignment)	Increase transit service options		Multi-Use pathway to/from Crested Butte	
Crested Butte	Sixth Street traffic		Downtown parking management	Pedestrian travel, safety across Sixth Street	Traffic impacts of new development
Mt.Crested Butte		Increase local transit service	Parking management		Traffic impacts of new development
Regional	Congestion to/from Crested Butte	Improving RTA service and funding stability	Proposed park-and-rides		Better planning for growth/development

community and by travel mode. Some issues are common between each community, such as the potential traffic impacts of growth and development, while other issues are location-specific.

Conclusion

This Plan Update addresses the major issues identified above through analysis and evaluation of potential solutions for each issue. It is recognized that the ability to respond to and address each issue varies based on complexity, history, contextual circumstances, the range of potential solutions and other factors. Some issues can be addressed quantitatively, while many are policy- or strategy-oriented. Finally, as discussed previously, other issues that could not be addressed in this process remain in the original Plan, with its guidance and recommendations continuing in full effect.

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Introduction

This chapter presents a profile of existing and future conditions for the study area with the objective of understanding major trends, issues, challenges, and opportunities. Because this type of analysis can easily become an endless list of facts, figures, and calculations with questionable value to the planning process, the focus here is to understand major regional transportation-related issues. Given the limited planning timeframe and budget, an exhaustive data analysis was de-emphasized in favor of updating major land use and transportation trends and issues from prior local planning efforts that may impact the region's current and future transportation planning objectives. The technical analysis relied on existing data to the maximum extent feasible. In some cases, data did not exist or was not easily obtained.

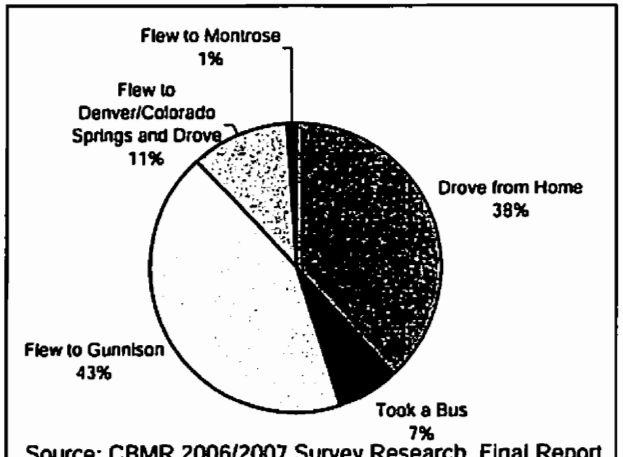
Study Area

The study area for this Plan Update, shown in Map 2.1 on the following page, includes the GVRTA's service area, which stretches from Mt. Crested Butte to Gunnison along the Gothic Road, Sixth Street, and the SH 135 corridor, including Crested Butte, CB South, Almont, and adjacent communities. As noted in Chapter 1, potential mining-related and other traffic issues on Gothic Road above Mt. Crested Butte are acknowledged as very important, but beyond the scope of this planning effort.

Travel Behavior - Visitors/Tourists

Given the area's strong resort orientation, it is important to understand how visitors and tourists travel to and within the region. According to research conducted by Crested Butte Mountain Resort (CBMR) and shown in Figure 2.1, almost half (43 percent) flew directly to Gunnison, while another one percent flew to Montrose. The remaining 56 percent drove or took a tour bus, with 38 percent driving directly from home and another 11 percent driving from the Front Range.

It is important to note that these data apply to the winter ski season. Local staff indicated that the summer festival season is much more of a "drive-in" market, with many visitors coming from as far away as Texas and California.



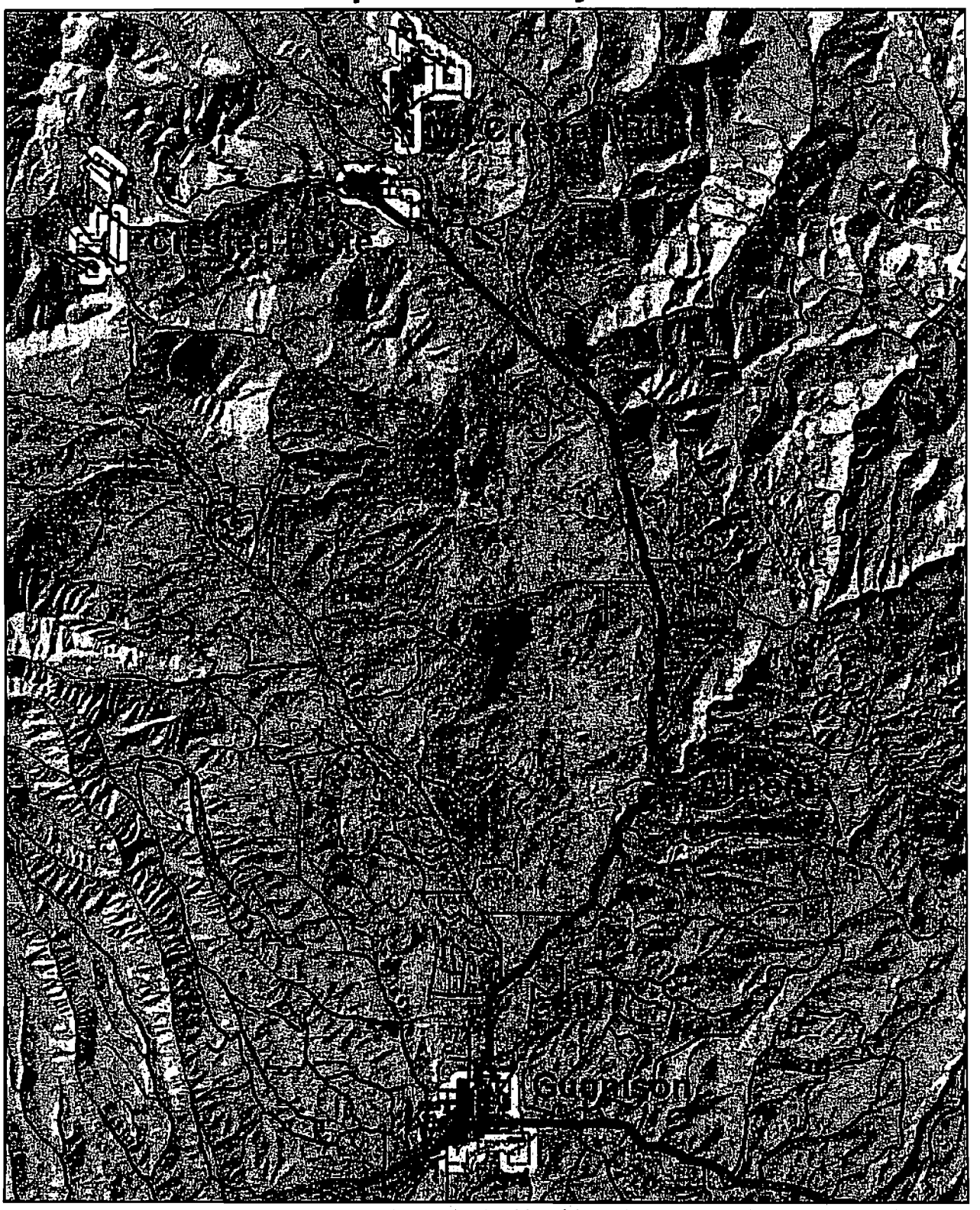
Source: CBMR 2006/2007 Survey Research Final Report

Figure 2.1: How do People Get to Crested Butte Mountain Resort

Annual enplanements (Figure 2.2) have fluctuated over the past several years (Figure 2.2), likely reflecting similar fluctuations in skier visit trends. In addition to ground transportation, one of the GVRTA's primary objectives is facilitating air travel by providing the aviation industry minimum revenue guarantees to support airline service from major travel hubs. Given the continuing economic challenges of the aviation industry, doing so is increasingly expensive. GVRTA staff indicated this summer to the Denver Post (July 3, 2008) that last year's cap on airline subsidies rose from $1 million to $1.4 million, though only $650,000 was spent, and that several new flights were secured. GVRTA uses sales tax funding to provide the minimum revenue guarantees, splitting the cost with CBMR.

As noted above, CBMR skier visits have fluctuated over time, although 2007/08 visits were the highest recorded (416,009) since the 1998/99 season (Figure 2.3). Such fluctuations are expected, since the ski industry is very sensitive to economic, weather, and other cyclical variations. CBMR has indicated a maximum objective of 600,000 skier visits over time.

Map 2.1: Study Area

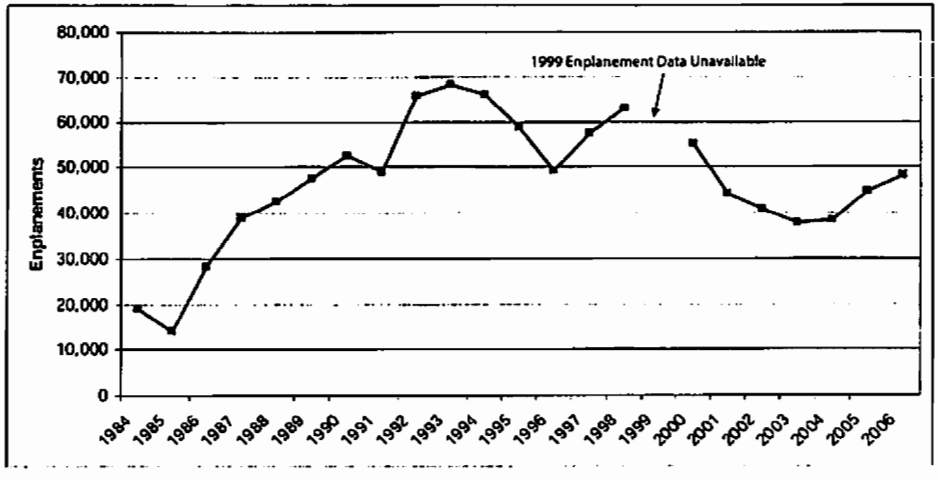


Chartier Associates, Inc.

CBMR skier visits were also compared with other destination resorts with relatively similar visitor levels. As shown in Figure 2.3, CBMR's historical skier visit trend roughly mirrors other similar destination resorts that experienced a decline after 1998/99 (facilitated by 9/11 and snow droughts) and have recently started trending upward again. Note that this comparison does not include Snowmass and Steamboat, as their visitor numbers are far above the range of CBMR and the other resorts shown in Figure 2.3. Finally CBMR visits were also correlated to Mountain Express transit ridership. As illustrated in Figure 2.4, the two track very closely. That Mountain Express ridership is consistently higher (by one-third or more) indicates transit's continued success in serving skier- and ski resort-related mobility needs. It should be noted that the long-term impacts of the recent (fall 2008) economic downturn and rapidly rising and fluctuating fuel prices on future skier visits are as yet unknown.

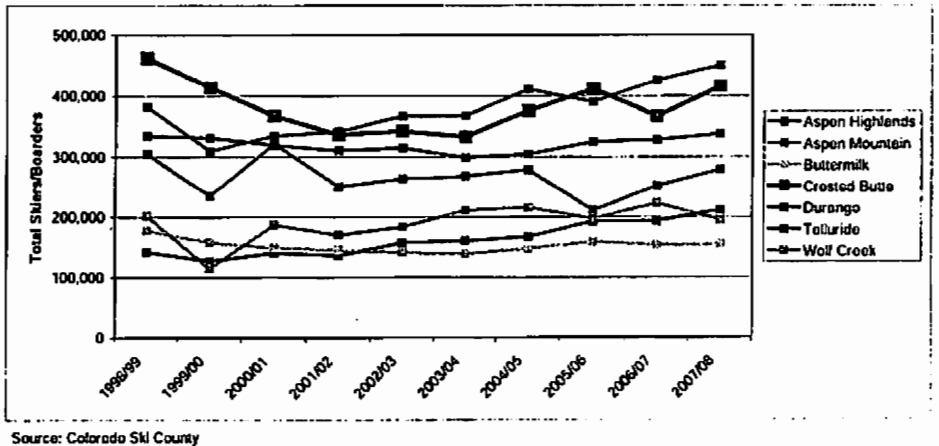
Additionally, lodging occupancy rates were also analyzed. Figure 2.5 shows CBMR occupancy rates by month for 2007, while Figure 2.6 shows data specifically for Grand Lodge. Historical occupancy rates by season for CBMR are shown in Figure 2.7. While the three figures confirm the expected trend that occupancies are highest by far in the winter ski season, two more interesting factors emerge. First, even in ski season, occupancy rates generally average less than 60 percent. And second, summer occupancy rates are increasing at CBMR, with rates up to half of the winter season and as high as 50 percent. This diversification is important economically and also from a transportation perspective as it allows more efficient utilization of what has historically been "excess" transportation capacity in the non-winter months. However, it is also likely that the summer lodging market is more geographically diverse than in the winter.

One final and important component of travel behavior is mode share within the region. While transit ridership, vehicle traffic counts, and other data are collected over time (and discussed subsequently in this Chapter), an often under-appreciated aspect of local travel behavior analysis is a travel diary survey. Such a survey was completed as part of the 1999 Transportation Plan but has not been undertaken since.



Source: 1999 Gunnison Valley Transportation Plan and the Federal Aviation Administration

Figure 2.2: Gunnison - Crested Butte Regional Airport Historic Enplanements



Source: Colorado Ski County

Figure 2.3: Crested Butte Mountain Resort Total Skier Visits

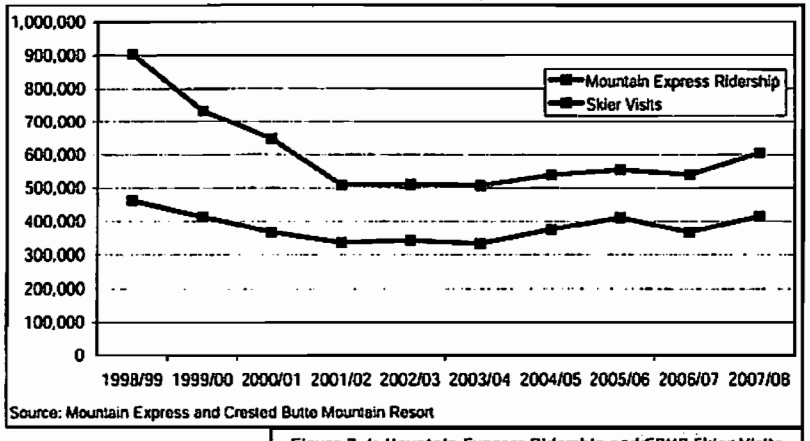


Figure 2.4: Mountain Express Ridership and CBMR Skier Visits

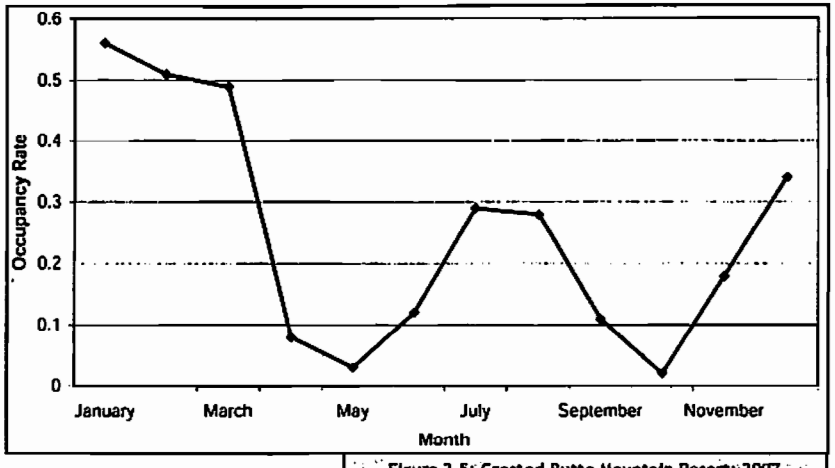


Figure 2.5: Crested Butte Mountain Resort: 2007 Occupancy Rates by Month

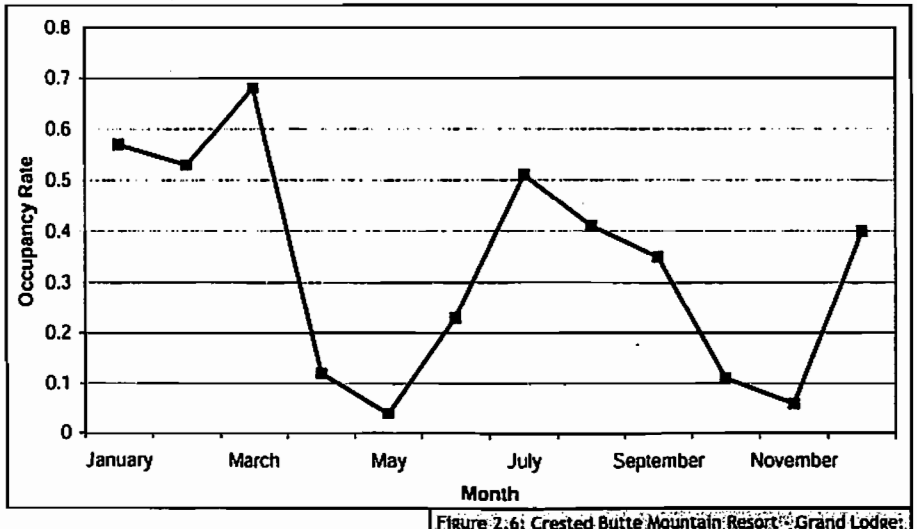


Figure 2.6: Crested Butte Mountain Resort - Grand Lodge: 2007 Occupancy Rates

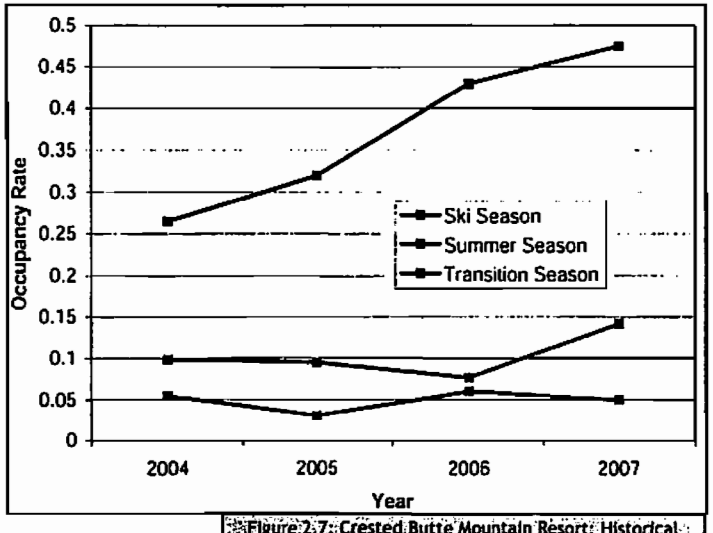


Figure 2.7: Crested Butte Mountain Resort: Historical Occupancy Rates by Season

While expensive and time consuming, travel diary surveys are the most comprehensive and accurate source of travel behavior by mode, and are critical to understanding the frequency, location, and types of trips conducted by walking, biking, and riding transit. Such surveys also provide data about commute distances, employment stratification, and other transportation-related factors. As discussed in Chapter 4, such surveys also serve as the best source for person trip parameters that can contribute to a regional growth management strategy. The region should consider conducting a travel diary survey once every 2-4 years.

Public Transportation Trends

Public transportation service within the region is provided by Mountain Express within and between Crested Butte and Mt. Crested Butte, and RTA regional service serving Mt. Crested Butte, Crested Butte, Gunnison, and points in-between. Several smaller operators provide private shuttle or demand response service. Among the former is Alpine Express, which also contractually operates RTA service.

Ridership for RTA regional service is shown in Figure 2.8 and Table 2.1. Data is for the 2007/08 ski season and reflects the implementation of regional transit service in its current form. As shown, ridership generally grew steadily over the winter season, save for a decrease in January, and ended much higher with March than in November or December. Riders per trip and per day also increased steadily.

Another way to view ridership is at the daily level, or by "run," as shown in Table 2.2 (also for the 2007/08 winter season).

As shown, the highest ridership occurs on morning runs from Gunnison to Crested Butte, and on late afternoon runs returning to Gunnison. At these times, bus service reaches and even exceeds vehicle capacity.

Mountain Express, founded in 1978, is operated by a Board of Directors consisting of two council members each from the Towns of Crested Butte and Mt. Crested Butte. Like RTA service, Mountain Express is funded by local sales tax, although at a different rate (one percent) assessed only in the two communities. The agency also receives funding from a one percent admissions tax (including the sale of lift tickets) in Mt. Crested Butte as well as federal operating funds and capital grants.

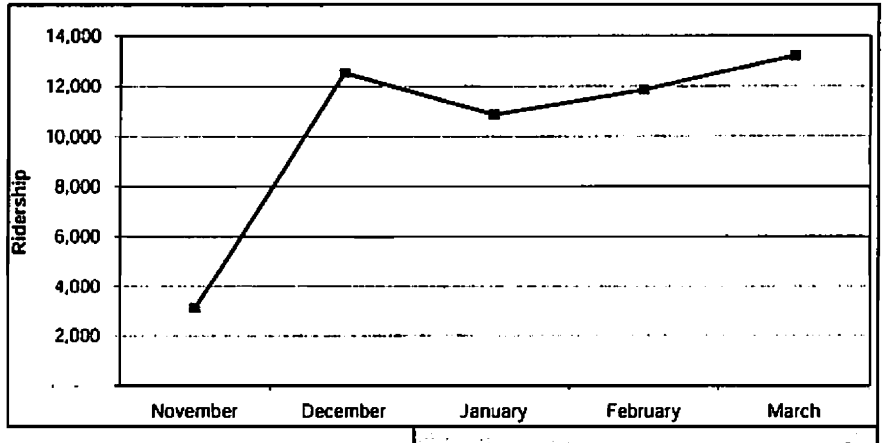
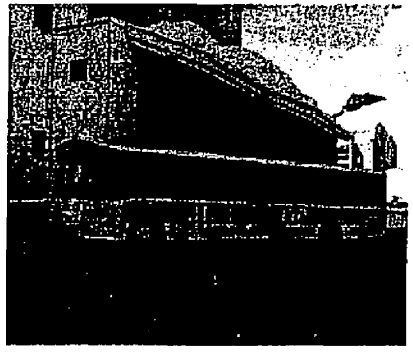


Figure 2.8: RTA Ridership: 2007 - 2008 Ski Season



Year	Month	Riders	Bus Trips	Days	Riders Per Trip	Riders Per Day
2007	November	3,120	308	15	10	208
	December	12,549	712	31	18	405
2008	January	10,867	688	31	16	351
	February	11,861	638	29	19	409
	March	13,226	682	31	19	427
Total		***51,623***	***3,028***	***137***	***17***	***377***

Table 2.1: RTA Ridership: 2007 - 2008 Ski Season

Time/Direction	Ridership	Capacity	Remaining Capacity	Percent Capacity
6:30am GUN to CB	15	30	15	51%
7am GUN to CB	30	30	-0	100%
7:30am CB to GUN	3	30	27	10%
7:30am GUN to CB	27	30	3	91%
8am CB to GUN	3	30	27	9%
8:30am GUN to CB	25	30	5	82%
8:30am CB to GUN	4	30	26	13%
9am GUN to CB	12	30	18	41%
9:30am GUN to CB	23	30	7	76%
10:30am CB to GUN	9	30	21	29%
11:30am GUN to CB	29	30	1	98%
12:30pm CB to GUN	14	30	16	48%
1:30pm GUN to CB	15	30	15	50%
2:30 pm CB to GUN	23	30	7	78%
3:30pm GUN to CB	9	30	21	29%
4pm CB to GUN	35	30	-5	118%
4:30pm CB to GUN	29	30	1	95%
5pm GUN to CB	6	30	24	22%
5pm CB to GUN	25	30	5	84%
5:30pm GUN to CB	5	30	25	18%
6pm CB to GUN	23	30	7	76%
8pm CB to GUN	15	30	15	51%
Totals / Averages	***380***	***30***	***13***	***58%***

Table 2.2: RTA Average Daily Ridership: 2007 - 2008 Ski Season

During the winter season, Mountain Express operates four free routes between and within Crested Butte and Mt. Crested Butte. The rest of the year, only the Town shuttle operates which provides service between the two communities.

Mountain Express ridership is shown in Figure 2.9 and Table 2.3. Like the skier visits that ridership is closely tied to, ridership declined after 1998/99 but has risen steadily in recent years. Figure 2.10 illustrates monthly ridership for 2007.

Ridership for both Mountain Express and RTA regional service are also shown by season in Map 2.2 and Map 2.3 for 2007/08.

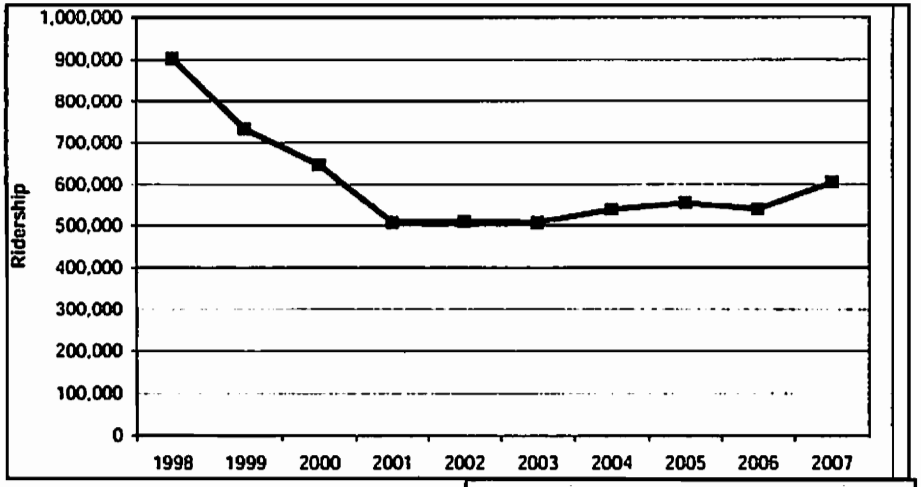
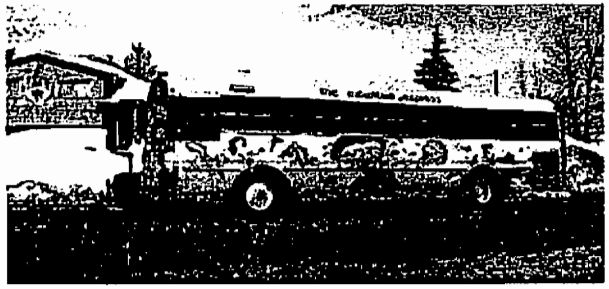
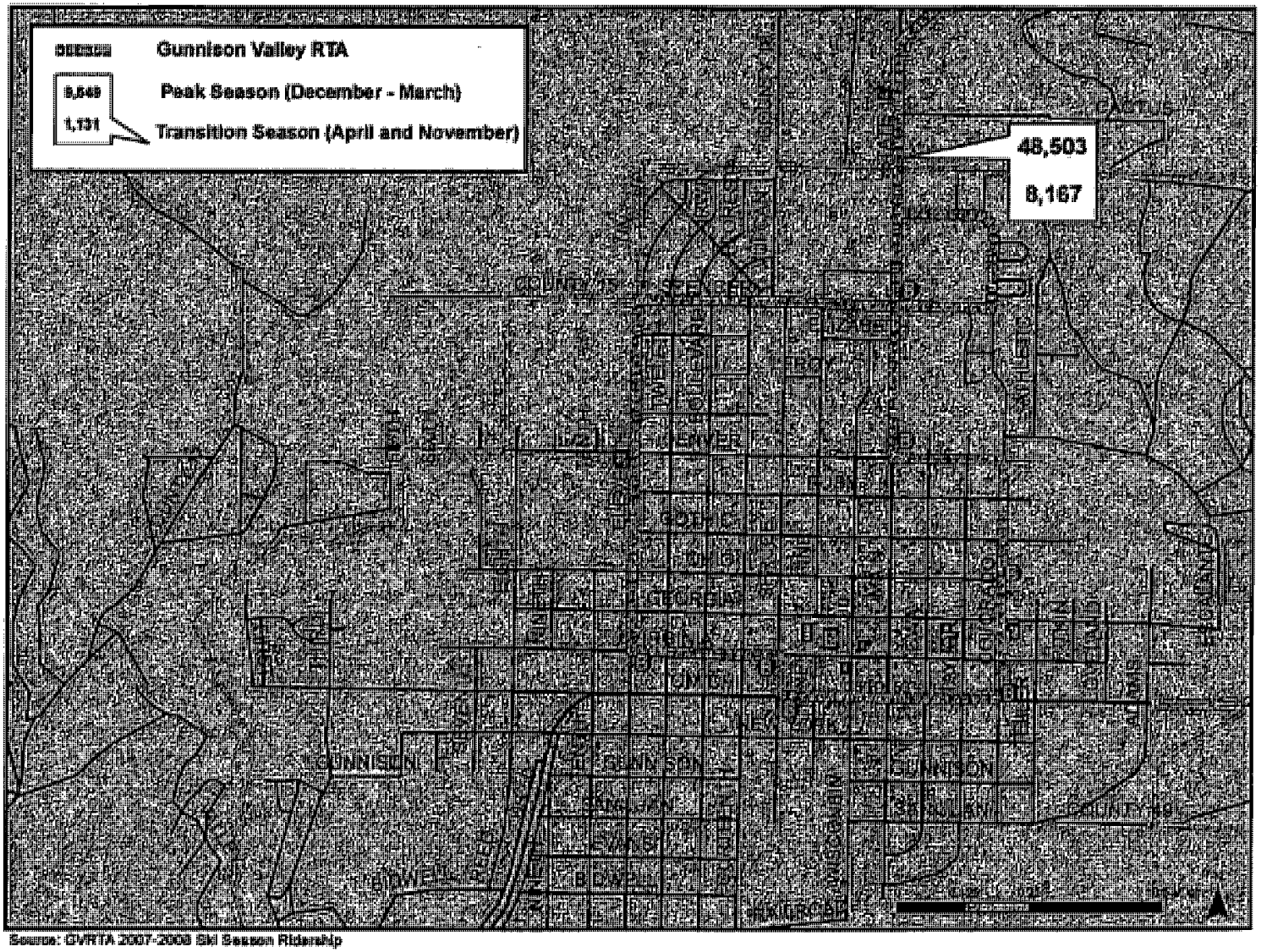


Figure 2.9: Mountain Express Historical Ridership

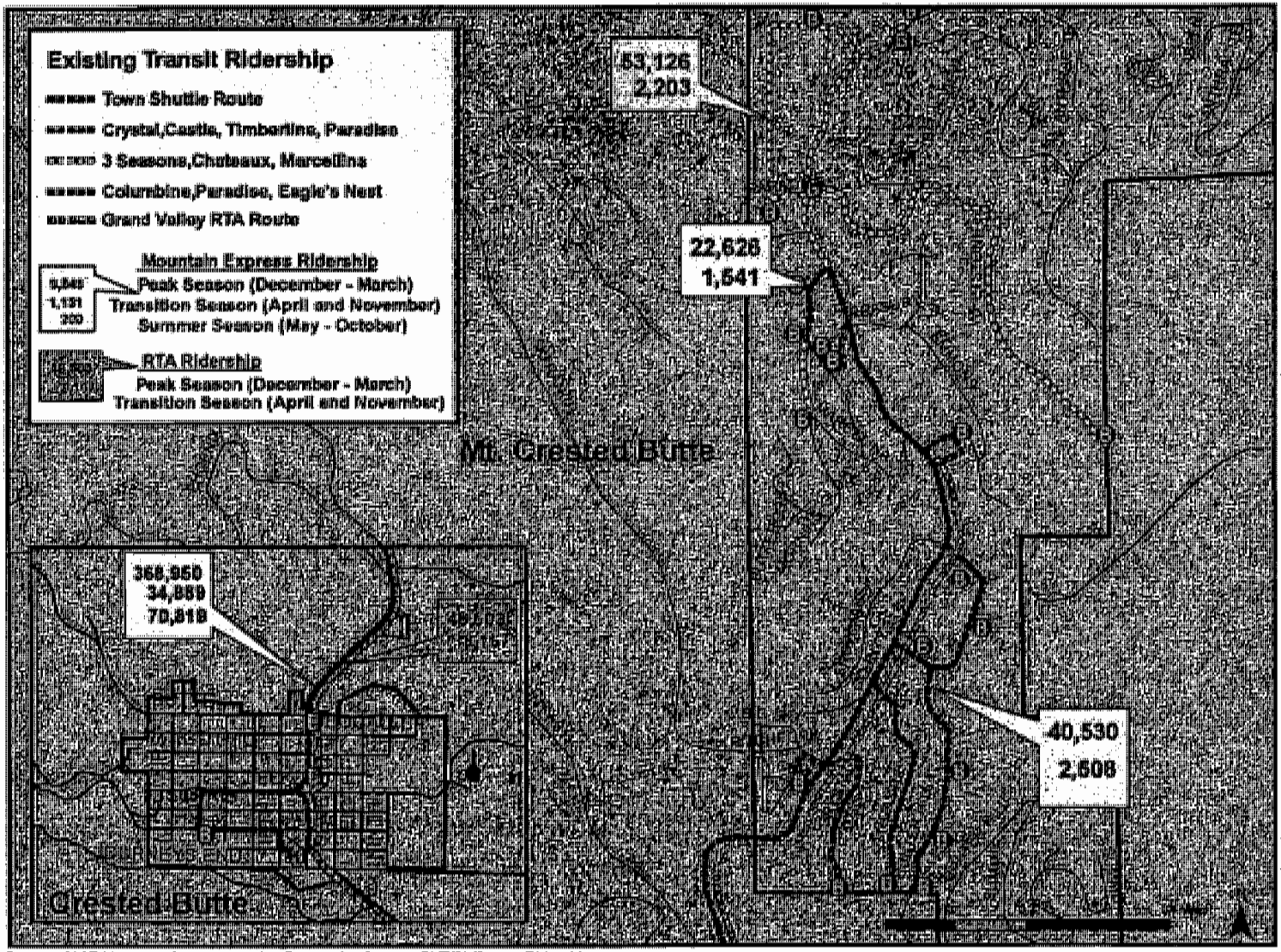


Map 2.2: Transit Ridership: Gunnison Area



Source: GVRTA 2007-2008 Ski Season Ridership

Map 2.3: Transit Ridership: Crested Butte & Mt. Crested Butte Area



Source: 2007 Mountain Express and 2007/2008 Ski Season GVRTA Transit Ridership

Year	Total Passengers	Operating Miles	Total Operating Hours
1998	903,749	198,097	20,738
1999	733,605	176,604	22,023
2000	647,421	170,290	18,950
2001	508,719	147,474	12,955
2002	510,018	145,415	13,105
2003	507,237	142,955	12,517
2004	538,595	173,374	15,479
2005	554,729	127,920	11,661
2006	539,774	130,945	11,935
2007	604,809	132,846	13,231

Table 2.3: Mountain Express Historical Ridership

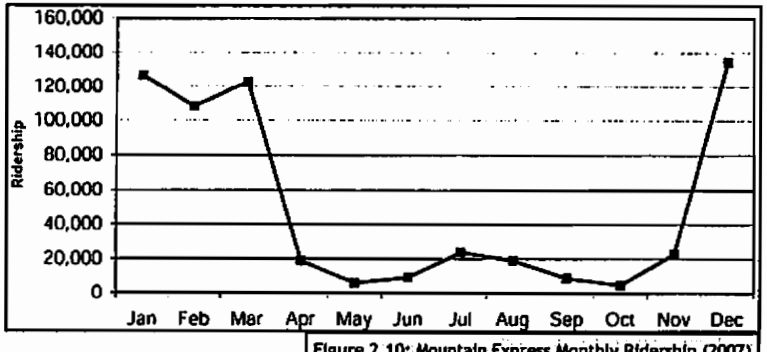


Figure 2.10: Mountain Express Monthly Ridership (2007)

Roadway and Traffic Trends

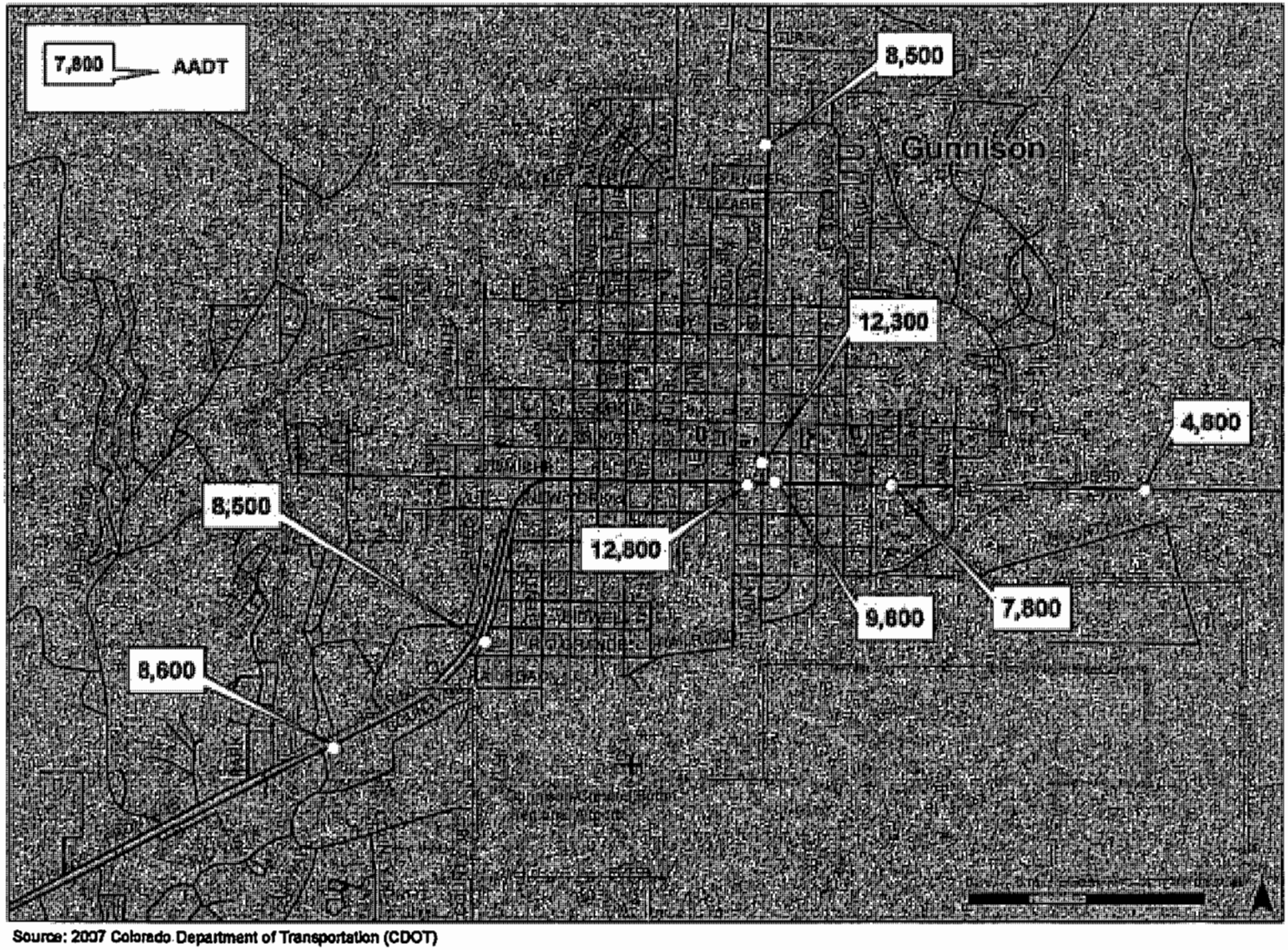
Traffic counts from CDOT and local sources were assembled and reviewed to provide an understanding of current roadway and traffic mobility trends. CDOT counts were available only for summer months in 2005 and 2007. Local counts for 2005-2007 for some locations were available from Crested Butte and CBMR. Additionally, most available counts were of average daily traffic (ADT), while some CDOT counts were adjusted average annual daily traffic (AADT).

Daily traffic counts for the Gunnison area are shown in Map 2.4 (AADT) and Map 2.5 (ADT). As expected, the highest counts (between 13,000 and 17,000) are along US 50 just west of Main Street (Highway 135), and along Main Street just north of US 50 in downtown Gunnison. To put this in context, the maximum carrying capacities (MCC) established in the 1999 Transportation Plan included 18,000 for the two-lane section of SH 135 north of Gunnison. Although MCCs were not established for SH 135 and US 50 in downtown Gunnison, as four and five lane roadways, they can handle much more traffic - likely in the 32,000 to 38,000 range.

Daily AADT traffic counts for Crested Butte are shown in Map 2.6, while Map 2.7 shows AADT traffic counts for both Crested Butte and Mt. Crested Butte. The highest traffic count in Crested Butte is on Sixth Street just before the four-way stop (about 10,000 ADT). No corresponding MCC has been established for Sixth Street itself, though the MCC for the four-way stop is 10,000. This is not to suggest that the intersection has reached its capacity, as Sixth Street traffic is much lower (about 3,600) just to the north. Further, the intersection was recently rebuilt with turn lanes, better sight-line geometry, and a bus-only turn lane, all of which increase the effective capacity of the intersection. In Mt. Crested Butte, the one known traffic count of 4,636 compares favorably with the MCC of 18,000.

Historical daily traffic counts were also reviewed based on available data. Figure 2.11 shows historical counts for SH 135, while Figure 2.12 shows the same information for US 50. For both roadways, traffic trends are generally holding steady, though SH 135 shows a notable recent increase, while US 50 shows a contrasting decrease. However, AADT counts for US 50 west of SH 114 (east of Gunnison) show a stable and slightly increasing trend (Figure 2.13).

Map 2.4: Daily Traffic: Gunnison Area (AADT)



Source: 2007 Colorado Department of Transportation (CDOT)

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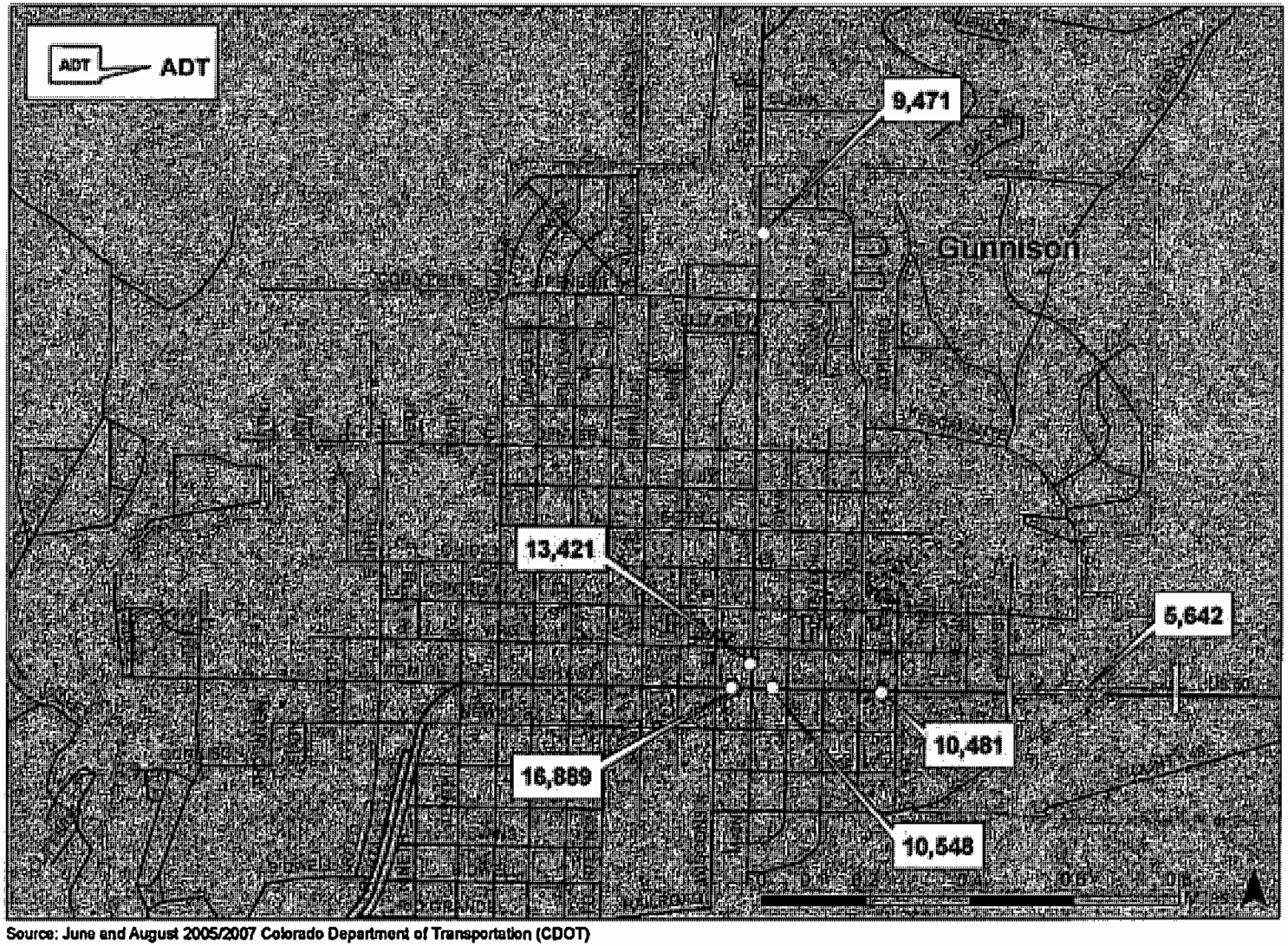
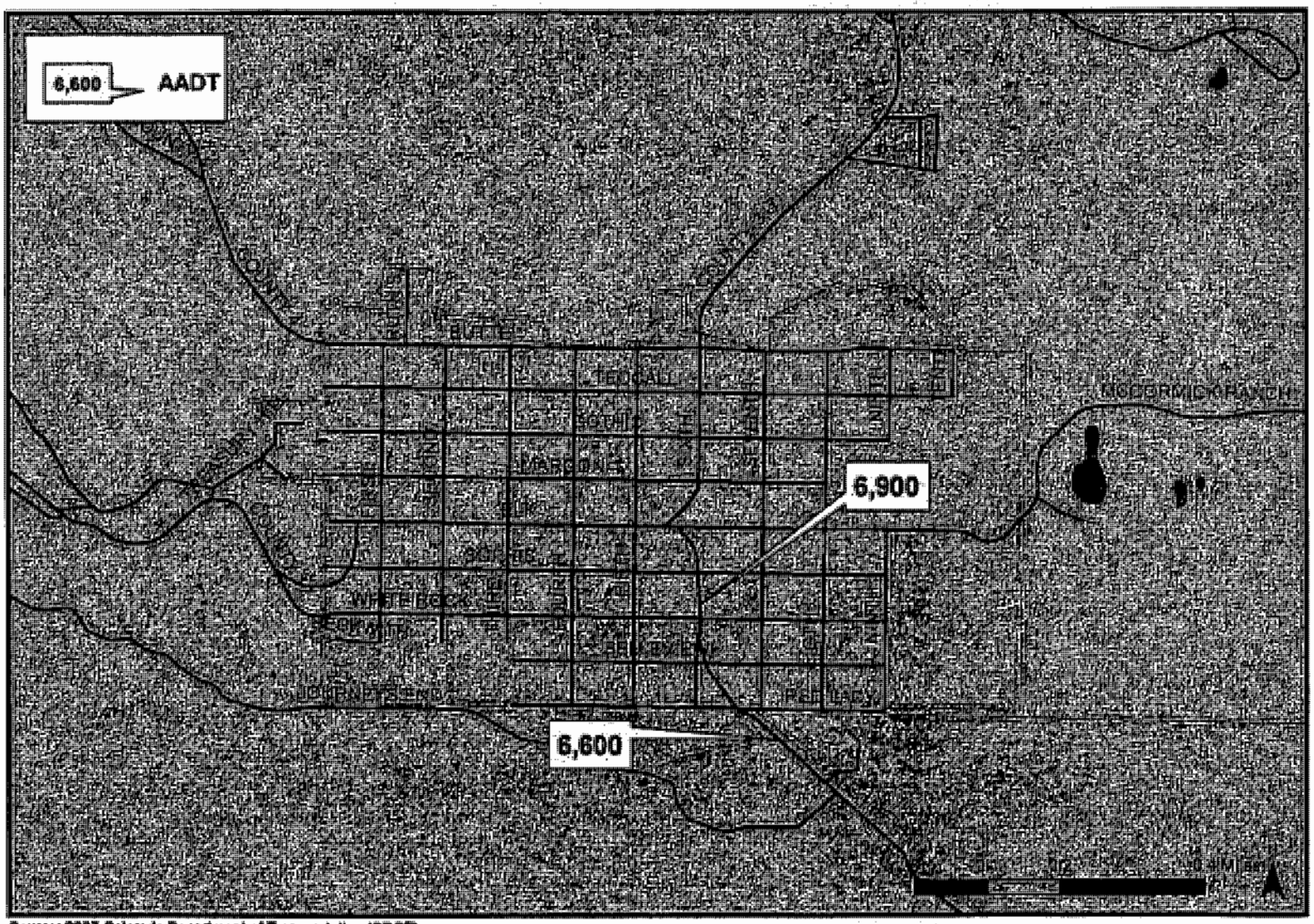
Map 2.5: Daily Traffic: Gunnison Area (ADT)



Source: June and August 2005/2007 Colorado Department of Transportation (CDOT)

Map 2.6: Daily Traffic: Crested Butte (AADT)



Source: 2007 Colorado Department of Transportation (CDOT)

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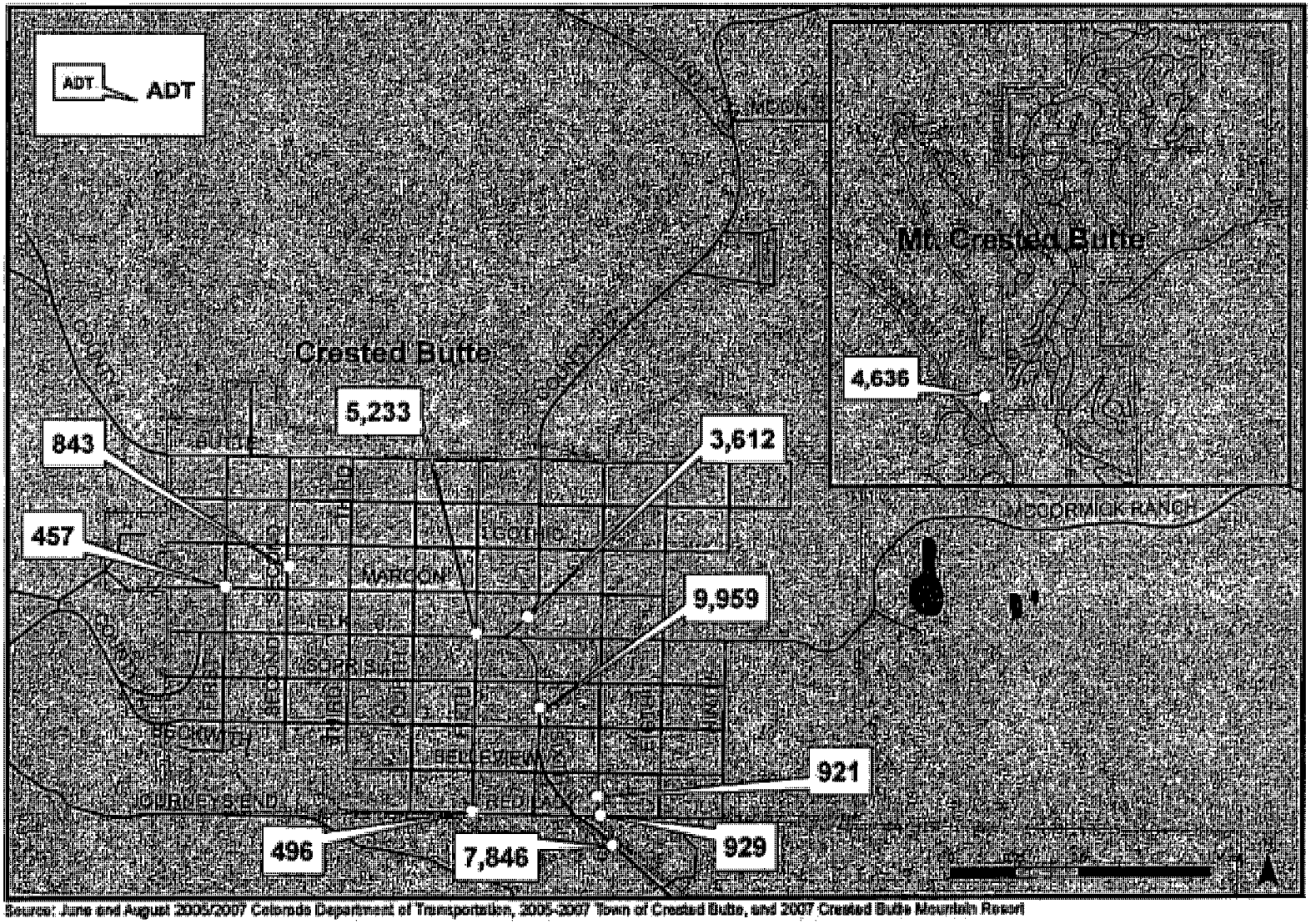
Map 2.7: Daily Traffic: Crested Butte & Mt. Crested Butte (ADT)



Source: June and August 2006/2007 Colorado Department of Transportation, 2005-2007 Town of Crested Butte, and 2007 Crested Butte Mountain Resort

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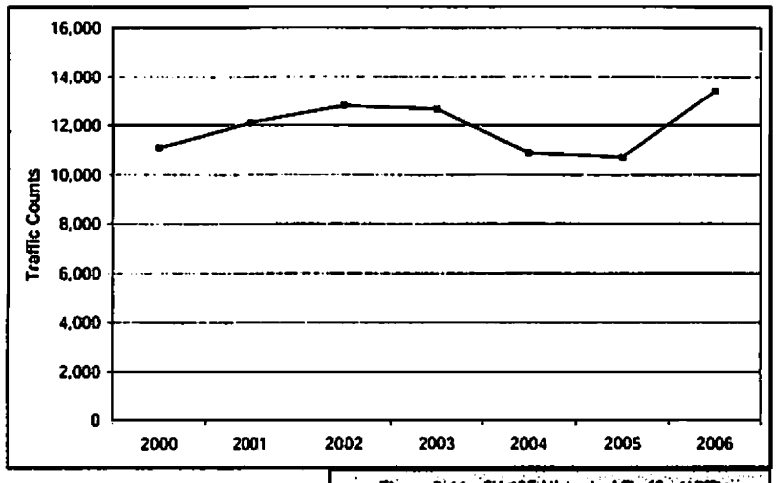


Figure 2.11: SH 135 Historical Traffic (ADT)

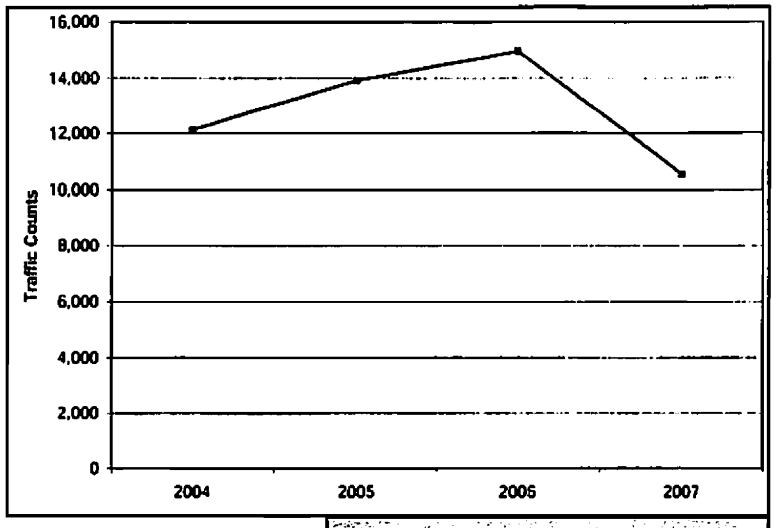


Figure 2.12: US 50 Historical Traffic (ADT)

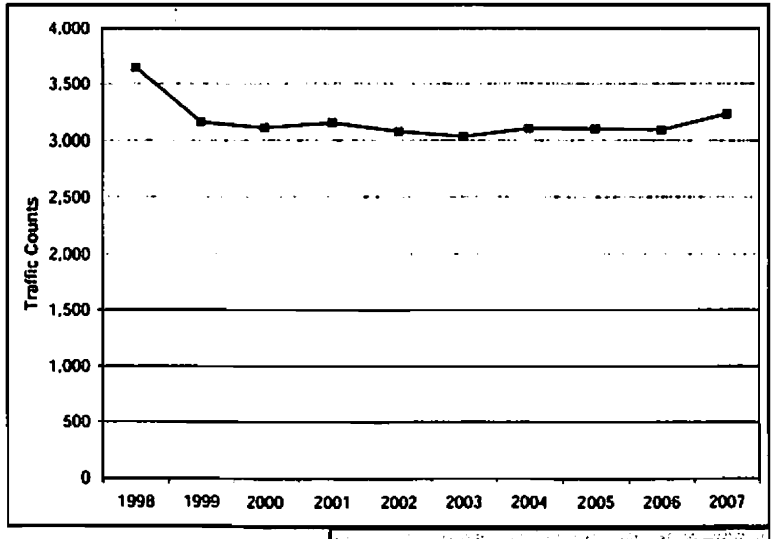


Figure 2.13: US 50 Historical Traffic (AADT)

Historical daily traffic trends were also reviewed for SH 135, with data available for northeast of Castle Mountain Road (AADT) and north of Washington Gulch Road (ADT). In both locations, traffic count trends have been holding steady, with only very slight increases over time.

Finally, historical traffic counts by month were also reviewed for US 50 (Figure 2.16) and SH 135 (Figure 2.17) to gauge average variations in traffic throughout the year over time. For both highways, peak traffic occurs in the summer months, particularly July. This is reasonable given the substantial summer festival and tourist season. It should be noted that data was not available to conduct a similar analysis along Gothic Road between Crested Butte and Mt. Crested Butte. Such an analysis would likely have shown the winter months to be highest in traffic volume.

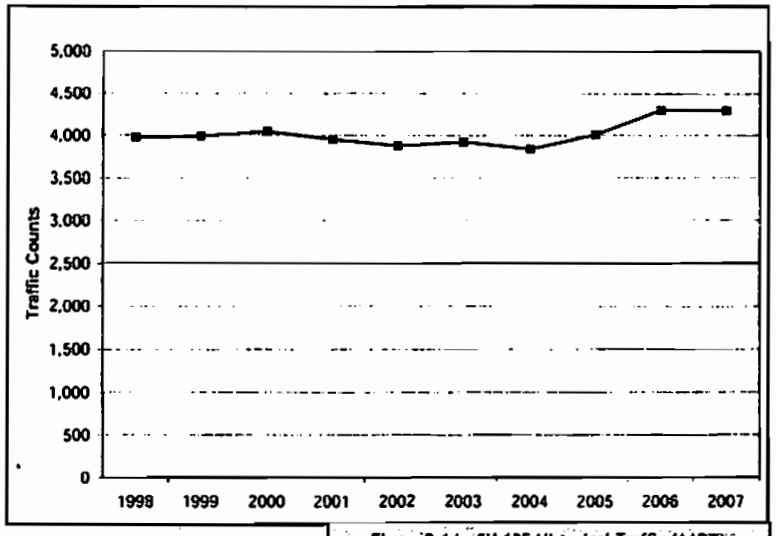


Figure 2.14: SH 135 Historical Traffic (AADT)

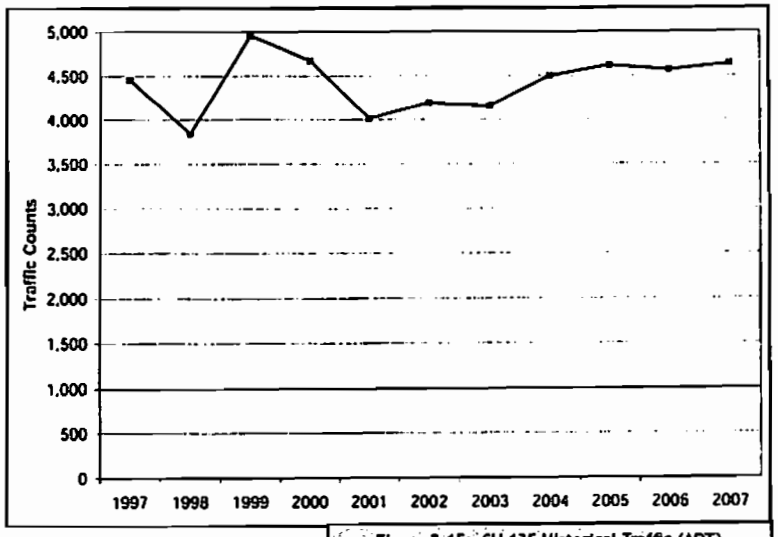


Figure 2.15: SH 135 Historical Traffic (ADT)

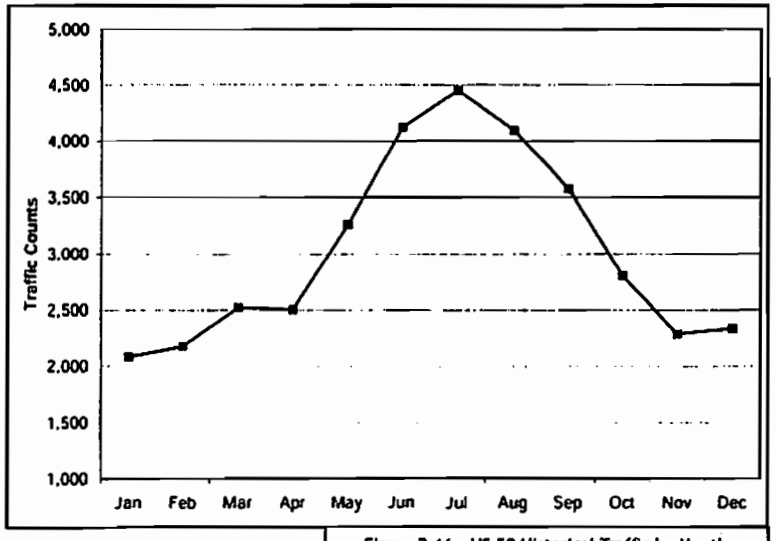


Figure 2.16: US 50 Historical Traffic by Month

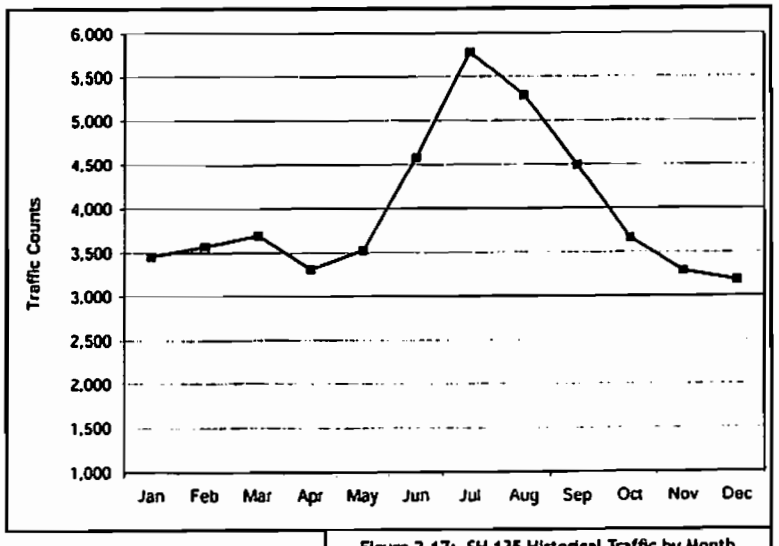


Figure 2.17: SH 135 Historical Traffic by Month

Parking Trends

Parking is a critical component to understanding mobility trends, especially in a resort-oriented region with two traditional downtowns. Accordingly, data was collected or assembled in support of a parking inventory in downtown Gunnison, downtown Crested Butte, and within Mt. Crested Butte.

In Gunnison and Crested Butte, a field inventory was conducted to estimate the number of parking spaces in the downtown core of each community. While utilization rates were not calculated, the inventory was conducted to understand the amount, type, and magnitude of parking supply and how it is managed, such as through time restrictions. In Gunnison (Map 2.8), approximately 600 spaces were counted along Main Street (SH 135) and adjacent blocks north of Tomichi Avenue (US 50) in the downtown core. Parking spaces along Tomichi Avenue and Main Street are restricted to two hours between 8:00 am and 5:00 pm; there is no paid parking. As noted in Chapter 4, feedback from local residents, staff, and stakeholders indicate that parking is an occasional problem, but that this may partly be a matter of perception, such as if one cannot park right in front of their destination.

In Crested Butte (Map 2.9), approximately 140 spaces were counted along and adjacent to Elk Avenue between First Street and Sixth Street. Spaces in the three public lots add another estimated 170 spaces. Additionally, utilization of the four-way lot has been estimated at 58 percent by CBMR based on 2001-05 data; more recent occupancy rates have not been recorded. As in Gunnison, there is no paid parking in Crested Butte, and parking spaces along Elk Avenue are similarly restricted to two hours between 8:00 am and 5:00 pm. There are no time restrictions for the public lots except a prohibition on overnight parking. And, as discussed in Chapter 3, residential streets are often used as overflow parking for Elk Avenue, though this is not their intended or desired purpose.

Parking is more complex in Mt. Crested Butte given the resort and multitude of lodging and other complexes. However, data was available for the three main lots - Rasta, Main, and Snowmass Road (Map 2.10). CBMR tracks seasonal occupancy rates for each lot, which range from 21 percent to 98 percent. Occupancy statistics for the Main Lot and Rasta Lot are also shown in Figures 2.18 and 2.19. Using CBMR's parking data, average occupancy rates for the "ten highest days" of the winter season were also calculated; these rates range from 67 percent to 78 percent (data was not available for the Snowmass Road lot).

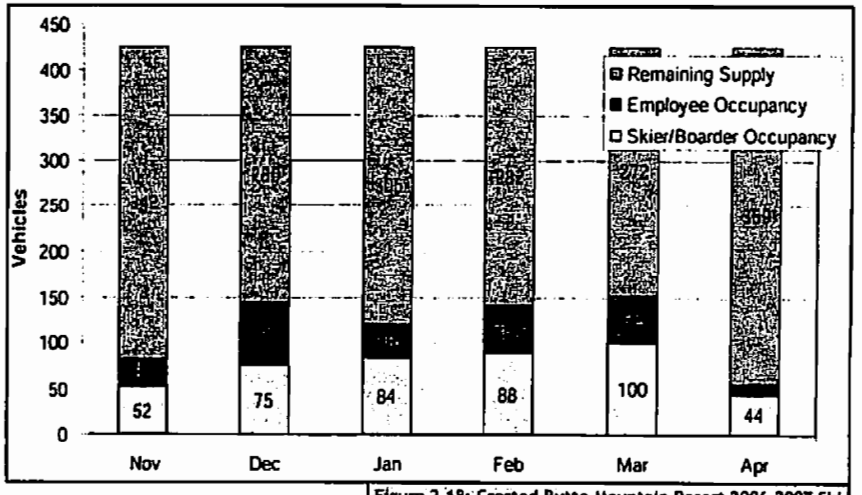


Figure 2.18: Crested Butte Mountain Resort 2006-2007 Ski Season Main Lot Parking Statistics

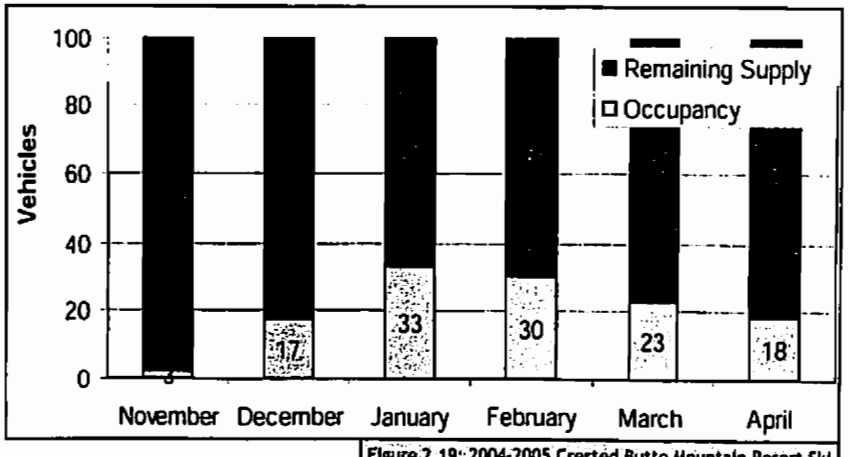
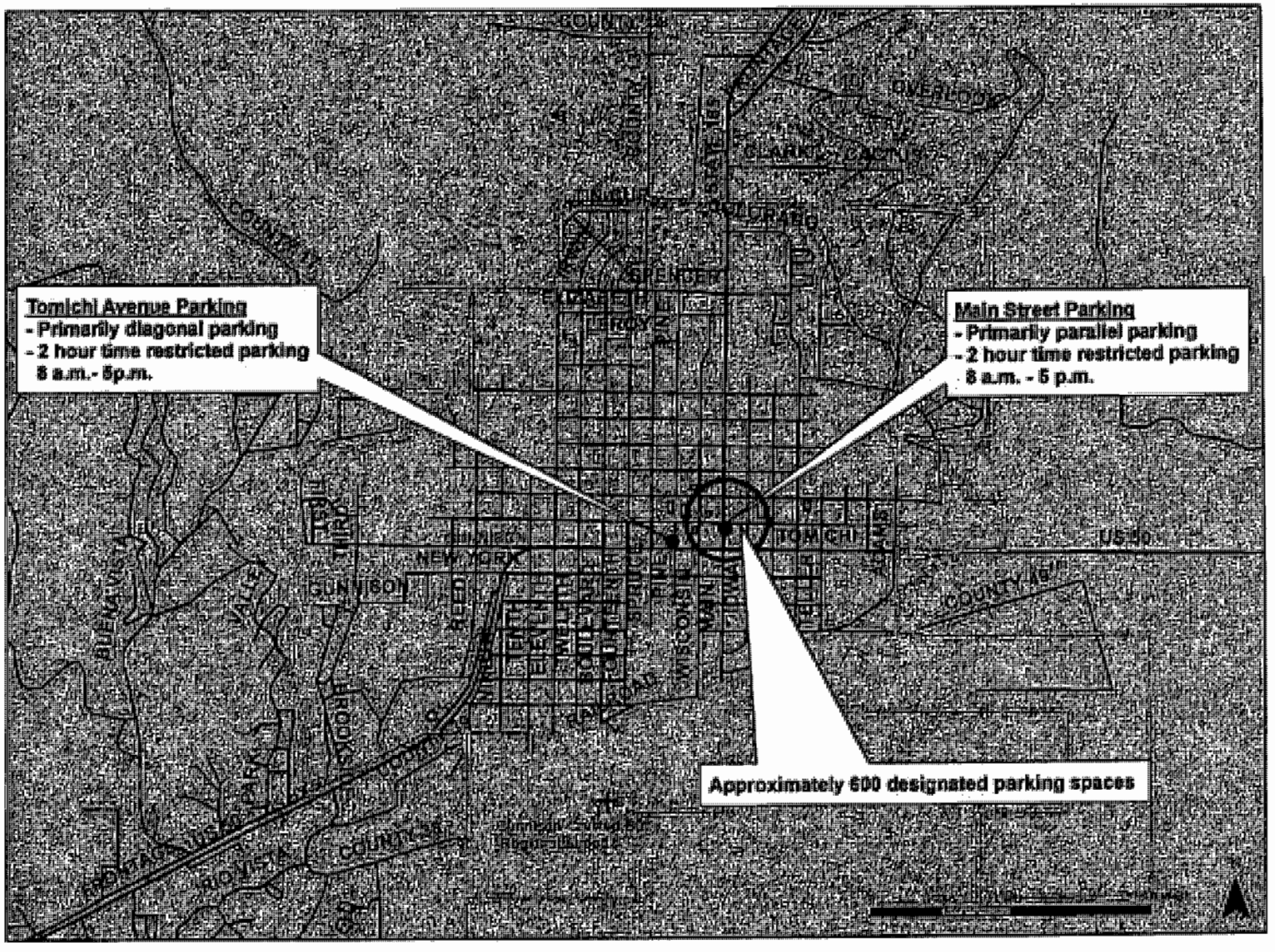
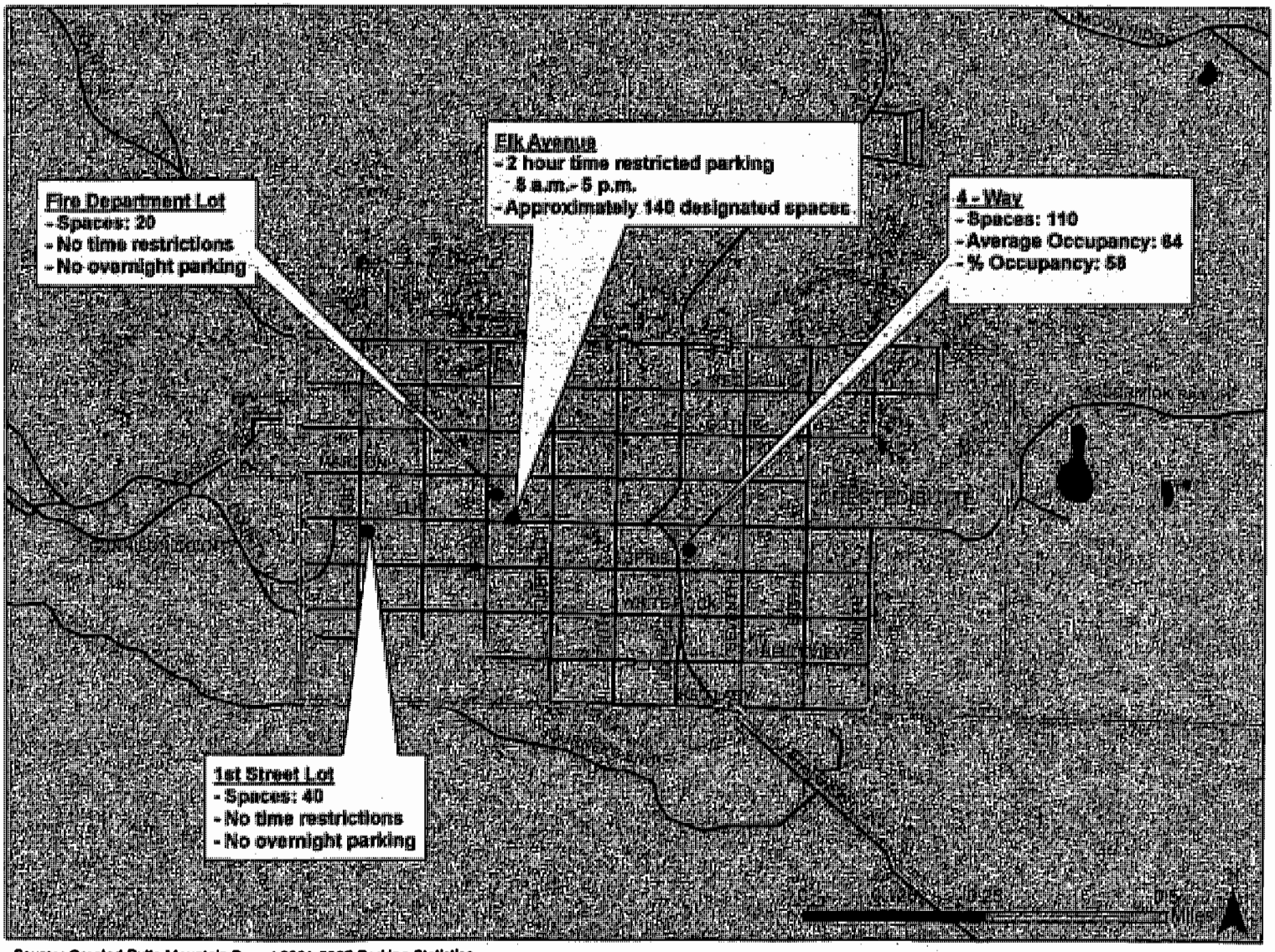


Figure 2.19: 2004-2005 Crested Butte Mountain Resort Ski Season Rasta Lot Parking Statistics

Map 2.8: Gunnison Parking Inventory

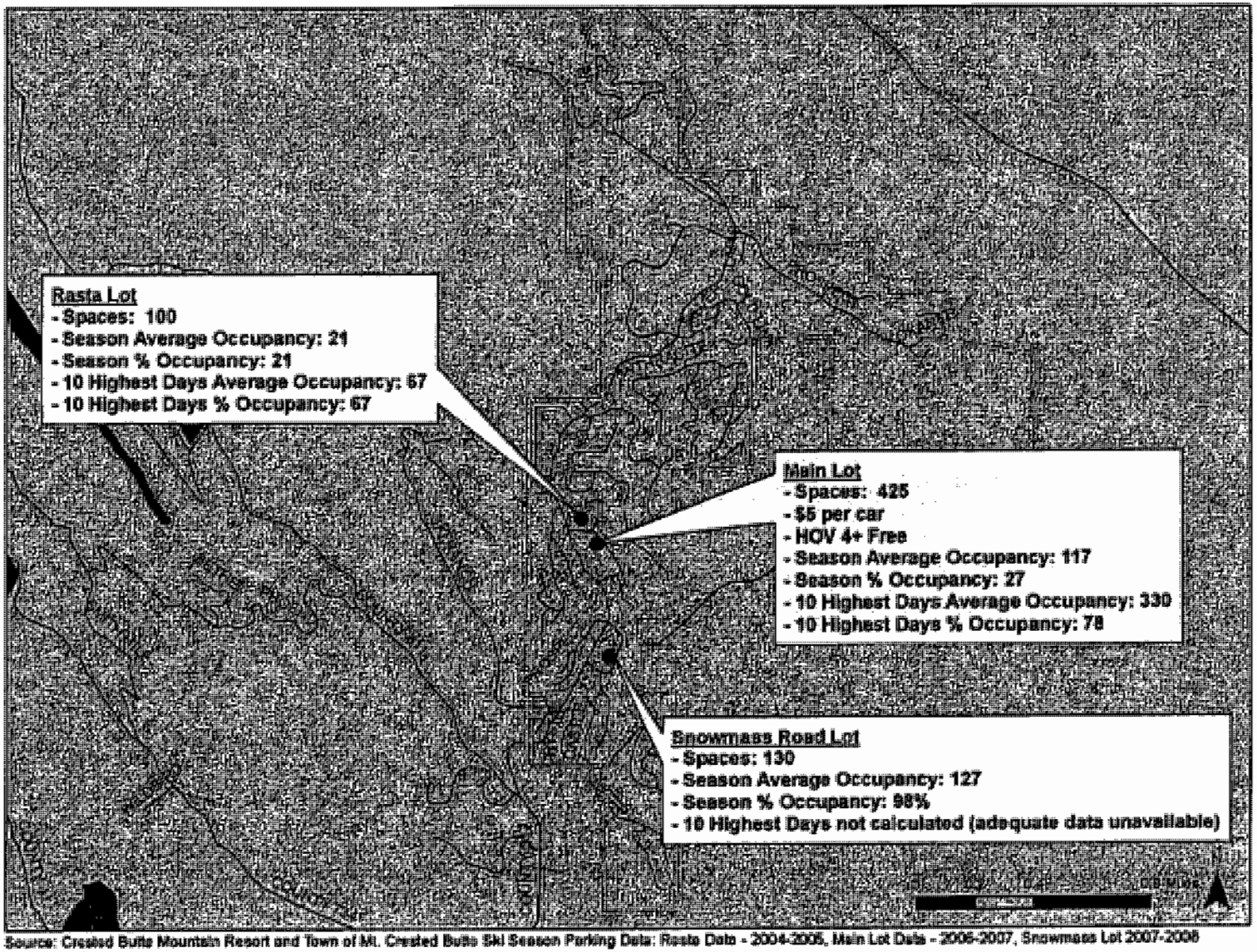


Map 2.9: Crested Butte Parking Inventory



Source: Crested Butte Mountain Resort 2001-2005 Parking Statistics

Map 2.10: Mt. Crested Butte Parking Inventory



Source: Crested Butte Mountain Resort and Town of Mt. Crested Butte Ski Season Parking Data: Rasta Data - 2004-2005, Main Lot Data - 2006-2007, Snowmass Lot 2007-2008

While this technique is not currently used by CBMR, it is used in other resort areas (such as Snowmass) to gauge parking supply and utilization at peak periods during the winter ski season. Should Mt. Crested Butte ever consider a parking cap (discussed in Chapter 3), this is an effective monitoring technique to support that policy, particularly with CBMR's long-term objective of reaching 600,000 annual skier visits.

Bicycle/Pedestrian Trends

Walking, biking, and trails are important transportation modes and community values in the region. Each community has plans, programs, and/or ongoing implementation efforts to improve bicycle/pedestrian infrastructure and safety, as well as access to recreational trails. Based on GIS data provided by the Town of Crested Butte and the City of Gunnison, Maps 2.11 and 2.12 show existing and future bike/ped and trails infrastructure. (The GIS data did not include sidewalk coverage.) Chapters 3 and 4 contain further discussion and recommendations regarding non-motorized transportation.

Future Conditions

Up to this point, the focus of this chapter has been a profile and understanding of existing transportation conditions and trends within the region. As with the 1999 Plan, however, an analysis of future conditions was also conducted. This analysis is also known as a "carrying capacity" analysis, as it attempts to understand the ability - and limits - of the regional transportation network to accommodate planned and proposed future growth and development.

The carrying capacity analysis first involved identifying the nature and status of every known planned and proposed development project within the study area. This exercise relied on data from local staff, review of the East River Planning Model, review of local plans' population projections, development project Traffic Impact Analysis (TIA) Reports, and other data. Each project was reviewed to understand its land use components (types and intensities) for purposes of estimating gross and net project trip generation.

Each project's "trip generation" is the number of vehicle trips that project will generate, or add to the background traffic stream. It is based on national standards data for trip rates per unit of a particular land use from the ITE Trip Generation Handbook. These ITE trip generation rates are incorporated into project TIA Reports, and were calculated for all other projects. Some projects, depending on their location and development characteristics, also included a "multimodal trip" reduction, primarily for the presence of transit service.

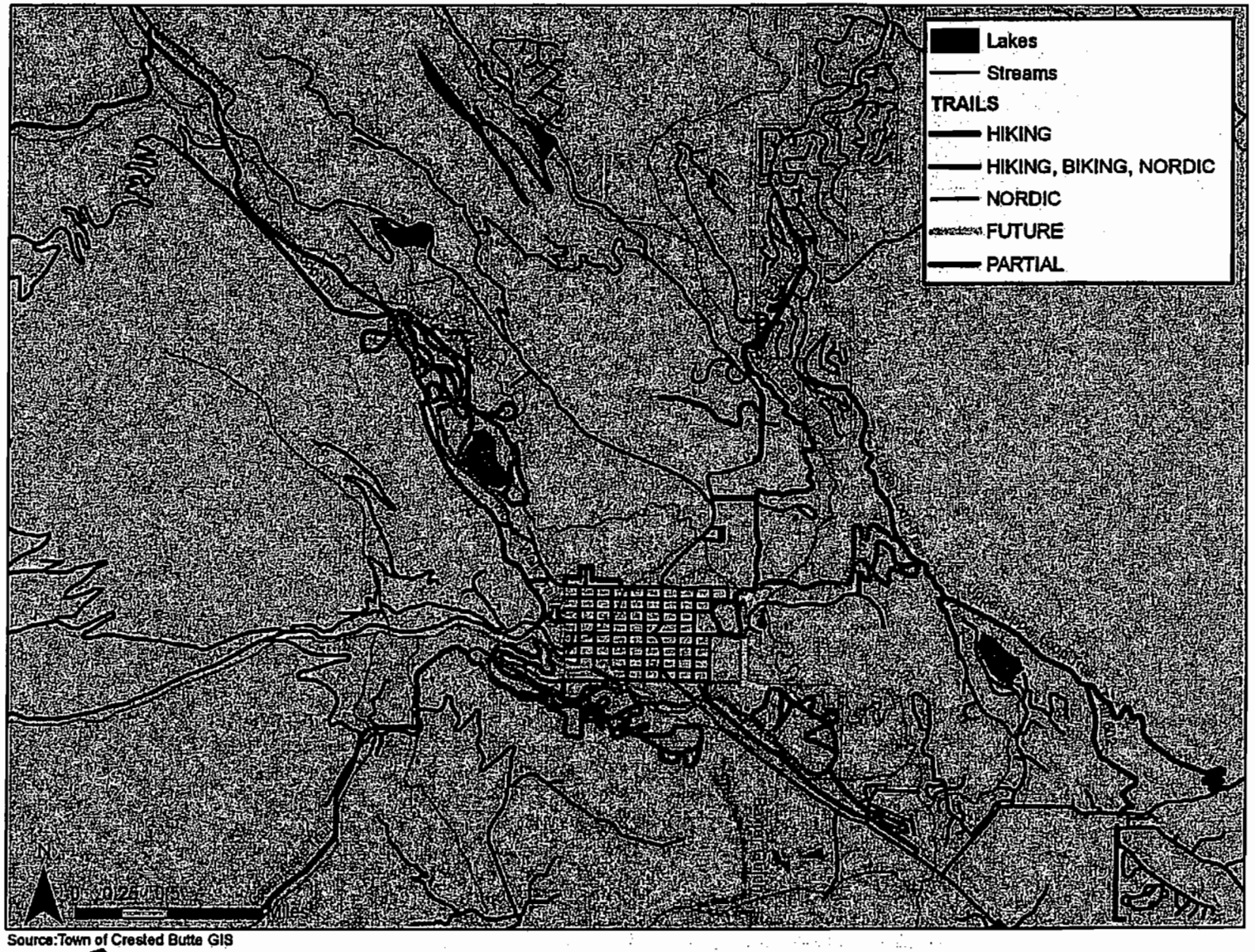
This analysis, contained in the Appendix, indicated that if every planned, proposed, or potential project achieved full buildout, approximately 40,000 new daily trips would be added to the region's transportation network. The potential Gunnison Rising project would add approximately 30,000 additional trips. This conclusion, while sobering, should also be placed in significant context:

- Not every project will achieve full buildout, and not every project will even get built. Those that do may significantly change their land use mix or intensity in response to future market conditions or regulatory requirements.
- Development usually occurs slowly and steadily over time, not in one giant wave. This gives the region time and opportunity to monitor new growth and adjust accordingly.
- Local governments tend to "over-zone" land for development, often inflating carrying capacity calculations. The market and other growth constraints (such as water availability) will support only so much growth regardless of the "potential" for lands to develop.

The objective of this analysis is not to unduly raise concerns over the amount of development that will occur, but rather to highlight the amount of development that could occur. Future growth and land use/transportation relationships are important local issues that the community values greatly. Chapter 4 provides more information about potential growth management strategies and recommendations. Strategically, the key ideas the region should keep in mind going forward include:

- Monitor growth closely over time to understand the amount and magnitude of new growth that is actually occurring. This prevents perception from defining reality, and promotes transportation responses appropriate in scale and timing.
- Select a growth management philosophy and understand its implications. Some communities choose to accommodate growth as it occurs, while others choose to limit growth to that support by existing infrastructure and resources. Each philosophy has implications for transportation planning, funding, and implementation.
- Finally, land use planning and growth management should support regional transportation objectives. As discussed in Chapter 4, maximizing transit use and balanced travel choices are important regional transportation objectives. Accordingly, land use planning and growth management should shape new development to address these transportation objectives.

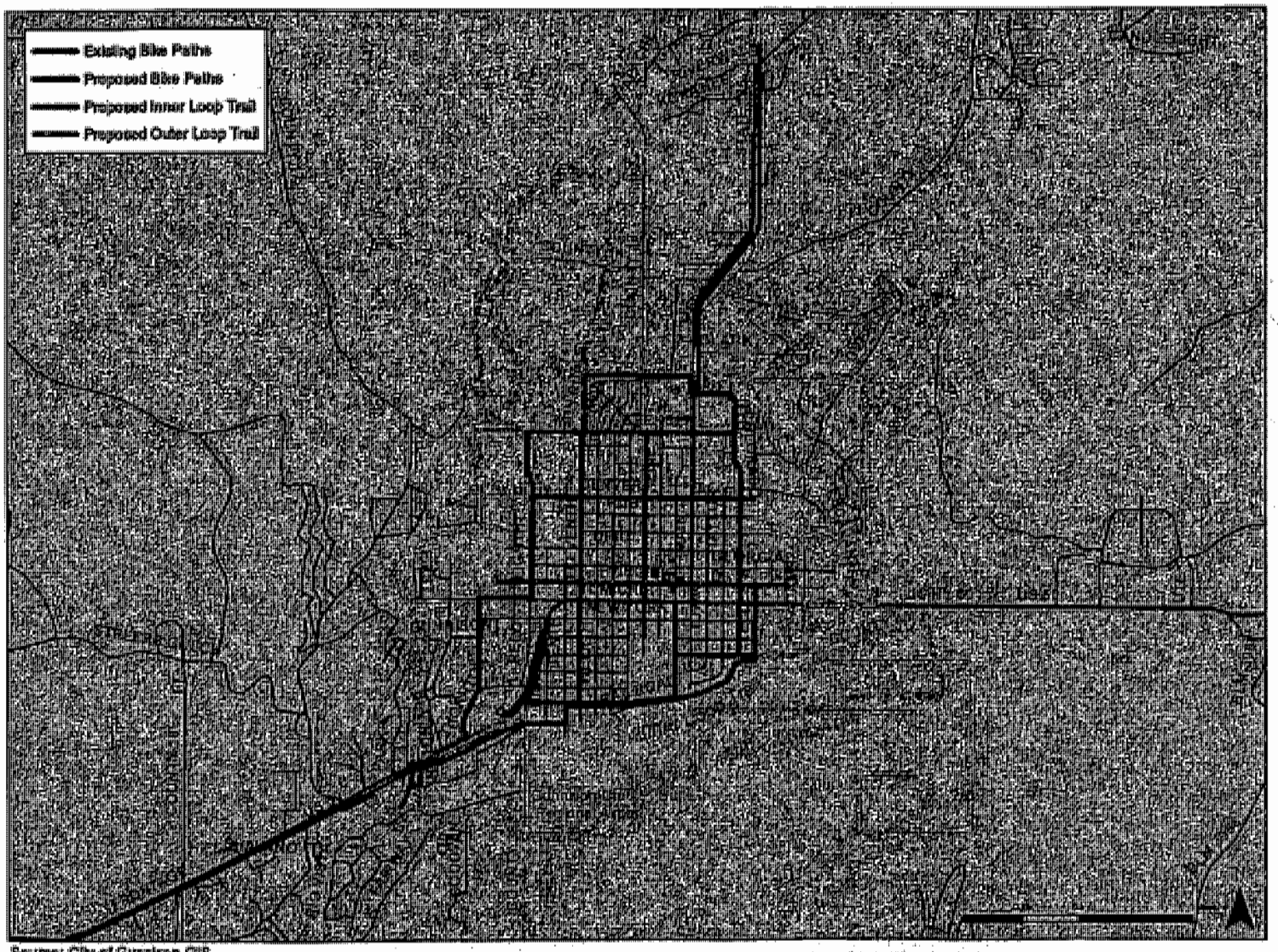
Map 2.11: Crested Butte & Mt. Crested Butte Non-Motorized Facilities



Source:Town of Crested Butte GIS

Charlier Associates, Inc.

Map 2.12: Gunnison Non-Motorized Facilities



Source: City of Gunnison GIS

Chartier Associates, Inc.

Conclusions

Chapter 2 presents an existing and future transportation conditions profile for the region. The available data suggest a stable transportation network with growing transit use and available transit and roadway capacity for future growth. Yet, such future growth may be significant, meaning that the region must continue to plan for and monitor new growth carefully and deliberately.

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Introduction

This chapter provides analysis and recommended strategies, policies, and investments addressing the priority transportation issues discussed in Chapter 1 for the northern portion of the study area - Mt. Crested Butte, Crested Butte, and CB South and adjacent communities. In doing so, the recommendations are intended to build upon progress already made and successes achieved while being realistic about feasible options going forward.

Mt. Crested Butte - Context

New development in Mt. Crested Butte will continue to augment the area's primary orientation as a destination ski resort. From a transportation perspective, this means that the area's traffic will primarily continue to be caused by local day skiers, non-local skiers who stay for a weekend or multiple days, resort and service employees, and year-round and seasonal (second home or fractional) residences. Until the area is fully developed, construction-related traffic will also be present.

While the ownership (but not the operator) of CBMR recently changed (December 2008), and challenging economic conditions continue to hinder the ski industry and resort development, these factors have historically been cyclical. Accordingly, the community and region should take the longer view regarding the potential for new development at CBMR and in Mt. Crested Butte and the need to proactively plan for its implications, both positive and negative over time.

Strategically, Mt. Crested Butte should continue to emphasize the availability and convenience of transit service in a way that increases its attractiveness as a resort destination and enhances its economic competitiveness by maximizing travel choices for visitors and residents and to attract and retain employees. New development should have a complementary mix of uses on-site and be pedestrian- and transit-friendly as means to incentivize travel choices, maximize "internal capture" (trips retained on site) and de-emphasize vehicle trips (especially driving alone). To the maximum extent feasible, a "park once" environment - where subsequent trips can be accomplished without driving - should be encouraged. Paid parking, while politically unpopular, should be considered as a means to discourage drive-alone trips and fund additional transit service. Another option, used by the Town of Snowmass Village, is to cap the number of parking spaces as a traffic control measure.

As discussed below, feasible options are limited for Gothic Road to/from Crested Butte, so its traffic capacity will act as a de-facto growth limit for Mt. Crested Butte. Accordingly, the availability and use of excellent transit service should continue to be incentivized, along with smart growth that satisfied multiple trip purposes on-site, as means to de-emphasize vehicle and drive alone trips.

This emphasis on maximizing and increasing transit service includes both to/from Crested Butte as well as local circulator service within Mt. Crested Butte. Providing competitive and abundant travel choices should increase personal mobility for local residents as well as visitors/tourists, employees, and others.

Key Issue - Gothic Road Traffic

This issue addresses the challenge of managing traffic flow and limiting congestion along Gothic Road between Crested Butte and Mt. Crested Butte.

Options

There are four potential strategies to address this issue: 1) Implement parking restrictions in Crested Butte and Mt. Crested Butte with corresponding transit service increases; 2) Construct an intercept lot in Crested Butte; 3) Widen Gothic Road and/or construct a parallel route; 4) Implement a toll along Gothic Road. The community has indicated that gondola service, recommended in the original Plan, is no longer feasible.

Options Analysis
Widening of Gothic Road, building an alternate route, or instituting a toll are infeasible or impractical strategies. Accordingly, the focus should be on reducing vehicle trips, particularly drive-alone trips between the two communities. Increases in vehicle traffic will eventually be constrained by the physical capacity of the roadway, impacting commerce, tourism, and quality of life, particularly in Mt. Crested Butte. And as observed by Crested Butte staff, vehicle congestion impairs transit operations along the roadway as well.

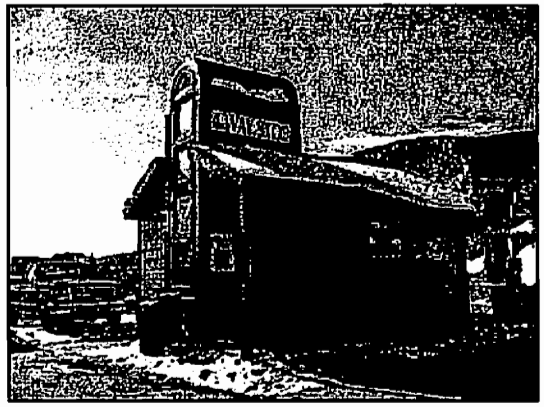
Recommendations
As discussed above, the key to reducing vehicle trips is to restrict parking (especially free parking) and to continue providing plentiful and convenient transit service. Recommended actions to address this issue are:

- Limit parking, especially free parking, in Mt. Crested Butte and Crested Butte.
- Continue to provide plentiful and convenient transit service between both communities.
- Require new development to maximize non-auto travel choices by providing a complementary mix of uses at a pedestrian- and transit-friendly scale that satisfies multiple trip purposes using non-auto travel modes.

A final observation, made by Mt. Crested Butte staff, is that there is no post office in Mt. Crested Butte, causing significant traffic to/from Crested Butte. While more nuts-and-bolts than the recommendations described above, constructing a post office in Mt. Crested Butte may also contribute significantly to reducing congestion on Gothic Road.

Crested Butte - Context

Crested Butte thrives as a tourist destination - as a gateway to Mt. Crested Butte in winter and through various festivals and events in summer. Its historic downtown and nearby recreational opportunities also attract many visitors, while its "mountain town" quality of life is an attraction in its own right for local residents and employers. Residents care deeply about and advocate to protect the town's unique community character, such as the flower boxes along Elk Avenue.



From a transportation perspective, Crested Butte enjoys many enviable qualities. Its compact urban form, short block lengths, and pedestrian-scale buildings encourage significant walking and bicycling. Transit service through town and to Mt. Crested Butte is plentiful; the RTA service to/from Gunnison is also a major asset. Recent reconstruction of the four-way stop intersection (Sixth Street and Elk Avenue), with a bus-only turn lane, is an important contribution to the local transportation network.

However, the community engagement process indicated several transportation issues of concern, particularly parking along Elk Avenue and vehicle traffic - and the "barrier" effect and related safety issues - along Sixth Street.

Key Issue - Crested Butte Parking Management

Residents indicated that parking is a critical and multi-faceted issue. Parking along Elk Avenue, in adjacent residential areas, and in surface lots is problematic and often congested. Additionally, residents have indicated that Crested Butte is functioning as a "de-facto" intercept lot for traffic ultimately destined for Mt. Crested Butte.

Options
There are three primary strategy categories that can be employed to more effectively mange parking demand. They are listed in order in terms of their ease of implementation, costs, and aggressiveness: 1) increase parking supply; 2) improve access to alternative transportation modes; 3) increase parking turnover in high-demand areas, such as through paid parking. Paid parking is controversial, and the analysis and recommendations presented below are specifically designed to maximize other strategies in the parking management toolkit before considering paid parking.

Options Analysis & Recommendations
Increasing parking supply can occur by either building more spaces or by increasing the "effective supply" by lowering the demand for parking. Lowering parking demand tends to be more cost-effective than building new parking and can contribute to other Town goals such as improving the pedestrian environment. There are four strategies to decreasing parking demand.


Public Parking in Crested Butte at 1st Street and Elk Avenue

1. **Increase enforcement:** For time restrictions to work effectively, users must have the perception that they will be fined for violations.
2. **Mode shift:** Improve alternative mode access into downtown. This includes making transit, biking and walking more attractive.
3. **Increase turnover:** Expand time restrictions or implement paid parking to allow for high value spaces to be used many times over the course of the day.
4. **Encourage shared parking:** Ensure that existing parking spaces are utilized to their maximum potential.

1. Increase Enforcement

Often in downtown areas, much of the current storefront parking supply is consumed by employees and other parkers who evade enforcement. Better enforcement leads to higher turnover rates, effectively creating new parking supply, benefiting downtown businesses in Crested Butte. The increased enforcement should be done without creating a parking environment that is hostile to visitors and new residents. There are four specific strategies Crested Butte should consider:

i. Increase probability of time limit offenders receiving tickets

Experience in other communities has shown that some downtown employees know exactly how to evade local parking enforcement. Employee parking is a poor use of downtown store front parking spaces because it underutilizes highly valued parking spaces. Employee cars sit all day without generating additional pedestrian activity to the street and without generating additional shopping trips. Employees and employers parking in front of their businesses impede the access of customers to their stores, making downtown shopping less attractive.

ii. Eliminate 2-hour shuffle

Experience has shown that some employees and other long-term parkers avoid parking tickets by shuffling their cars throughout the day. Increased enforcement efforts will decrease the likelihood of such parkers shuffling their cars within the same time zone.

iii. Establish fines for repeat offenders

In areas where parking is scarce, some drivers may be willing to risk receiving a parking ticket as a "cost of business." An occasional fine is worth the convenience of not moving the car during the day. Although fines increase for multiple violations in one day, the fines do not increase for multiple offenses over time. Increasing fines for repeat offenders ("scofflaws") is an important part of enforcement.

Advances in parking technology could make parking enforcement officers more effective. Handheld computerized machines record the parking history of each vehicle ever entered. This allows enforcement agents to keep track of first time offenders, repeat offenders and vehicles being shuffled around during the day. Some handheld units provide digital recognition of license plates allowing enforcement agents to point and shoot. Agents are more efficient because they spend less time entering license plate numbers, and more time enforcing.

iv. Maintain customer-friendly environment

No one enjoys receiving a ticket, especially if the violator was unfamiliar with parking regulations. Visitors, downtown shoppers, and new residents are an important part of the Crested Butte economy and it is important that these patrons do leave upset from a parking ticket they felt was undeserved.


Bicycle Parking on Elk Avenue in Crested Butte

At the same time, these vehicles should not receive special permission to violate parking codes. Special care must be taken to ensure the right balance of leniency and enforcement for these patrons.

2. Mode Shift

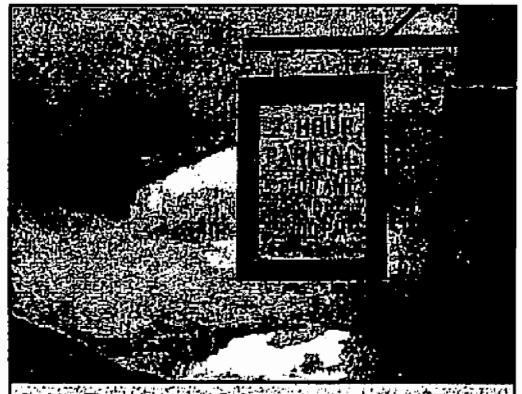
The dense grid of low-speed streets makes Crested Butte an excellent cycling environment. An easy but effective technique to enhance the cycling environment further is to ensure enough bicycle parking. Bicycle parking could be required in connection with off-street auto parking requirements at a ratio of one space per every five auto spaces.

However, many people live too far from their jobs to realistically commute by bike on a regular basis. Also, the local climate makes cycling challenging for much of the year. Leveraging the frequent, reliable, and comfortable regional transit service between Crested Butte and Gunnison helps directly reduce parking demand in each downtown.

If the GVRTA decides in the future to institute a fare for regional service (see discussion in Chapter 4), it should consider an "eco-pass" type of program to provide employees with access to free passes (paid for by the employer). Research and experience have shown that employees are more likely to use a transit to get to work if they have a free pass. If parking is restricted at the employment location, providing transit passes to employees is almost always less expensive than building or leasing new spaces. A recent study in downtown Boulder found that it was five time less expensive to provide free annual transit passes to all employees in downtown Boulder than it was to build replacement parking for those who switch to driving without a pass.

3. Increase Turnover

One of the most aggressive strategies to increasing available parking supply in downtowns is to switch to paid parking. As noted above, this is a controversial step that should be considered only after the other strategies described above have been implemented.



Parking Time Limits and Enforcement can Increase Turnover

While controversial, paid parking in downtown districts has proven time and again to be successful. Benefits of paid on-street spaces include:

a. Employees will be discouraged from using high value spaces close to business front doors.
b. Prices can be set high enough that there will always be available spots, but low enough to not discourage use (approximately 85% utilization).
c. Money generated can be used to improve the downtown district, such as by undergrounding utilities, street sweeping, snow removal, etc.
d. The less convenient parking areas, can remain free, subsidized by the paid, more convenient on-street spaces.

Before paid parking is considered in Crested Butte, parking time limits can be refined to create more options for parkers and to maximize efficiency of the existing spaces.

4. Encourage Shared Parking

Often peak parking demand of adjacent land uses occurs at different times of the day. For example, a bank and an adjacent movie theater could share spaces as their parking demand peaks at different times. Shared parking decreases the need for off-street parking spaces with all of the corresponding benefits mentioned above. A good resource to analyze shared parking potential is the Urban Land Institute's Shared Parking. (Smith. Shared Parking, Second Edition. ULI and the International Council of Shopping Centers. 2005.)

Shared parking is particularly relevant for mixed use districts and small downtowns. There are many benefits to implementing shared parking:

a. Reduction of land devoted to parking
b. Reduction of development costs
c. Concentration of access points
d. Potential to redevelop traditional downtown areas where on-site parking is not feasible

While many jurisdictions do allow for shared parking, developers often do not take advantage of the opportunity. Despite the benefits, there are several challenges to developing a shared parking facility.

a. Timing of new developments is not conducive to provide shared opportunities.
b. Allowable walk distance between the land use and the shared parking facility is set too short by local governments, limiting opportunities.

c. Developers concerned about addition delays due to joint development agreements.
d. Land use types may change, affecting parking availability for all parties.
e. Financers may perceive additional risk and lack of control over undedicated parking spaces.

Intercept Lots - The potential for an intercept lot was also considered as part of the parking analysis, but is not recommended for several reasons. First, the potential "customer markets" for an intercept lot overlap significantly with those for park-and-ride lots (see CB South section later in this chapter and Chapter 4). For all but non-local drive-in visitors, an intercept lot would dis-incentivize use of regional bus service and recommended park-and-ride lots. Trying to intercept non-local drive-in visitors is difficult as they are most likely, having driven hundreds or thousands of miles, to drive the final few miles to their ultimate destination. Intercepting such drivers by locating a lot on the north end of Crested Butte encourages vehicle traffic through town and is impractically too close to Mt. Crested Butte to be effective. An intercept lot on the south end of Crested Butte provides an unwelcoming visual gateway and would be difficult in terms of assembling enough land for parking. If parking supply is severely restricted and parking cost becomes significant in downtown Crested Butte and particularly in Mt. Crested Butte, intercept parking may become more feasible (though such tradeoffs may be unpalatable).

To the extent that opportunities may arise to consider an intercept lot in the future, the following guidance is recommended:

1. There must be sufficient incentive to use these lots. Often this is cost savings. These lots must be cheaper than the parking that is available in town. Another incentive could be general supply. If downtown parking is hard to find, intercept lots with plenty of parking will be attractive.
2. The staging area for the bus must be comfortable for passengers. There must be lighting, seating and shade. A map of the bus drop off points will also help.
3. The shuttles must come often. Passengers are particularly sensitive to waiting time. The perceived time waiting for a bus is often twice that of the actual time. Maximum travel time thresholds should be set to ensure adequate service exists. This can be a travel time factor between driving and to using the intercept lot/ taking the shuttle. For example, it should not take more than twice as long to use the intercept lot as it does to drive.
4. There must be adequate signage informing people of the location on the lot as they drive into town. Most first time visitors will look for parking right downtown first. If the intercept lot was highly visible on the way into town they will be more likely to turn around and park there.
5. If possible, parking lots should be striped pr marked. Unmarked dirt lots tend to be underutilized because drivers pulling into spaces give excess room between cars. Dirt lots can be marked with cement parking stops. In times of heavy use, a parking attendant can direct cars to an appropriate buffer distance between the adjacent cars.
6. Don't underestimate people's ability to walk from the intercept lot to the main destination. Acceptable walking distances increase with good pedestrian design and amenities. Capital investments in the walking environments can have similar budget demands as the initial rolling stock for the transit- without any of the continuing operational costs.
7. Lots should be discouraged from being used for overnight parking. Some people will see these lots (away from downtown, lots of capacity, dirt) as nice ling term storage areas reducing the capacity.

Parking Management: Effective management of the existing parking supply is less expensive than creating additional supply. In Crested Butte, better management could reduce the need for additional surface lot or structured parking. Some high value store front spaces in downtown are currently being used inefficiently as long-term parking. Parking management in Crested Butte should include setting appropriate time limits for storefront parking, oversee directional signage to parking facilities, creating and managing new employee parking facilities, creating and managing neighborhood permit programs and, in the future, potentially implementing and regulating paid parking.

Neighborhood Parking Permit: Shifting parking policies in downtown Crested Butte will likely affect the demand for on-street spaces in the adjacent residential neighborhoods. Policies that increase turnover of downtown spaces, such as increased enforcement and paid parking, will shift parking demand into adjacent areas. Downtown visitors wishing to avoid paying for parking will adjust their transportation behavior to park in the nearest free spot.

Graphic Source: City of Seattle

For changes in parking policy to work practically and politically, it is essential to avoid the risk of spillover parking into the surrounding neighborhoods around downtown Crested Butte.

Most commonly, this is achieved through a neighborhood Parking Permit Program (PPP). A PPP manages parking spillover into residential areas by restricting the number of vehicles allowed to park on streets adjacent to commercial areas.

The first step to developing a PPP is to create maps identifying the extent of each the PPP zones. Multiple zones aid in managing the number of permits issued. Often zones are color-coded for easy distinction. Once the zones are established, signs are erected on each block restricting parking for all except those with a valid permit for that zone.

Residents who live within one of the zones can apply for a permit upon showing verification of residence in that zone (i.e. utility bill). Generally, residents pay a small annual fee for the parking permit to cover administrative costs of issuing the permits. Each person receiving a parking permit should also receive several temporary parking passes that friends and visitors to their home can use to park on the street.

Often after a PPP begins, many of the on-street spaces within a zone are not fully utilized. If this becomes evident in Crested Butte, permits can be sold to non-residents who regularly need parking downtown. These are often called commuter permits because they are generally most attractive to downtown employees. The number of commuter permits sold should be limited to ensure that there always exist open parking spaces in each zone.

Parking District: A parking district would be responsible for downtown enforcement, parking finance, the neighborhood permit program, marketing, and public outreach. This includes removing the responsibility of parking enforcement from the police force to a special parking district. Parking agents managed by a special parking district would have reduced training requirements as they would not require full police certification.

Development-Related Policies: The following parking policies are important in the context of new development and redevelopment.

1. Ensure on-street parking: On-street parking is the most valuable type of parking for several reasons. First, it creates a physical and psychological buffer between pedestrians on the sidewalks and moving traffic. Second, it presents the best access to the front doors of retail, residential and commercial destinations. Third, it limits the need for off-street parking facilities. Off-site parking facilities use valuable land, require additional curb cuts through the pedestrian realm for access, and present challenges to creating good urban design. Additionally, in urban areas, off-street parking facilities can be extremely expensive. Fourth, on a per-space basis, on street parking takes up less space than other forms of parking. The ramps, driveways, and aisles needed in parking lots and structures are absorbed by travel lanes themselves.
2. Place parking behind buildings: Fronting streets with buildings improves the pedestrian environment. Placing parking behind buildings also allows for the access points (i.e. driveways) to come from lower volume side streets where presumably there will be fewer pedestrians. This allows for a more continuous pedestrian frontage, and creates fewer pedestrian-motor vehicle conflicts. It also eliminates mid-block left-hand turning movements on the higher volume street, a leading cause of mid-block congestion.
3. Minimize supply: Parking is often oversupplied, creating a litany of design challenges. A 2003 study of 42 parking lots during the holiday season found that the average occupancy was less than half. (Gould. "Parking: When Less is More." Transportation Planning, Vol.28, No.1. Transportation Planning Division, APA. Winter 2003.) Anecdotally, most everyone is familiar with retail shopping centers with massive parking facilities that are rarely (if ever) full. The problem is that the minimum required parking for residential and commercial development is often set at the annual maximum expected demand, leaving excess parking for much of the year.
4. Ensure delivery parking: Although unglamorous, providing delivery parking must be addressed in all place typologies. Delivery parking is particularly important in areas of high retail and restaurant activity. Alleys are ideal places for temporary truck parking, allowing for back door delivery access away from customer parking and entrances. When alleys are not recommended, special loading zones can be designated.

Bicycle Parking: Parking is usually thought of as "car parking." Great streets, however, have provisions for all modes, and adequate and secure bicycle parking is an important component. There are no national standards for bike parking supply as there are for handicapped spaces and local requirements for bicycle parking tend to vary widely. The following design guidelines should be considered:

A. Location guidelines

1. Bicycle parking should be at least as convenient as the majority of automobile parking. It should be easily accessible from the road or bicycle path. The entrance and exit should be designed to minimize conflict with flows of pedestrians and motor vehicles.

2. Spaces that are unusable for cars and would otherwise be dead space due to their location or size are appropriate for bike parking, with little or no opportunity cost incurred. Locating bicycle parking at intersections in curb extensions is one way to make use of otherwise unusable space.
3. On-site bicycle parking should not be located in front of buildings unless the furnishing zone is wide enough that parked bicycles do not block the sidewalk. Ideally, a rack area should be located along a major building approach line. Parking should be located no more than a 30-second walk (120 feet) from the entrance it serves and should preferably be within 50 feet.
4. Allow 40% of bicycle parking requirements to be met off-site in a common area within 400 feet of the project incurring the requirements.

B. Supply guidelines

1. Require bicycle parking in connection with off-street parking supply.
2. Require one parking space for every five vehicle parking spaces.
3. Consideration should be given for both short-term and long-term bike parking and a reasonable amount of each should be provided depending on demand.

More detailed recommendations regarding bicycle parking design guidelines and motorcycle and scooter parking are included in the Appendix.

Parking Summary

All three categories of parking strategies outlined above are appropriate for Crested Butte in some form.

It should be emphasized that the categories should be implemented sequentially, starting with the least costly and aggressive (enforcement) and working up to more aggressive (increasing turnover) only as needed. The objective of parking management should be to maximize efficient use of existing supply, incentivize use of alternate travel modes (by discouraging unnecessary vehicle trips), and not create undue barriers or burdens for residents, employees, and visitors. It should also be noted that other recommended strategies (such as park-and-rides) depend on implementing this strategy and creating at least some level of parking restrictions. Implementing the recommended parking strategy categories sequentially has the additional benefit of not creating false choices between doing nothing and only implementing paid parking.

Key Issue - Sixth Street Traffic

This issue was highlighted by local residents, with the concern being that traffic on Sixth Street through Crested Butte creates east-west travel barriers, especially for pedestrians.

Analysis & Recommendations

There are two major dynamics to this issue: Managing traffic on Sixth Street through town, and maximizing pedestrian safety. Each of these is discussed as follows:

Managing traffic: The objective of this dynamic is twofold. First is to reduce traffic or at least limit traffic volume increases on the highway through encouraging transit use. Second is to "calm" traffic through town by enforcing the speed limit and through street design strategies such as narrow lanes that discourage "blow and go" driving behavior.

Maximizing pedestrian safety: The recent re-construction of the four-way stop is an important contribution to pedestrian safety. The four-way stop at 90-degree angles, wide crosswalks, relatively short crossing distance, and good visibility are the most important components to pedestrian safety. Other important components include good signage, short block lengths, and multiple crossing opportunities to establish an environment and awareness for drivers that pedestrian (and bicyclist) presence, opportunities, and safety is important and should be respected.

One option often considered is a grade-separated crossing which can take the form of a pedestrian bridge or an underpass. These are both very expensive options that may be impractical given the recent significant investment in the four-way stop intersection. A pedestrian bridge would also have visual impacts. Given their costs, underpasses are most ideal where changing grade/elevation - often associated with drainage or natural water features - presents such an opportunity. In the environment of short block lengths and multiple crossing opportunities that already exists in Crested Butte, maximizing those opportunities is more effective.

To the extent that a future opportunity arises to consider a grade-separated pedestrian crossing, the following guidance is recommended:

1. Pedestrian hourly volume should be more than 300 in the four highest continuous hour periods, if vehicle speed is more than 40 mph and the proposed site is in an urban area and not over or under a freeway. Otherwise, pedestrian volume should be more than 100 in the four highest continuous hour periods.
2. Motor vehicle volume should be more than 10,000 in the same four hour period; or average daily traffic (ADT) is greater than 35,000 if speed is over 40 mph and the proposed site is in an urban area.
3. If these two conditions are not met, motor vehicle volume should be more than 7,500 in the four hours or have an ADT greater than 25,000.

In addition to high motor vehicle traffic and pedestrian traffic volumes, as many of the following conditions as possible should also be met:

- A large number of young children who must regularly cross (particularly at locations near schools).
- No convenient alternative crossing places nearby.
- Funding and a specific need for the overpass/ underpass.
- An extreme hazard for pedestrians.

CB South & Adjacent Neighborhoods - Context

CB South and adjacent neighborhoods south of Crested Butte represent a large residential population base and a regional transportation opportunity. However, unlike Gunnison and Crested Butte, which are easier to serve with transit service because they are both relatively dense, mixed-use, compact communities with well-developed street grid networks, CB South and adjacent communities are very difficult to penetrate with transit service. This is because of these neighborhoods' lower density, winding street network, lack of mixed land uses in close proximity, and separation from the Highway. Additionally, their demographic and socioeconomic profiles do not correlate as strongly to potential transit ridership as in Crested Butte, Mt. Crested Butte, and Gunnison.

Key Issue - Increasing Transit Service Access

While noted by the GVRTA Board as not the most pressing technical issue, increasing transit service to these areas, especially CB South, is the most important public involvement issue identified through the planning process and a major impetus for this Plan Update. It is also an opportunity to expand the local market for regional bus service and, by dis-incentivizing drive-alone commuting to Crested Butte and Mt. Crested Butte, an important component to achieving the mode-shift and parking objectives discussed previously.

Feedback from local residents indicate they view this issue from at least three perspectives. First is the idea of equity and fairness - they pay sales tax to support regional bus service but do not receive the same access to transit or direct service. (However, it should be noted that CB South residents pay sales tax primarily in Crested Butte, Mt. Crested Butte, or in Gunnison, where transit service is provided.) Secondly are issues of safety and convenience in accessing regional service along the side of Highway 135 and having to cross the highway to board/alight the bus. Third, residents have indicated there is latent demand for transit service geared towards commuting, school trips, to/from CBMR, and other trip purposes and destinations for which viable alternatives to driving are currently lacking.

Options

There are three potential options for increasing transit service in the area: 1) establish a route traversing the neighborhood and providing direct service ; 2) provide service to a centralized point within the neighborhood; 3) provide park-and-ride service along Highway 135.

Options Analysis

Providing direct neighborhood service would be cost prohibitive on a cost per rider basis because of the trip length (approximately 18 miles) and high operating costs versus relatively low anticipated ridership. Depending on various parameters, such service would cost approximately $18-$20 per rider, almost 10 times the current (2007) $1.93 cost per rider used by Mountain Express. This is primarily due to the significant route length and time needed to cover even a portion of the neighborhood.

Such service would also generate relatively low ridership due to the very low penetration of the service (number and percent of residences served) and lower per capita ridership rates as compared to more transit-supportive areas like Crested Butte. Such service would also require additional capital and operating funding at a time when fuel costs are rising dramatically and local sales tax revenue collections are decreasing.

Providing service to a centralized point within the area would be difficult because it would burden regional bus operations (which would have to divert off the highway, adding significant time to a tight route schedule), still be inaccessible to large numbers of residents, and would require construction of a parking lot large enough to hold park-and-ride vehicles without consuming parking for local businesses and residents. Also important is the "time-efficiency" perception of the potential rider.

Once a driver parks and exits a personal vehicle, the perception of time spent waiting for the bus and completing the trip on the bus is significantly longer than reality. Accordingly, transferring from car to bus at the point where the remaining bus trip is direct and short incentivizes ridership much more than transferring within the neighborhood where the remaining bus trip is longer, slower, and less direct (by having to leave the neighborhood and return to the highway to then complete the trip).

Another option that has been suggested is to implement new local service between CB South and Crested Butte. This option would also be cost-prohibitive for the reasons discussed above, and would create two additional challenges: 1) Lengthening transit travel times to/from Gunnison by first routing passengers to Crested Butte to transfer, and 2) Creating either one very long, circuitous route to serve CB South and adjacent communities or multiple new routes serving each community.

Recommendations

Providing park-and-ride service at the re-aligned intersection of Cement Creek Road and SH 135 would be the most cost-efficient way to serve this unique area in the short-term. While there are costs involved in realigning the intersection to create available land for parking and then to build a parking lot, these costs can be amortized over time.

Stopping along the highway would least impact existing regional bus operations and should ensure the most cost-efficient ridership by gathering potential riders in one location nearby, but not impacting, adjacent neighborhoods. This option would also have the benefit of reducing vehicular traffic and parking pressure in Crested Butte, but would also depend on increased parking management in town for this option to be viable since the length and time distance between Crested Butte and CB South is relatively short, normally a dis-incentive to park-and-rides.

Additionally, a hard-surface path (sidewalk or multi-use path) should be constructed along Cement Creek Road to the highway to provide safe access for those who can walk or bicycle to the bus stop. The park-and-ride stop itself should have enclosed shelters and, ideally, next-bus arrival information.

Along with managing parking in Crested Butte as discussed above, the key to ensuring high ridership at a CB South park-and-ride stop is to provide convenient service (service at the times of day/evening needed by local residents) and frequent service (as justified) to make transit appealing and competitive with driving alone.

Park-and-ride transit service needs to be customized to the market it is serving. Some park-and-ride lots fill up with daytime commuters, meaning frequent transit service is needed only at a few strategic times during the day (such as early morning and early evening). Other lots have lower but more frequent turnover throughout the day.

The advantage of the park-and-ride option for regional RTA service is that operations can be tailored to local conditions. For example, the regional bus does not have to stop at the park-and-ride lot on every trip, but having the lot adjacent to the Highway means that the regional service can maintain a consistent schedule and operations throughout the day whether a particular bus stops at the lot or not.

In the longer term, depending on ridership, there may eventually be a need to provide separate service from a CB South park-and-ride lot to Crested Butte. Ridership counts and ongoing on-board passenger surveys should be used to gauge the potential and timing for such additional service.

Another potential transit service option is for residents of CB South (and other neighborhoods as desired) to form a special assessment district to fund direct transit service. While such service is not recommended as a cost-efficient use of regional transit revenues, there is no reason that residents willing to assess themselves to fund such service shouldn't be able to do so. It would require a service agreement with Mountain Express or the GVRTA to operate the service, with the objective of such an arrangement to be revenue-neutral for the transit agency.

Key Issue - Bicycle/Pedestrian Mobility

Several entities have been working towards implementing a continuous bicycle/pedestrian path from Crested Butte to CB South (and eventually to Gunnison). Conversations with Crested Butte staff indicated several challenges in doing so, particularly with fragmented parcel ownership, uncooperative land owners, and topographic and environmental constraints.

Analysis and Recommendations

Like traffic management on Gothic Road, this is a situation in which the region should continue to pursue the strategies already underway.

A pathway completely separated from Highway 135 is appropriate given the high speeds and narrow ROW of the highway. While bicyclists (but not pedestrians) can and do "share the road" using the shoulders, this is potentially unsafe and not ideal for all but the most experienced bicyclists. Narrow shoulders and snow banks are additional impediments.

The best short-term solution is to extend the reach of the bicycle/pedestrian network using the regional transit system. Maximizing opportunities for bikes on buses provides de-facto connections in lieu of physical pathways. Doing so also increases multimodal and travel choice opportunities other than driving alone.

Existing Multiuse Pathway in Crested Butte South

Bicycle Parking at Cement Creek Road and SH 135

Conclusion

This chapter focuses on analysis and recommendations addressing issues affecting the northern end of the study area - Mt. Crested Butte, Crested Butte, CB South, and adjacent communities. The issues and challenges are complex, with implications both local and regional. The ultimate intended outcome is to provide tools and strategies to help strengthen the existing transit network and to encourage balanced travel choices that enhance community livability and personal mobility.

Introduction

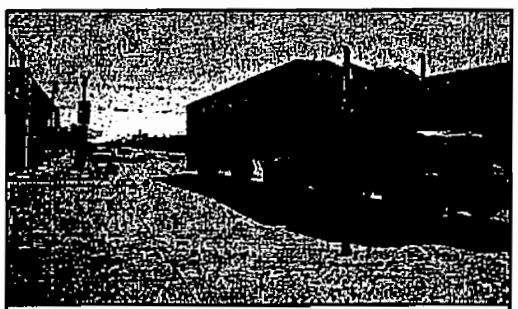
This chapter provides analysis and recommended strategies, policies, and investments addressing the priority transportation issues discussed in Chapter 1 for the Gunnison area as well as regionally-significant issues. As noted in Chapter 3, in doing so, the recommendations are intended to build upon progress already made and successes achieved while being realistic about feasible options going forward.

Gunnison - Context

Gunnison is the most-populated community in the Valley and is the retail, government, aviation, and educational hub for the region. Significant potential new development - particularly Gunnison Rising - portend many new houses, jobs, and retail establishments within Gunnison. From a transportation perspective, Gunnison is the regional crossroads for drive-in tourists and visitors, freight and goods traffic, and for visitors flying into the Gunnison-Crested Butte Regional Airport.

Key Issue - Proposed Bypass

The City of Gunnison is considering the potential for a bypass connecting US 50 to SH 135 in the northeast quadrant of the city. The bypass would begin east of Escalante Drive within the proposed Gunnison Rising project, curve around the eastern edge of Western State College, and intersect SH 135 approximately at Spencer Avenue on the north edge of town. The purpose of the corridor would be to provide an alternate route for truck traffic and other regional through traffic to decrease impacts within downtown Gunnison.



US 50 in Gunnison

Key Issue Analysis

So called "bypass" roadways can have both significant benefits and impacts. Most importantly, however, is that bypasses almost never function as originally intended. Almost universally, bypasses constructed to absorb regional traffic also end up generating new local trips. This is because the presence of such major new infrastructure significantly increases adjacent land values, accelerating their development. While such tools as land preservation and transfer of development rights strategies could be used in response, the history of their effectiveness in actually doing so is very poor.

It is appropriate for Gunnison to address the existing and potential traffic impacts on its downtown core, but a bypass solution is a double-edged sword. What will the economic impacts to downtown be of both drawing away tourist traffic and opening new lands to development that may ultimately compete with downtown? And, planned poorly, there is the potential to create traffic problems within the bypass corridor rather than its intent of solving traffic issues along the SH 135 and US 50 corridors.

Obviously, constructing a bypass corridor will be extremely expensive, perhaps prohibitively so in the current economic climate where materials and construction unit costs continue to increase dramatically. There will also be environmental and socioeconomic impacts to address.

Recommendations

This Plan recommends two primary courses of action; the recommendations are not mutually exclusive. One recommendation is for the City and County to preserve the ability to construct the bypass in the future, primarily through obtaining or reserving ROW. Because the proposed route is currently located in the County with potential annexation into the City, both entities should jointly work to prepare and officially adopt a roadway master plan that specifically defines the corridor alignment and ROW requirements. The plan should also set the corridor centerline and designate the corridor as a collector roadway for cross-section design and ROW purposes. As Gunnison Rising or other development projects come forward whose traffic impact mitigation programs could benefit from

the bypass, the City could negotiate with these projects for "fairshare" funding of bypass project development and implementation costs.

If the bypass does become a reality, it is critical that it include certain design characteristics. Local staff correctly characterize the corridor as another link in the city's grid street network rather than as a "bypass." Accordingly, the roadway should be designed and constructed to collector street standards. This means that no residential driveways should front directly on the corridor, which would ideally include a complementary mix of land uses. The existing city street grid network should be fully incorporated to connect with and cross the corridor.

To the extent that block lengths smaller than the existing street grid can be incorporated, they should be 330 feet in length. Block sizes should not be longer than 528 feet. The corridor should have a speed limit no greater than 35 mph, and a two lane cross-section with meaningful transit and bicycle/pedestrian infrastructure. The objective is a "complete street" corridor that provides balanced travel choices in a lively, mixed-use environment. Anything less would create a high-speed corridor that excludes walking, biking, and transit travel options. It would also cause safety issues with unsafe vehicle speeds that would be inconsistent with the residential character of the corridor.

A second recommendation is to retrofit both US 50 and SH 135 over time into complete street corridors. Their expansive ROW, especially along US 50, provide an important opportunity to do so. Such complete street corridors, capable of handling much more vehicle traffic than currently exists on either roadway, are designed to encourage safe access and use for driving, walking, bicycling, and riding the bus by those of any age and mobility. While specific design elements and cross-sections vary based on local conditions, complete streets can include bicycle lanes, sidewalks, medians, wide shoulders, bus pullouts, raised crosswalks, and other features. The objective of creating complete streets (especially along SH 135) is to "calm" traffic (but not reduce capacity) and promote balanced travel choices. These are both ingredients for supporting downtown Gunnison's lively, mixed use environment and helping ensure its vibrancy into the future.

This last point is worth emphasizing. Roadway corridors tend to reflect their surrounding land uses, and vice versa. Multi-lane, high-speed roadways tend to be located in, and encourage, areas of "strip development" with low economic value and poor or non-existent walking, biking, and transit accommodations. In contrast, vibrant districts, like downtowns, tend to have well-designed streets that move vehicle traffic steadily while encouraging safe and convenient walking, biking, and transit use. As traffic increases on both corridors over time and new development continues away from the city core, downtown Gunnison will need to stay vigilant about remaining both economically competitive and as a primary center for both locals and visitors. Regardless of the proposed bypass, retrofitting SH 135 and US 50 into complete streets is an important strategy available to address regional traffic concerns and downtown vitality.

Key Issue - Gunnison Transit Circulator

Currently, the RTA's regional service includes several stops in Gunnison on its way to/from up-valley. Local residents and stakeholders questioned whether a stand-alone transit circulator would be viable for Gunnison as one way to meet perceived latent demand for increased local transit service.

Downtown Gunnison

Key Issue Analysis

Transit circulators are characterized by relatively short routes with frequent service that connect key destinations and are geared towards "choice riders." An important planning principle for circulators is that it is not sufficient to only connect residential with commercial.

Instead, circulators should connect at least three unique destinations, including institutional, specialty retail, employment, etc. Additionally, a transit circulator should attract at least 5,000 riders per day and ideally run every 10-20 minutes. Finally, while a stand-alone circulator might act to feed and absorb some ridership to/from the regional transit service, its potential viability should not depend on this function, but rather by its ability to serve its own market niche.

Transit Circulator Criteria
- Connect at least three unique destinations
- Attract at least 5,000 riders per day
- Operate on 10-20 minute headways or better
- Be competitive with auto travel

While Gunnison does have some unique destinations, such as downtown and Western State College, it does not have the absolute population or population density to support "choice rider"-oriented transit service anywhere near the parameters described above. Additionally, the city's wide arterials, lack of congestion, and plentiful free parking all disincentivize transit ridership as a viable alternative to driving. Even if viable, new revenues would have to be identified to fund this new service.

However, there is an opportunity to coordinate the provision of social service transportation operations by several providers within the Gunnison area for those who depend on such services and cannot use traditional transit service. Service coordination, such as through a "brokered" system (where one entity coordinates service needs and availability through several providers), may increase system efficiencies and responsiveness. (This recommendation parallels the one made in the original Transportation Plan.)

Recommendations

As an initial step, the City or GVRTA should take the lead on coordinating the provision of social service transportation operations. Over time, as Gunnison continues to grow and develop, the potential for circulator transit service should be monitored in the context of the criteria noted above. It is difficult to reliably estimate potential ridership for such service given the many factors involved - age, income, vehicle ownership, trip origins and destinations, disincentive to drive, etc. - but the City and GVRTA should continue to explore partnerships for potential test service, such as with Western State College.

Diagonal Parking in Downtown Gunnison

Key Issue - Parking Management

Through the community engagement process, parking management was identified as an issue, though not to the degree expressed in Crested Butte. Residents and stakeholders in Gunnison noted that parking is generally plentiful, but there is an occasional parking problem (or perception of a problem), especially when it is difficult for a driver to park close to his/her destination in downtown.

Recommendations

Many of the parking management policies and strategies for Crested Butte discussed in Chapter 3 would also apply to Gunnison, though perhaps on a smaller scale. Strategically, it should be noted that more restrictive parking policy is an important component of accomplishing increased local transit and other travel choice objectives. While parking supply should be sufficient, plentiful free parking discourages transit use. Conversely, increasing parking turnover may also increase economic vitality, by allowing more customers access to the same parking supply over time.

Key Issue - Pedestrian Safety

Gunnison has been working over time to increase the amount of sidewalks, bicycle lanes, trails access, and other bicycle/pedestrian infrastructure.

The city's dense street grid enhances crossing and travel path opportunities for walking and biking, as well as helping to disperse vehicle traffic. However, the relatively wide streets encourage higher vehicle speeds and make pedestrian crossings more difficult and unsafe.

Recommendations

The complete streets strategy recommended previously for SH 135 and US 50 would also significantly enhance walking and biking access and safety in downtown, the most important area in Gunnison (along with Western State College) for these activities.

In addition, the City's planning process should continue to emphasize these bicycle/pedestrian objectives:

- Eliminating gaps in the current network (using different facility types)
- Connecting residential areas with schools
- Increasing multimodal linkages, particularly to bus stops
- Requiring all new and retrofit roadway projects to incorporate bicycle/pedestrian infrastructure

As the bicycle/pedestrian network continues to expand and mature, an added level of planning sophistication can be implemented that considers the following factors to identify appropriate bicycle/pedestrian investments:

- Rating the supportiveness of the surrounding environment (such as pedestrian unfriendly to pedestrian friendly)
- Considering the types of trip purpose - recreational, commuting, etc.
- Assessing experience and comfort of potential users

These and other factors can help determine the need for and most appropriate type of bicycle/pedestrian facility. The overall objective should be to make walking and biking as safe and convenient as driving, especially for shorter trips that would otherwise require a car.

Regional Issues - Context

The region has made great strides since adoption of the original Transportation Plan. As discussed in Chapter 1, the most significant accomplishment is the formation of the GVRTA and implementation of regional transit service. The GVRTA is seeking renewal of its existing sales tax funding in this November's election.

Yet, the region is also facing challenges. Sales tax revenue collections have decreased approximately 10 percent so far in 2008. Oil and fuel prices have risen substantially in recent months, and, while also falling somewhat, fuel prices have become increasingly volatile. As a result, it is more expensive and difficult to provide increased transit service (or even maintain existing service) at the very moment when high gas prices are shifting drivers to transit nationally in record numbers. (This trend is much less pronounced in the Gunnison Valley given its remote mountain location and specialized economy, though fuel prices are still negatively impacting the GVRTA and Mountain Express.) High fuel prices also potentially affect the minimum revenue guarantees the GVRTA uses to subsidize local airline service. The increasingly challenging economic environment for the aviation industry creates pressure to reduce or eliminate service to small mountain communities like the Gunnison Valley in favor of more profitable urban service.

While current conditions should not be described with undeserved negativity, so should they also be acknowledged and considered. Yet, as the economy is always cyclical, the region should hold the longer view when it comes to taking the next step (and the next several steps) regarding regional transportation issues.

The GVRTA Board indicated that the most important regional objective should be to discourage drive-alone trips and incentivize transit ridership. Discussion and analysis of the key issues below occurs in this context.

Key Issue - Fare Policy and Revenues

Currently, all transit service in the Valley is free, including regional service. With decreasing sales tax revenues and rising fuel costs, additional revenues may be needed over time to support and enhance existing service. However, is instituting a fare the best approach to increase revenues?

Key Issue Analysis

The potential for instituting a fare for regional service is not considered lightly. Local residents and stakeholders highlighted the safety issues that existed before the regional service started operating regarding pedestrians on the highway and hitchhiking. There is also an equity issue of charging a fare for service that is already supported by local sales tax. However, transit agencies across the country that are supported by sales tax or other local revenues also charge fares. In this increasingly challenging financial environment, GVRTA should reasonably maximize every source of potential revenue. Charging a fare for regional service more directly connects costs to use, and also allows for incentivizing long-term ridership through fare stratification (how fares vary between different

types of passengers, trip lengths, and number of trips), potentially providing greater ridership and revenue stability over time.

The first consideration was to try to quantify potential fare revenues for policy discussion by the GVRTA Board. There are quantitative relationships, known as elasticities, between transit fares, revenues, and ridership. These elasticities are based on national research, typically in larger urban areas, and do not account for the unique characteristics and context of the Gunnison Valley. According to the national research, there are two primary fare elasticities. One indicates that a 10 percent increase in fare will result in a four percent decrease in ridership, but this can vary considerably by the size of the system, the specific transit mode, the type of rider, and other factors. However, smaller systems in smaller communities, such as in the Gunnison Valley, tend to have a higher fare elasticity. That is, ridership levels are much more affected by fare changes than in larger cities with larger, more established transit systems. The second elasticity is an algebraic equation known formally as the Simpson & Curtin formula, and informally as the shrinkage ratio.

The two tables on this page show the ridership and revenue implications of various potential fare levels using the two elasticity relationships described above. Both are based on average daily ridership for the 2007/08 winter (peak) season. The first table uses the "four percent" elasticity and is calibrated to current financial parameters under which the regional service operates, particularly regarding the daily cost the RTA pays Alpine Express to operate the regional service and how that cost might differ at the $2.00 fare price point. The second table uses the shrinkage ratio and is calibrated to existing daily ridership at the $0.00 (free) fare to predict changes in revenues and ridership in response to various potential fare increases. That the results between the two tables are very different is not unexpected. These calculations are not meant to be precise for this region since, lacking local data, they borrow from national research. Rather, they are meant to illustrate order-of-magnitude relationships between fares, revenues, and ridership.

Based on this analysis, the GVRTA Board indicated that the issue of deciding on whether or not to implement a fare is not paramount at this time. Rather, the Board asked for guidance on the important factors to consider in future deliberations on possibly implementing a fare. Accordingly, major factors include:

- Impact on ridership, both existing riders and the potential to attract new riders
- Amount of potential revenues (gross and net) a fare would generate
- Ability to use new revenues to maintain and expand service
- Availability of other, more palatable, revenue sources
- Additional administrative and capital costs to administer the fare, buy fare machines, and sell transit passes
- Additional route time delay caused by processing fare payments and channeling boarding and alighting

Table 4.1

RTA Transit Service Relationships: Fare, Revenue, Ridership

(Using Standard Elasticity Method)

Adult Fare	Percent Change	Daily Ridership	Percent Change	Farebox Revenue	Net Revenue	Percent Change
$0.00	-100%	168	40%	$0		
$0.25	-88%	162	35%	$41		
$0.50	-75%	156	30%	$78		
$0.75	-63%	150	25%	$113		
$1.00	-50%	144	20%	$144		
$1.25	-38%	138	15%	$173		
$1.50	-25%	132	10%	$198		
$1.75	-13%	126	5%	$221		
$2.00		120		$200	$0	0%
$2.20	10%	115	-4%	$253	$53	27%
$2.50	25%	108	-10%	$270	$70	35%
$2.75	38%	102	-15%	$281	$81	40%
$3.00	50%	96	-20%	$288	$88	44%
$3.25	63%	90	-25%	$293	$93	46%
$3.50	75%	84	-30%	$294	$94	47%
$3.75	88%	78	-35%	$293	$93	46%
$4.00	100%	72	-40%	$288	$88	44%

Note: Daily ridership/revenue estimates based on deviation from base data provided by RTA staff.

Table 4.2

RTA Transit Service Relationships:

Fare, Revenue, Ridership

(Using "Shrinkage Ratio" Method)

Adult Fare	Daily Ridership	Percent Change	Farebox Revenue
$0.00	380	0%	$0
$0.25	348	-8%	$70
$0.50	320	-16%	$128
$0.75	291	-23%	$175
$1.00	263	-31%	$210
$1.25	234	-38%	$234
$1.50	206	-46%	$247
$1.75	177	-53%	$248
$2.00	149	-61%	$238
$2.20	126	-67%	$222
$2.50	92	-76%	$184
$2.75	63	-83%	$140
$3.00	35	-91%	$84
$3.25	6	-98%	$17

Note: Daily ridership/revenue estimates based on deviation from base data provided by RTA staff.

- Ability to increase ridership through monthly passes, "eco-pass" programs, and other fare stratification strategies

As with paid parking, implementing a fare is very controversial, and should be the option of last resort. In the meantime, there are other potential revenue sources that should be considered in lieu of, or at least before, implementing a fare.

For example, the GVRTA should maximize interior and exterior advertizing revenues through on-board placards, exterior ads, and at bus stops (benches and shelters). There are companies who will build bus stop shelters at little or no cost for the right to advertise on them. Another innovative funding source is to partner with local stakeholders to encourage purchase of service levels. A hypothetical example could be Western State College paying the GVRTA to cover the cost of providing campus shuttles. While revenue-neutral for the transit agency, it is one technique for maintaining or expanding service. Under this market-based approach, service is purchased presumably where it is most needed, strengthening the link between transit demand, service provision, and ridership.

The private sector, particularly new development projects, also has a role to play in funding transit service. In mitigating a new development's traffic impact, the developer might pay for ongoing transit service as a means to "remove" a certain number or percentage of vehicle trips from surrounding roadways. Similarly, local merchants might pay for transit service and/or related infrastructure (bus stops/shelters) if a correlation with higher ridership (more customers) could be shown. To come full circle, if paid parking is implemented in the future, revenues could be used in part to fund transit access and service to those lots/spaces, thereby linking paid parking with an additional mobility benefit.

The point of these examples is to illustrate the possibilities with potential revenue sources so that, as noted in the parking discussion in Chapter 3, the choice is not simply between doing nothing or something very controversial.

Recommendations

The GVRTA Board should continue revenue collections and ridership levels to gauge the ongoing need for additional revenue sources. Opportunities for creative transit financing should be pursued as appropriate. As a last resort, the GVRTA should consider implementing a fare for regional service, calibrated to maximize revenues while minimizing ridership losses.

Key Issue - Regional Park-and-Ride Lots

The GVRTA has been considering developing regional park-and-ride (PNR) lots along SH 135 between Gunnison and Crested Butte to increase transit access and ridership.

Key Issue Analysis

PNR lots can be an effective strategy for increasing transitserviceaccessandridershipcost-efficiently, dis-incentivizing vehicle trips, and reducing destination parking pressures. There can be significant up-front land acquisition and infrastructure construction costs, but these costs can be amortized over time. PNR lots can also facilitate special-event/festival parking and transportation. In considering low-density, suburban-style neighborhoods like CB South (discussed in Chapter 3), PNR lots are also the most feasible way to provide new transit access and service to these areas.

There are, however, important elements necessary to ensure the success of this strategy. Lots should generally be located very close to the origin of the trip, and the length and time distance between the trip origin and destination should be great enough that transit can be a viable and competitive option to driving alone to overcome the need to transfer from a private car to a bus and the associated wait time, especially in winter and inclement weather. Similarly, PNR lots are usually less effective the closer they are located to the trip destination. They also depend on strong parking regulations at the destination, as plentiful free parking is a strong dis-incentive for transit use. Additionally, while PNR lots provide a cost-efficient way to gather riders at a central location, this strategy necessarily sacrifices direct neighborhood service.

Cement Creek Road and SH 135 Intersection

The GVRTA is considering PNR lots at the following four locations:

- Clark Boulevard, on the north end of Gunnison
- Ohio Creek Road
- Cement Creek Road at CB South
- Brush Creek Road, just south of Crested Butte

The order in which these lots are constructed depends on much more than latent transit demand. Other factors include land costs/donations and amounts, and in the case of Cement Creek Road, the timing of the intersection realignment to create the PNR parcel.

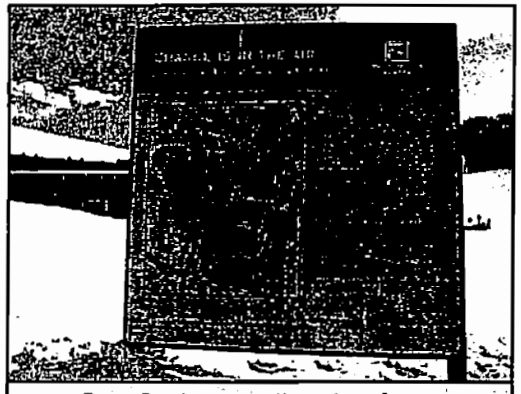
Additionally, as noted by the GVRTA Board, given its location, each lot will have a natural market orientation that service operations should match. For example, given its close proximity to Crested Butte, the Brush Creek lot may primarily serve trips headed to Gunnison. Similarly, the Clark lot may mostly serve trips to Crested Butte and Mt. Crested Butte.

Recommendation
The GVRTA should pursue implementing PNR lots as the best strategy for enhancing regional service and penetrating new suburban markets. Lots should be easily accessible, comfortable and sheltered for waiting, with service oriented toward each lot's natural market orientation.

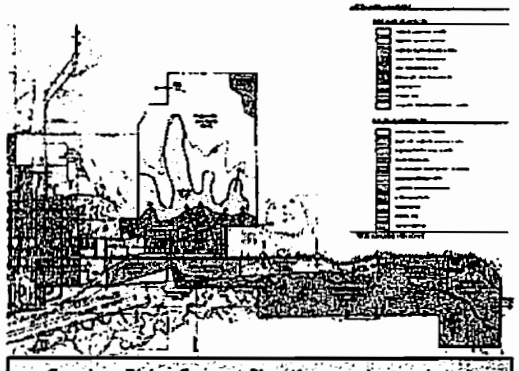
Key Issue - Growth Management

Residents and stakeholders throughout the Valley - especially in Gunnison - expressed concern about how to manage future growth and development and accompanying traffic impacts.

Recommendations
In Colorado, water availability will likely always be the strongest de facto growth management tool, but there are several strategies to encourage smart growth that broadens travel choices and personal mobility. Colorado does not have statewide growth management statutes, but creative localities with initiative have the ability to implement their own strategies.



Future Development at Mountaineer Square



Gunnison Rising Concept Plan (from project website)

Typical growth management strategies involve the following concepts:

- **Land controls:** This set of strategies can include buying open space, implementing transfer of development rights, conservation easements, requiring development clustering and open space, incentivizing infill development, and other tools.
- **Infrastructure:** Two common strategies addressing infrastructure include "adequate public facilities" ordinances that require development to fund or otherwise ensure adequate infrastructure capacity will be available to support the development, and impact fees, which charges development its "fair share" of providing new infrastructure to support growth.

There are also many smart growth tools specifically relating to transportation. One powerful concept is location-efficient development, defined as development that supports the use of all travel modes, especially transit. Such development is characterized by compact, mixed use projects that have strong street and bike/ped connectivity, easy access to transit, and reduced parking requirements. The Appendix includes a checklist of location-efficient development components. Another powerful concept is sustainability, and more specifically, reducing greenhouse gas (GHG) emissions. Such strategies also emphasize compact, mixed use communities that encourage walking, biking, and transit use. A companion strategy is to measure traffic impacts in terms of total person trips - not just vehicle trips - and to provide corresponding mitigation options beyond roadway or intersection widening, such as increasing transit service or encouraging walk/bike trips.

More strategically, smart growth transportation planning at the project development level should emphasize the following objectives:

- Reduce or eliminate the need to make vehicle trips through walking, biking, and transit.
- Encourage vehicle trips to be carpool/high-occupancy vehicle trips.
- Reduce the frequency, length, and duration of drive-alone trips through better land use planning that clusters residential, employment, and retail/commercial uses.

Another way to view smart growth from a transportation perspective and more directly relate new development to regional transit service is to consider a regional "transit capture rate" objective. Also known as transit mode share, this would be a percentage of total trips (either daily or "peak hour" trips) that occur using local and regional transit service. Adopted as policy, it would require new development and redevelopment to demonstrate how additional traffic impacts would address this objective.

A transit mode share target could also be customized by location and time of day/year. For example, the mode share target for trips between Crested Butte and Mt. Crested Butte in ski season would be different than a mode share target for trips between Gunnison and Crested Butte in the summer. As noted in Chapter 2, the best way to establish and monitor transit (and non-auto) mode share is through an ongoing travel diary survey program which also has the benefit of tracking employment, commuting, trip purpose, and other transportation-related measures over time.

Because there is a wealth of material on smart growth transportation planning upon which a separate report could be written, the Appendix contains a list of helpful resources for further information, guidelines, case studies, etc.

Conclusion

This chapter focuses on analysis and recommendations addressing issues affecting the Gunnison area and region-wide issues. As noted in Chapter 3, the issues and challenges are complex, with implications both local and regional. The ultimate intended outcome is to provide tools and strategies to help strengthen the existing transit network and to encourage balanced travel choices that enhance community livability and personal mobility.

Chapter 5: Plan Implementation

Introduction

This chapter provides a framework for implementing the numerous recommendations contained in Chapters 4 and 5. As noted in Chapter 1, this Plan Update addresses the most important issues identified through the community engagement process and is intended to supplement the 1999 Transportation Plan, not replace it.

The region has made great strides in implementing the recommendations of the 1999 Transportation Plan. Table 5.1 shows the implementation status of the major recommendations of the original Plan relative to this 2008 Update using the following categories:

- Accomplished: Items that have been completed.
- Ongoing: Recommendations for which progress has been made and efforts continue, including items that are inherently ongoing with no set completion date.
- Not Accomplished: Still-valid recommendations for which little or no progress has yet been made
- Not Feasible: Recommendations that are no longer applicable
- Plan Update: Previous recommendations that are updated or otherwise addressed as part of this 2008 Update.
- Not Addressed: Recommendations or actions from the 1999 Transportation Plan beyond the scope of the 2008 Update.

Accomplished and ongoing action items are highlighted to demonstrate the regional progress toward achieving the 1999 Plan. As emphasized in Chapter 1, recommendations from the 1999 Plan not specifically addressed or re-visited in this 2008 Update remain valid. Additionally, the 2008 Update responds to new issues not included in the 1999 Plan. Accordingly, both documents together comprise the Upper Gunnison Valley Transportation Plan.

As Chapter 1 also notes, this Plan Update is primarily policy-based rather than projects-based. Therefore, a traditional implementation program that organizes a list of projects by timeframe is not as applicable. Many of the policy recommendations in this Plan Update are either ongoing or apply only as opportunity or need arise.

Even so, there is a logical staging in that certain recommended actions should be completed first before other recommendations can be implemented.

Table 5.1

1999 Transportation Plan - Implementation Status

Public Transit Programs	Status
Service expansion of Mountain Express	Accomplished
Increase subsidy for Shuttle to provide more regional commuter routes	Accomplished
Consolidate social transit service providers operations within Gunnison	Plan Update
Identify corridor for future valley rail	Not Feasible
Form an RTA	Accomplished
Extend transit service to CB South	Plan Update
Initiate all day scheduled valley transit service	Accomplished
Provide shuttle service to remote parking locations south of CB	Plan Update
Provide support for initiation and expansion of taxi service in Gunnison	Not Accomplished
Initiate scheduled fixed route service in Gunnison	Plan Update
Develop special event and RV parking sites served by transit in and around the City of Gunnison	Not Accomplished
Develop gondola from Crested Butte to Mt. Crested Butte	Not Feasible
Plan for valley rail system	Not Accomplished
Motor Vehicle Programs	
Gunnison traffic signal evaluation, optimization, improvements	Ongoing
Improved signing and marking on SH 135 and Gothic Rd	Accomplished
Traffic calming/entry features on regional roadways	Ongoing
Improve Sixth Street bike/ped crossings - Crested Butte	Accomplished
Paved shoulders and turn lanes on Gothic Road	Accomplished
Paved shoulders, turn lanes on SH 135 from Gunnison to Crested Butte	Accomplished
Provide safety improvements along SH 135	Accomplished
Construct scenic pullouts along SH 135	Not Accomplished
Emergency vehicle response improvements	Not Accomplished
Build passing lanes at appropriate locations along SH 135	Not Accomplished
Tunnel for through traffic beneath Sixth Street in Crested Butte	Not Feasible
Non-Motorized Systems	
Develop a comprehensive bicycle and pedestrian improvement plan for Mt. Crested Butte	Ongoing
Develop and implement a "share the road" signage program along SH 135 and Gothic Road	Accomplished
Increased sweeping of shoulders for bicycles - all seasons	Ongoing

table continued on next page

Bicycle parking program - Gunnison, CB, MCB	Ongoing
Improve Sixth Street bike/ped crossings - Crested Butte	Accomplished
Off-street trail between Crested Butte and CB South	Plan Update
Develop and enhance bicycle and pedestrian crossings of roadways throughout the City of Gunnison	Ongoing
Sidewalk improvements program in the City of Gunnison	Ongoing
Safe access to school progras - Gunnison, CB	Ongoing
Sidewalk improvements program - Crested Butte (high traffic streets)	Ongoing
Fully implement the Gunnison County Trails Master Plan	Ongoing
Transportation Demand Management Programs	
Regional employer based TDM program	Not Accomplished
Non-auto tourist promotion	Ongoing
Intercept parking lot south of Crested Butte	Plan Update
Park and ride lot network	Plan Update
Regional community-wide TDM program	Not Accomplished
Comprehensive parking program - Crested Butte	Plan Update
Resident vehicle permits - CB, MCB	Plan Update
Land Use Measures Programs	Not Addressed

Most importantly, recommended parking management strategies should be implemented before transit park-and-ride recommendations so that the former helps create the market for the latter. (However, the time gap between the two should be short.) Similarly, a regional transit mode share objective should be adopted as one means to facilitate stronger growth management controls.

Table 5.2 at the end of this chapter illustrates the recommended implementation program. Recommendations are classified by travel mode, location, and implementation timeframe.

Rather than specific target dates, which are particularly difficult to estimate for policy-based actions, recommendations are classified into three levels of timeframe priority, in particular to show timing and priority relationships to each other, rather than an absolute, artificial timeline. The lead agency for implementation is also identified, though many recommendations require or would benefit from partnerships to implement.

Conclusion and Next Steps

This chapter provides an implementation framework for the recommendations contained in this 2008 Update to the Upper Gunnison Valley Transportation Plan. The most important aspect of implementation is the sequence of implementing certain recommendations relative to others, rather than adhering to a specific timeframe.

There are two other important implementation aspects to consider. First is ongoing performance monitoring and assessment. While many policy-based recommendations do not correspond to quantitative or numerical thresholds or triggers, certain recommendations do, such as the concept of a regional transit mode share target. Other recommendations, particularly regarding the proposed Gunnison Bypass, have very specific policy and quantitative guidance. And, the quantitative guidance contained in the 1999 Plan regarding maximum carrying capacity and other elements remains valid. Finally, other recommendations are situational, meaning they should be pursued only if need or opportunity arise. These include regional transit revenue options and the Gunnison transit circulator. Discussion of the latter, for example, includes policy and quantitative guidance to assess its potential on an ongoing basis.

Finally, as with the 1999 Plan, the funding partners to this 2008 Update should consider adopting all or parts of this Update. Certain recommendations, particularly regarding the Gunnison Bypass, parking management in Crested Butte and Mt. Crested Butte, and the regional mode share target as a growth management tool, would be strengthened by adoption as official policy, either as part of this Plan or separately. Ultimately, the intent is to maximize the usefulness of this Plan over time to assist the region in achieving its transportation objectives.

Table 5.2
2008 Plan Update Implementation Matrix

Travel Mode	2008 Plan Update Recommendation	Recommendation Details	Location	First-Tier Priority	Second-Tier Priority	Third-Tier Priority
				Lead Implementation Agency		
Roadway	Prposed Bypass	- Adopt alignment and ROW - Collector standards - Complete Streets	Gunnison	Gunnison County Gunnison		
	Re-align Cement Crook/SH 135 Intersection	- Realign at 90 degrees	CB South	CDOT Gunnison County		
	Manage Gothic Road Traffic	- Parking management & restrictions - Incentivize transit use - Discourage drive-alone trips - Smart growth planning	Mt. Crested Butte	Mt. Crested Butte CBMR		
Parking	Increase Enforcement	- Target repeat offenders - Eliminate "shuffling"	Crested Butte Gunnison	Gunnison Crested Butte		
	Shift to Other Modes	- Incentivize transit & bike/ped	Gunnison Mt. Crested Butte Crested Butte	Crested Butte Mt. Crested Butte	Gunnison	
	Increase Turnover	- Refine time limit options - Implement paid parking	Gunnison Mt. Crested Butte Crested Butte	Mt. Crested Butte	Crested Butte	Gunnison
Transit	Gunnison Transit Circulator	- Monitor long-term for viability	Gunnison			Gunnison
	Revenues & Funding	- Maximize advertising - Funding partnerships - Implement fare as last resort	Regional	GVRTA		
	CB South - Park-And-Ride	- Cement Creek PNR lot	CB South		GVRTA	
	CB South - Direct Service	- Special Assess. District	CB South	Residents, property owners		
	Regional Park-And-Ride: Up-Valley Trips	- Clark, Ohio Creek, Cement Creek PNR lots	Regional		GVRTA	
	Regional Park-And-Ride: Down-Valley Trips	- Brush Creek PNR lot	Regional			GVRTA
Walk & Bike	Pedestrian Safety	- Roadway design - Ongoing planning	Gunnison Crested Butte	Crested Butte	Gunnison	
	Crested Butte-CB South Connection	- Off-road pathway	CB-CB South		Crested Butte Gunnison County	
Growth & Develop.	Regional Growth Management	- Incentivize transit & balanced travel choices	Regional	Gunnison County Gunnison CB, MCB		

CRESTED BUTTE

MOUNTAIN RESORT

2009 Resort Master Development Plan

Appendix C: Project Implementation Phasing Plan

APPENDIX C: PROJECT IMPLEMENTATION PHASING PLAN

The following table represents CBMR's conceptual on-mountain project implementation priorities over the next ten years, based upon approval. Project implementation is subject to many variables including, but not limited to, internal management decisions, future capital availability, and entitlement processes. Therefore, this table is provided for the reader's benefit but could be modified at any time.

Table C-1 shows the phased plan for on-mountain project implementation. On-mountain projects are expected to occur over the next ten years and have been divided into short-term projects (approximately one to five years), mid-term project (approximately five to eight years) and long-term projects (approximately eight to ten years).

Table C-1:
On-Mountain Project Phasing Summary

Term	Project Name	Improvement
Short	Adult Beginner Carpet	Relocate to Whetstone area
	Peach Tree Lift	Replace rope, chairs, hangers, grips
	Ice Bar	Renovate or replace existing building
	Red Lady Lodge	New building
	Red Lady Lift	Add gondola cars; add chairs for capacity
	Teocalli Bowl Lift	New surface lift
	Snowmaking Pond	New 60M gallon pond in North Village
	Gold Link Lift	Replace with a detachable quad & realign
	Interconnect Gondola	New 6-passenger gondola
	Snodgrass Lift U	New detachable quad (main access lift)
	North Village Gondola Area	New restrooms, food venue & accessory shop
	Base Area Tubing	Relocate to former Adult Carpet area
Mid	Snodgrass Lift T	New fixed grip quad (on west side of mountain)
	Teocalli Lift	Replace with a fixed grip quad
Long	Painter Boy Lift	Replace with a detachable quad
	Snodgrass Mid-mountain	Mid-mountain food venue & accessory shop
	Snodgrass Lift S	New fixed grip quad (on southeast face)
	Prospect Junction	Food venue & accessory shop
	Snodgrass Magic Carpet	New teaching carpet (at mid-mountain restaurant)
	Paradise Lift	Increase capacity with more chairs; 1900 pph to 2400

Notes:
Short Term: ~1 to ~5 years
Mid Term: ~5 to ~8 years
Long Term: ~8 to ~10 years