

Breckenridge Ski Resort



MASTER DEVELOPMENT PLAN

SEPTEMBER 2022



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ACCEPTED BY:



Scott Fitzwilliams
Forest Supervisor
White River National Forest

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PREPARED BY: 

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CHAPTER 1

Introduction

A. WHAT IS A MASTER DEVELOPMENT PLAN?

1. THE PURPOSE OF THIS DOCUMENT

This Mountain Resort Master Development Plan (MDP) is intended to act as the guiding document for the next decade at Breckenridge Ski Resort (BSR). BSR is a large, mature resort and has engaged in the thorough, structured process of master development planning many times over its six decades of operation on public lands. This MDP builds on these past efforts while also looking forward to maintaining and improving the guest experience and sustainability of BSR's operations.

Since BSR's last MDP in 2007, conditions at BSR have changed considerably. This MDP helped BSR reengage with the strategic visioning and comprehensive planning that is integral to the creation of an MDP. The process BSR used is discussed below and outlined in Illustration 1.

The first step in the Master Planning process is to consider and re-establish the overall resort vision and guiding goals based on market needs, resort niche and long-term outlook. The resulting vision and goal statements form the foundation of this MDP. The questions, "what is important to our guests?" and "what makes our resort special?" both inform the vision and goal statements. These statements help guide the resort in answering the question, "where should we invest our time, money and resources?"

Planning + Design Nomenclature

Throughout this document, text highlights (like this one) have been included to explain the various planning and design concepts utilized throughout the MDP process. Further descriptions and explanation of these concepts may be found in the Supplemental Information.

With a vision statement and goals affirmed, the next step is to inventory existing conditions at the resort to identify existing strengths, weaknesses, opportunities, and constraints. This is critical information that goes into the resort planning phase. Details are collected such as the number of lifts and their conditions, the square footage of guest service spaces and how many parking spaces are available. Physical resources are also inventoried to help identify ideal locations to develop or to avoid due to environmental sensitivity.

The next phase of this MDP process is to reanalyze existing capacities of various facility components to determine imbalances within the operation. Collectively, this analysis led to the identification of improvements that would bring existing facilities into better balance, help the resort prioritize projects and help the resort to operate more efficiently. Accomplishing these goals will result in a well-balanced resort, which provides an adequate array of services and experiences



**What makes
our resort
special?**

to satisfy guest expectations for a quality recreation experience. The results of this process are documented in this MDP.

Finally, as a living, dynamic document, this MDP may be amended periodically to reflect innovations in facilities and recreation, as well as changes in the resort. Like this document, amendments will be thoroughly considered to ensure alignment with the strategic vision and goals of BSR.

In addition to acting as a guide for the managers of BSR, the MDP is a vital means of communication between BSR and the US Forest Service (Forest Service). Workshops with the Forest Service were held throughout the process to discuss resort constraints and potential upgrade plan projects. Like many other mountain resorts across the United States, BSR is located largely on public lands and operates under a special use permit (SUP). Specifically, BSR is located on lands managed by the White River National Forest in Colorado on a 40-year ski area SUP. Forest Service SUPs require the preparation of a MDP that identifies the existing and desired conditions and capacity for the resort.

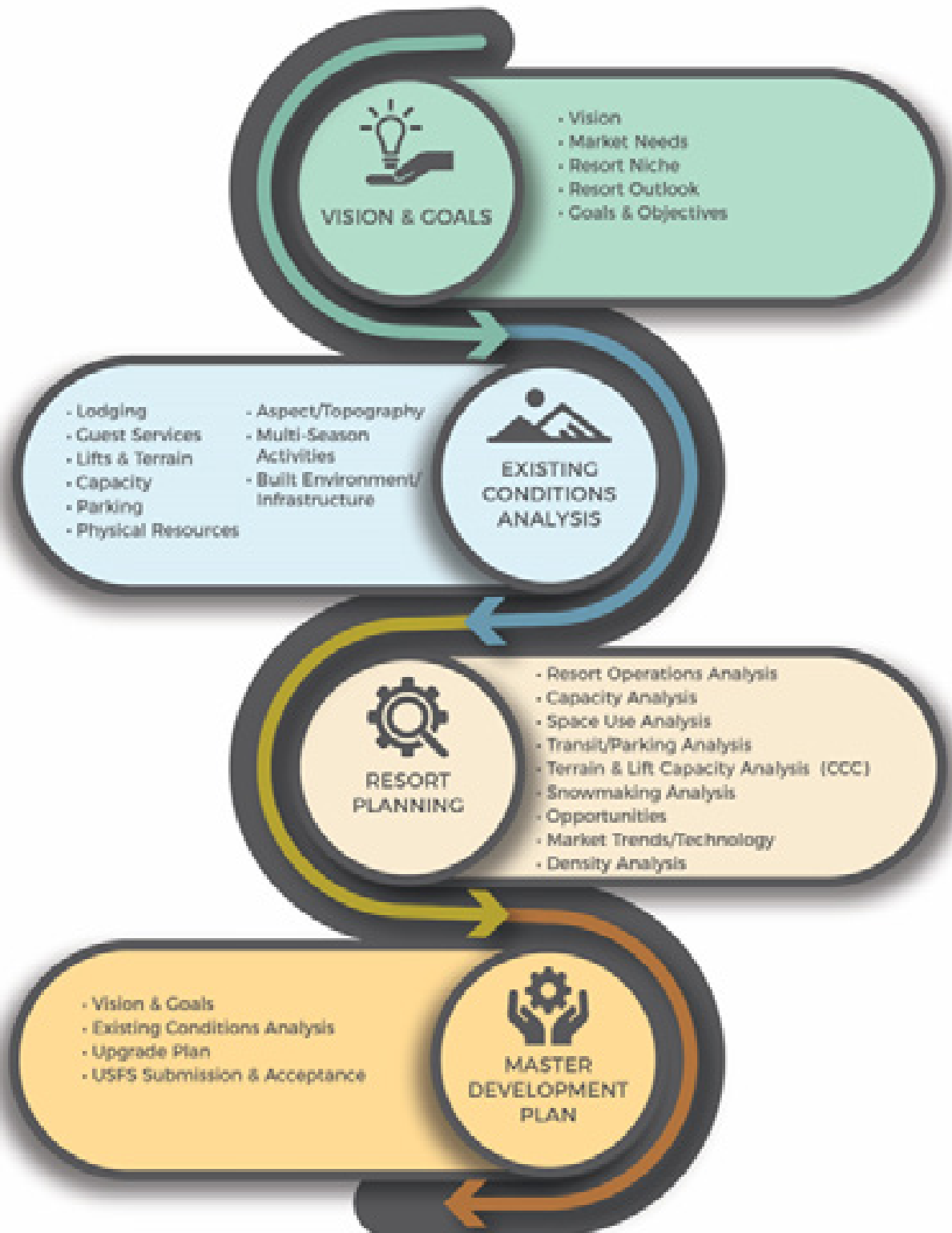
2. THE PROCESS: VISION TO IMPLEMENTATION

This MDP was created using an iterative and collaborative process among the resort management team, Forest Service personnel who administer the SUP, and SE Group planners. While this MDP contains a vision and outlines planned improvements for BSR, the “acceptance” of this document by the Forest Service does not mean that the planned projects are “approved” for construction, nor does it obligate BSR to complete all the projects as planned. Before a project can be constructed on NFS lands, several steps must be completed following the master planning process. Specifically, each project must undergo an environmental analysis and must be authorized by both local and state permitting agencies.

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This MDP fulfills the Forest Service requirement that BSR have an MDP on file, but the acceptance of this plan by the Forest Service does not authorize projects to be implemented. Each project within this MDP will require site-specific analysis and approval per the National Environmental Policy Act (NEPA) prior to implementation.

ILLUSTRATION 1. *The MDP Process*



B. RESORT BACKGROUND

1. LOCATION

BSR is a mountain resort located adjacent to the historic mining Town of Breckenridge in Summit County, Colorado, between Peaks 6 and 10 of the Tenmile Range in the Southern Rocky Mountains. By vehicle, Breckenridge is approximately 80 miles west of Denver, the largest metropolitan area in Colorado, via the Interstate 70 corridor. Without traffic, it is an approximately 1 hour and 45-minute drive from Downtown Denver to Breckenridge by car. Figure 1 provides additional context for the surrounding area.

BSR primarily operates under a Special Use Permit on land managed by the Dillon Ranger District of the White River National Forest (WRNF). BSR’s SUP, the boundaries of which are specified in Figure 2, incorporates about 5,553 acres. In addition, Vail Resorts owns or manages privately held skiable land around the bases of Peak 8 and 9. Between Peak 6 and 7 approximately 10 acres of land is held as a private inholding that is not managed by BSR.

**Located adjacent to the historic
mining Town of Breckenridge**



2. HISTORY

In the early 1960s, Rounds and Porter, a lumber company from Wichita, Kansas sought and received the first permit to operate a ski area along the Tenmile Range. Breckenridge Ski Area first opened to the public in December 1961 with a Heron double chairlift and a T-Bar serving peak 8. The new ski area opened with limited lift capacity and access from the Front Range required travel over Loveland Pass. Even with these constraints the ski area recorded approximately 17,000 skier visits the first season. The popularity of Breckenridge Ski Area continued to grow with the opening of the Eisenhower Tunnel in 1973, which expedited the travel time from the Front Range to Breckenridge. Continuing today and into the foreseeable future, Summit County and Breckenridge will attract visitors from Colorado and beyond for its plentiful winter and summer recreational activities, including hiking, bicycling, sight-seeing, camping, fishing, snowshoeing, and skiing.

From installing the world's first high-speed detachable quad in 1981 to opening some of the best lift-served high-alpine terrain in North America with the Imperial Express chairlift, to pioneering an integrated summer adventure park, Breckenridge has been at the forefront of innovation in the mountain recreation industry. Major ski area accomplishments over the previous 50 years include:

- Opening of Peak 9 in 1971 with two double chairlifts and 12 trails. Skier visits surpassed 220,000 in the 1971/72 season.
- Colorado's first Alpine slide opening at the base of Peak 8 on private lands.
- The world's first high-speed four-person chairlift is installed on Peak 9 in 1981.
- Breckenridge became the first major resort in Colorado to allow snowboarding in 1984.
- Peak 10 opens in 1985 with the installation of the Falcon SuperChair.
- The upper portions of Peaks 7 and 8 open in 1993 for hiking and tree skiing.
- Breckenridge merges with Vail, Beaver Creek and Keystone to form Vail Resorts in 1997.
- Breckenridge installs the country's highest-capacity lift and first double-loading six passenger chairlift (QuickSilver SuperChair at 3,600 people per hour [pph]), which replaced the world's first high-speed lift in 1999.
- Peak 7 opens in 2002 increasing the ski area's intermediate terrain by 30 percent.
- Peak 8 SuperConnect transports skiers from Peak 9 to Peak 8 in 2002.
- The construction of the highest lift in North America (highest high-speed lift in the world) – Imperial Express SuperChair – is completed in 2005 taking guests to 12,840 feet above sea level.
- The BreckConnect Gondola opens in January 2007 linking the Town of Breckenridge to the Peak 7 and 8.
- The Peak 6 expansion in 2013 opens 400 acres of lift-served mostly intermediate lower on the mountain and expert terrain at higher elevations, plus 143 acres of hike-to terrain, expanding the resort's footprint to five peaks along the Tenmile Range.
- Planned in 2013 and implemented 5 years later, Breckenridge installs Epic Discovery, a unique high-mountain adventure park on Peak 8.

Today, BSR is owned and operated by Vail Resorts, Inc. (VRI / NYSE:MTN), a premier mountain resort company which operates 37 resorts in the United States, Canada, and Australia. Throughout the year, BSR provides guests with unparalleled guest services and amenities in keeping with VRI's philosophy of providing "The Experience of a Lifetime." BSR operates several on-mountain and base area restaurants, as well as several guest service facilities and overnight accommodations in and around BSR's base areas.

C. PLAN VISION AND GOALS

The structuring vision for the next ten years at BSR is 'Better not Bigger.' The resort consistently ranks as having among the most skier days per season of any resort in the United States. As a result of its popularity, BSR often experiences significant congestion, which can diminish the guest experience. BSR's goal is not to increase overall skier and rider visits on or around peak days, but rather to concentrate on improving the guest experience and better managing visitation.

To provide an improved guest experience at existing visitation levels, BSR has three major goals that guide the planning process.

First, BSR wants to reduce congestion and wait times at portals to the resort. Ingress analysis of BSR's three main portals at the bases of Peaks 7, 8, and 9 demonstrates that the existing infrastructure does not serve the volume of guests who are using the mountain daily. This analysis is further confirmed by comments in guest experience (GX) surveys, which frequently note frustration with long lines and overcrowding in the base areas.

To resolve the issue of base area overcrowding, BSR plans to take a two-pronged approach. First, the resort plans to invest significant capital in upgrading lifts and other infrastructure in the Peak 8 and Peak 9 base areas. Second, BSR plans to realign existing lifts and construct new trails that will allow intermediate and advanced skiers and riders to circulate the upper mountain without having to return to the base areas.

Second, BSR intends to address the inadequacy of the existing kids' ski school terrain. Much of the beginner infrastructure is in the middle of the base areas of Peak 8 and 9, while on-mountain learning areas on Peak 9 are difficult to access for beginners. The infrastructure for kids' ski and ride school is simultaneously disjointed and overcrowded. To remedy these issues, BSR intends to provide new spaces for children's ski and ride school on Peak 8 and Peak 9. BSR's upgrade plans will enable children's ski and ride school to separate students away from the crowded base areas and teach them in a comfortable learning environment.

The final goal of BSR's ten-year outlook is modernizing aging lift infrastructure to increase guest comfort and streamline resort operations. BSR operates multiple older fixed-grip chairs from the 1970s and 1980s. These lifts are slow and are growing increasingly difficult to maintain. Furthermore, for several of these Riblets, the alignment of these lifts is suboptimal for circulation in the resort as it exists now. In addition, several of BSR's detachable quads were constructed in the 1990s and are beginning to show signs of wear. Much of BSR's ten-year improvement outlook involves upgrading and realigning lifts to modernize the lift network and suit the needs of the resort as it is currently laid out.

D. SUMMARY OF PHYSICAL CONDITIONS INVENTORY

Like the design criteria, physical conditions at BSR remain much as they were when inventoried in 2007 with a few notable exceptions. This document incorporates by reference the previous inventory of physical resources (Chapter 3 of the 2007 MDP), with the following addenda.

1. CLIMATE CHANGE

Anthropogenic global warming, caused by human emissions of greenhouse gasses, has already caused shifts in the global climate and is projected to cause more in the coming decade and century.¹

Nearby SNOTEL data suggests that, unlike many other ski resorts, BSR has not experienced any significant decrease in snowpack. This is likely due in part to BSR's high elevation limiting significant heating events in the winter months. Nevertheless, BSR has experienced a 1 to 2 degree increase in average winter temperature over the past decade and will likely to continue to experience warming into the future.²

In addition to the direct consequences of warming on average temperature and snowpack, BSR is likely to experience several secondary effects as the result of climate change. This includes the potential proliferation of invasive species, an increased likelihood of extreme precipitation events and landslides, as well as a marked increase in summer wildfires. The Multivariate Adaptive Constructed Analogs (MACA) model predicts a 163 percent increase in very large wildfires in Summit County, where Breckenridge operates.³ Planning at BSR should account for the numerous potential risks that climate change poses to the resort infrastructure and operations and take steps to mitigate and adapt to them.

Under Executive Order 14005, Part 2, Section 204, the Forest Service is committed to managing forest land to address the climate crisis.⁴ Furthermore, BSR's parent, Vail Resorts is committed to both mitigating and adapting to climate change both under the company's own EpicPromise mission and the goals toward Commitment to Zero, and the multi-resort Climate Collaborative Charter.⁵ Future projects are BSR should be considered with an eye towards mitigating climate impact, as well as adapting to the shifts that will occur as a result of climate change. Actions should be supported by evidence-based climate modeling and an understanding of resort conditions in relationship to the mountain's climate and ecosystem.

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- 1 IPCC Core Writing Team. 2014. Climate Change 2014: Synthesis Report. IPCC Assessment Reports (Geneva, Switzerland: Intergovernmental Panel on Climate Change, 2014).
 - 2 Vose, Russell S., Applequist, Scott, Squires, Mike, Durre, Imke, Menne, Matthew J., Williams, Claude N. Jr., Fenimore, Chris, Gleason, Karin, and Arndt, Derek. 2014. NOAA Monthly U.S. Climate Gridded Dataset (NCLimGrid), Version 1. NOAA National Centers for Environmental Information. July 2021. Location: -106.037778, 39.481667. <https://www.ncei.noaa.gov/access/metadata/landing-page/bin/iso?id=gov.noaa.ncdc:C00332>.
 - 3 Abatzoglou, John T., and Timothy J. Brown. 2021. A Comparison of Statistical Downscaling Methods Suited for Wildfire Applications: Statistical Downscaling for Wildfire Applications. *International Journal of Climatology* 32, no. 5 (April 2012): 772–80. <https://doi.org/10.1002/joc.2312>.
 - 4 Executive Office of the President. 2021. Executive Order on Tackling the Climate Crisis at Home and Abroad. 7619 86 FR § 204 (2021).
 - 5 Collaborative Charter. June 2021. <https://www.alterramtnc.com/assets/Climate-Charter-Pledge.pdf>.



**Grow better
not bigger**

E. SUMMARY OF THE UPGRADE PLAN

The Upgrade Plan, detailed in Chapter 4 and illustrated in Figure 8, implements the vision of BSR over the next ten to fifteen years by allowing the resort to grow *Better not Bigger*. It will align BSR's strategic goals with the interests of the community and of Vail Resort's stakeholders.

1. LIFTS

- Peak 8 Lift Projects
 - › Upgrade of Rip's Ride (7-Chair) to a high-speed quad
 - › Installation of new beginner's lifts between *Trygve's* and *Lower Crosscut* ski trails
 - › Upgrade 5-Chair to a high-speed quad
 - › Upgrade 6-Chair to a high-speed quad
- Peak 9 Lift Projects
 - › Installation of a new Frontier gondola to access new Peak 9 learning area
 - › Install carpets to better serve Peak 9 learning area
 - › Upgrade A-Chair to a high-speed quad
 - › Upgrade C-Chair to a high-speed 6-person lift on an extended alignment
 - › Replace E-Chair to a high-speed quad
- Other Lift Projects
 - › Two new Peak 7 carpet conveyors
 - › Installation of Gold Rush Gondola between Gold Rush parking lot and existing Gondola Lot
 - › Replacement of lift haul ropes and other lift maintenance, as needed

2. TERRAIN

- Peak 6 Terrain Projects
 - › Construction of connector trail between *Euphoria* and *Barton Breezeway* ski trails
 - › Further clearing of terrain south of Zendo Chair
- Peak 7 Terrain Projects
 - › Widening of *Claimjumper* and *Pioneer* ski trails, gladding on *Lower Forget-Me-Not*
 - › Clearing of additional infill trails between Peak 7 and Peak 8

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- Peak 8 Terrain Projects
 - › Development of new beginner pod at the base of Peak 8
 - › Construction of *Upper Frosty's Freeway* ski trail
 - › Glading and forest health management south of *Middle Four O' Clock* ski trail
 - › Expansion of Dragon Trail Kids' adventure zone
- Peak 9 Terrain Projects
 - › Development of new *Frontier* beginner terrain
 - › Glading and forest health management southeast of *Briar Rose* ski trail
 - › *Windows* glading and egress improvements
 - › *Needles Eye* terrain glading and forest health management
 - › Construction of Peak 9 to 10 connector skiway
 - › *Volunteer to Mine Shaft* connector and trail improvements
- Peak 10 Terrain Projects
 - › Construction of 8 new infill trails to the north and south of Falcon SuperChair
- Miscellaneous Terrain Projects
 - › New snowcat winch points
 - › Miscellaneous trail widening and connections
 - › Snow fencing and snow retention projects

3. GUEST SERVICES

- Installation of Pioneer Crossing north-east deck and seating area and facility improvements
- Improvements to TenMile Station

4. RESORT OPERATIONS

- Snowmaking Projects
 - › Maggie pond intake and pumphouse rebuild
 - › Snowmaking on *Frontier*, *Lower Sawmill* and *Cashier*
 - › Compressor pump and cooling system upgrades
 - › Miscellaneous replacements and automation
- Ski Patrol Projects
 - › Relocation of Peak 7 avalauncher
 - › Installation of remote avalanche system
 - › Installation of lift evacuation training site on Peak 9

5. SUMMER PROJECTS

- Construction of Peak 7 mountain coaster
- Construction of Peak 7 summer tubing hill
- Construction of Peak 7 and 8 bike trails and reroutes
- Construction of Peak 8 hiking trail
- Construction of e-bike and climbing trails
- Construction of suspension bridge from Alpine Camp



CHAPTER 2

Existing Conditions

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

The overall balance of the existing resort is evaluated by calculating the capacities of various facility components and then comparing these capacities to the resort's current Comfortable Carrying Capacity (CCC). This examination of capacities helps to identify BSR's strengths, weaknesses, opportunities, and constraints as a resort. The next step is the identification of improvements that would bring the existing facilities into better equilibrium. This, in turn, will assist the resort in meeting the ever-changing expectations of its market. Accomplishing these objectives will result in a well-balanced resort that provides an adequate array of services and experiences capable of satisfying guests expectations for a quality recreation experience. The examination of existing facilities in this chapter correlates with Figures 4-8.

Gorgeous views and thrilling high-alpine terrain



A. SUMMARY OF THE EXISTING GUEST EXPERIENCE

The guest experience at BSR covers a spectrum of year-round recreational activities, from alpine skiing in the winter to hiking, mountain adventures and lift-served mountain biking in the summer. BSR identifies itself as the home of the “Breck Effect,” the Tenmile Range’s infectious ability to encourage guests to test their limits. No matter the age or ability level, regional, national, and international guests come to push themselves out of their comfort zones and enjoy what the town and the resort of Breckenridge have to offer.

The winter guest experience at BSR is characterized by gorgeous views, plentiful snow, thrilling high-alpine terrain and a long season. BSR receives an average of 300 inches of snowfall a year and offers skiers and riders of all levels a chance to explore its high alpine terrain. Because of its elevation, BSR’s snow melts later than that of most surrounding resorts, meaning the resort is often able to stay open to skiers until May. In addition to skiing and riding, BSR also operates the GoldRunner mountain coaster at the base of Peak 8 during the winter. At the end of the day, BSR and the Town of Breckenridge both offer a variety of charming après ski options benefitting a mountain resort town.

BSR’s unparalleled winter experience makes it one of the most popular ski destinations in North America. However, this popularity is a double-edged sword that can diminish the guest experience at the resort. BSR experiences a number of days each season above its CCC. This leads to long lift lines and overcrowding of base areas, cafeterias, parking lots and terrain. These problems are further exacerbated by the alignments of the lift and terrain network, which tend to limit skiers’ and riders’ ability to lap the upper mountain, instead driving many skiers back to the base area lifts at the end of many runs.

While BSR and Vail Resorts remain committed to ensuring that everyone who wishes to can enjoy the mountains, the existing situation has a detrimental impact on the guest experience. Many complain on guest experience (GX) surveys of long lines and overcrowding. This MDP addresses the problems created by BSR’s popularity by creating a terrain and lift networks that strives to accommodate the regular surges in visitation that occur at BSR.

In the summer BSR offers opportunities for everyone from the experienced mountain adventurer to the new-to-the-mountains family. BSR operates primarily out of Peak 8 base area and at the top of the Colorado SuperChair in the summer. At the base area, BSR provides, among other activities, mini-golf, mountain coaster rides, an alpine slide, and a kids zipline. The Colorado SuperChair also operates out of the Peak 8 base area, and provides, scenic lift rides, mountain bike haul, as well as access to the high-elevation Alpine Camp at Vista Haus. At Alpine Camp, guests can experience a climbing wall, a challenge course, and a scenic overlook tower.

In addition to summer and winter outdoor recreation opportunities, BSR provides a variety of amenities, services, and events. In winter, food is available at four on-mountain locations and five base-area eating establishments. In summer, three of these restaurants, Vista Haus on-mountain, and Ski Hill Grill and Sevens Restaurant at the base areas, are open.

B. EXISTING LIFT NETWORK

BSR currently operates a lift network consisting of 12 detachable chairlifts, 8 fixed-grip chairlifts, 4 surface lifts and 8 beginner carpets. A detailed breakdown of the specifications of these lifts can be found in Table 1. Of the 32 chairlifts, surface lifts and carpets, 8 are located entirely on private lands. These lifts are marked with a star (*) in the lift specification table.

The core detachable lifts in BSR's lift network effectively serve the terrain network of Breckenridge. In addition, while most detachable lifts are reasonably well-maintained, several are over 20 years old, and may need to be replaced within the life of this MDP. Additionally, several of BSR's fixed-grip lifts may also be needing replacement. Many are over 40 years old. Furthermore, many of these old lifts were planned around a mountain that was substantially different than today and therefore do not serve BSR's current ski network in the most effective way. The following is a qualitative summary of the lift network.

1. GONDOLAS

The BreckConnect, an 8-person detachable gondola, constructed in 2006 on private land and over Town of Breckenridge Open Space, is an access lift. It has a multi-stage route that provides a means of accessing the Peak 7 and Peak 8 base areas from the Gondola Parking lot in the Town of Breckenridge. BreckConnect serves as an efficient method of transporting guests to the mountain.

2. 6-PERSON DETACHABLE LIFTS

Independence, Colorado and QuickSilver SuperChairs serve dual functions. They are used by skiers repeat skiing various terrain and as a method of mountain ingress on Peaks 7, 8 and 9, respectively. Independence, built 2002, and Colorado, built 2014, serve primarily intermediate terrain, on their respective peaks. Both lifts are highly utilized and can often have long lift lines during busy weekend.

QuickSilver SuperChair, built in 1999, primarily serves novice terrain, as well as some mid-mountain beginner terrain. Because it serves skiers of all levels and is the primary mountain access lift for Lower Peak 9, QuickSilver is frequently overburdened. In addition, QuickSilver has an abnormally high misload rate, which further increases the constraints on this lift's capacity. Finally, because of its high usage, QuickSilver is nearing its end-of-life. For these reasons, BSR should consider QuickSilver SuperChair's function and redesigning the terrain flow on Peak 9 to reduce the demands placed on QuickSilver by repeat skiers or beginner skiers.

Kensho and Falcon SuperChairs serve opposite ends of the resort—Peak 6 and 10, respectively—but serve similar functions. Both provide the only access to their respective peaks and are used by intermediate, advanced intermediate and expert skiers who are repeat skiing. Kensho, installed 2013 and Falcon, replaced in 2017, are both well-maintained and effectively serve the terrain.

3. 4-PERSON DETACHABLE LIFTS

Rocky Mountain and Beaver Run SuperChairs serve dual functions as secondary mountain ingress lifts from the Peak 8 and Peak 9, respectively, as well as being good repeat skiing lifts. Rocky Mountain SuperChair, built in 1997, departs from the Peak 8 base and serves the northern half of Peak 8's terrain, as well as provides access to Peak 7 terrain and even Peak 6 further

to the north. Beaver Run, constructed in 1990, takes intermediate skiers and riders from the Peak 9 base area to majority of Peak 9 developed ski trails. Both lifts serve their dual functions effectively. However, Rocky Mountain SuperChair is over two decades old, and Beaver Run is the oldest detachable chair on the mountain (32 years).

Peak 8 SuperConnect is a two-stage lift that primarily serves to transport guests from Peak 9 to Peak 8. In addition, the upper stage of the SuperConnect serves as a method of lapping a few south-facing expert runs to the mid-station. Installed in 2002, the SuperConnect effectively serves its intended purpose. This lift should be monitored closely for reliability as it provides the only means of accessing the rest of the mountain via a lift from Peaks 9 and 10.

Freedom and Mercury SuperChairs allow skiers and riders to repeat ski Peak 7 and the upper portions of Peak 9, respectively, without having to return to a potentially congested base area. Freedom SuperChair, newly built in 2021, allows guests from both Peak 6 and Peak 7 to avoid having to return to Peak 7 base and take Independence SuperChair to access Upper Peak 7 or Peak 8. Mercury SuperChair allows guests to lap the southern half of Upper Peak 9. Both lifts, as designed, function effectively to limit congestion to their respective base areas. As a new lift, Freedom SuperChair is expected to be in excellent working order. Mercury SuperChair has been in operation for 24 seasons and, while functioning effectively, necessitates preliminary consideration for end-of-life replacement.

Imperial Express, built in 2005, is a relatively low-capacity high-speed detachable quad and the highest lift in North America. Imperial serves the high-alpine terrain of Peak 8. The high-speed, low throughput design of this lift allows expert skiers to ascend to nearly 13,000 feet above sea level on terrain that is exposed and prone to high winds, while managing capacity in BSR's unique and sensitive high-alpine bowls. Imperial serves its function effectively and is in good working order.



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4. FIXED-GRIP QUAD LIFTS

Built in 2013 as part of the Peak 6 terrain expansion, Zendo Chair is the only fixed-grip quad at BSR. The lift is the main way for skiers can access Kensho SuperChair and the Peak 6 terrain. The lower capacity Zendo Chair helps regulate circulation to Kensho SuperChair and Peak 6 terrain but can also result in long lifts lines.

5. FIXED-GRIP TRIPLE LIFTS

A-Chair, built in 1975, is the only fixed-grip triple at BSR. A-Chair ascends from roughly the halfway point of QuickSilver SuperChair to an unload-only mid-station adjacent to the top of QuickSilver, then continues up into the valley between Peak 9 and Peak 10. Because of its age, low speed, and maintenance needs, A-Chair is typically only open on weekends and runs infrequently. A-Chair is also does not serve the existing trail network efficiently. The lower section of A-Chair to the mid-station could effectively serve novice skiers seeking to avoid returning to the base area and repeat ski via QuickSilver; however, the age and fixed-grip nature of A-Chair makes it difficult for beginners to load. Furthermore, the upper segment of A-Chair does not access much additional terrain and can create a bottleneck on *Upper Lehman* and *Upper Silverthorne* ski trails.

6. FIXED-GRIP DOUBLE LIFTS

C-Chair, constructed in 1972, serves much the same function for the north face of upper Peak 9 as Mercury SuperChair does for the south face. It allows guests to bypass the long, flat runout of *Lower Sawmill* while either transiting south from Peak 8 or returning from the north face of upper Peak 9. C-Chair is among the oldest lifts at BSR and it is long and slow, making the ride an unpleasant experience for guests. C-Chair also terminates lower than the other lifts ascending to Peak 9, rendering several runs inaccessible.

E-Chair is a 1982 Riblet primarily serving advanced intermediate and expert skiers and riders. The lift ascends to Peak 9 from upper Sawmill Gulch and allows advanced skiers from Upper Peak 8 to access Upper Peak 9 without descending to Sawmill Gulch. It also allows experts to lap the northwest glades of Peak 9. E-Chair is not substantially overburdened, but it is aging.

5-Chair and Rip's Ride (previously known as 7-Chair) are used to access beginner and novice terrain from the base of Peak 8. 5-Chair, built in 1970, accesses novice terrain, as well as BSR's terrain parks. Rip's Ride was built in 1980 entirely on private land and is primarily used by ski school as a beginner and novice learning lift. Both lifts are outdated and prone to misloads by their beginner and novice skier and rider population. The location of Rip's Ride is also challenging to walk to for beginner guests from the Peak 8 base core. In addition, the current location of these lifts contributes to the congestion in Peak 8 base area.

Snowflake is a unique lift built primarily on private land. It is used as a secondary transportation option to BreckConnect to get guests on the mountain. Constructed in 1996, this lift is low speed and low capacity which is suitable for the demands of the area.

6-Chair provides one of two advanced/expert gateways to Peak 8's high alpine terrain and Imperial SuperChair. The lift, constructed in 1979, ascends from above upper Sawmill Creek to a warming hut at the bottom of Imperial Bowl. This chair is old, low-capacity and often congested due to its popularity among guests.

7. SURFACE LIFTS (PLATTERS, T-BARS & CARPETS)

The T-Bar in Horseshoe Bowl provides the other gateway to Peak 8’s high alpine. Built in 1984, this lift hauls advanced and expert guests up from between Peak 8 and Peak 7 to the top of Horseshoe Bowl. This lift is well-maintained but congested on “powder days.” However, terrain constraints and weather considerations limit the lift’s upgradability. Additionally, many feel the T-Bar remains the soul of BSR.

Trygve’s, Eldorado and Camelback platter lifts were all constructed in the 1990s and operate in beginner and novice teaching areas around the mountain. Trygve’s and Camelback operate at the base of Peak 8 and 9, respectively, Eldorado operates adjacent to the mid-station of A-Chair and the top of QuickSilver SuperChair. These platters, when ready for replacement, should be considered for replacement with carpets if their associated terrain is continued to be used for beginner and novice teaching terrain.

In addition to aerial and surface ropeways, BSR operates 8 Ski & Ride carpets spread across Peak 8 and Peak 9. These surface lifts provide an ideal way to teach beginner skiers and are generally in good working order.

Many of BSR’s older lifts are nearing the end of their operational lifespans. This can cause frequent disruption and downtime. Furthermore, maintaining these lifts to ensure an acceptable level of service and reliability requires increasingly expensive repairs and modifications, and the expense will likely increase in the coming years. To continue to provide a positive guest experience, these lifts should be considered for replacement.



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experience**

CHAPTER 2. EXISTING CONDITIONS

TABLE 1. Lift Network—Existing

LIFT NAME, LIFT TYPE	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. GRADE (%)	ACTUAL CAPACITY (PPH)	ROPE SPEED (FPM)	CARRIER SPACING (FT.)	LIFT MAKER/ YEAR INSTALLED
QuickSilver SuperChair/DC-6	10,266	9,634	632	5,600	11%	3,600	1,100	110	Poma/1999
A-Chair/C-3	10,540	9,920	620	4,684	13%	1,600	393	44	Riblet/1975
Mercury SuperChair/ DC-4	11,521	10,055	1,466	7,557	20%	2,400	1,100	110	Poma/1997
C-Chair/C-2	11,220	9,967	1,253	5,796	22%	1,130	500	53	Riblet/1972
Beaver Run SuperChair/DC-4	11,307	9,716	1,591	9,058	18%	2,800	1,000	100	Poma/1990
E-Chair/C-2	11,548	10,581	967	3,075	33%	1,200	500	50	Riblet/1982
Falcon SuperChair/ DC-6	11,602	10,198	1,404	5,838	25%	3,000	1,000	120	Poma/2017
Camelback Platter/S-1	9,709	9,655	54	583	9%	400	300	45	Poma/1994
Ski & Ride Carpet D *	9,660	9,645	15	153	10%	400	50	8	Sunkid/2005
Ski & Ride Carpet A *	9,639	9,634	5	54	9%	400	50	8	Sunkid/1997
Ski & Ride Carpet B *	9,656	9,634	22	200	11%	400	50	8	Sunkid/1998
Ski & Ride Carpet C	10,227	10,200	27	200	14%	400	50	8	Sunkid/1998
Eldorado Tow	10,325	10,300	25	90	29%	400	50	8	Sunkid/1998
Colorado SuperChair/DC-6	11,273	9,948	1,325	6,394	21%	3,600	1,000	100	Poma/2014
Rocky Mountain SuperChair/DC-4	11,196	9,948	1,248	5,629	23%	2,400	1,100	110	Poma/1997
Snowflake/C-2	10,330	9,699	631	5,322	12%	1,200	500	50	Poma/1996
Peak 8 SuperConnect Top/ DC-4	11,275	10,345	930	3,251	30%	1,300	1,000	185	Poma/2002
Peak 8 SuperConnect/DC-4	11,275	9,850	1,425	8,377	17%	1,300	1,000	185	Poma/2002
5-Chair/C-2	10,671	9,960	711	3,578	20%	1,200	450	45	Riblet/1970
6-Chair/C-2	11,958	10,968	990	3,400	30%	1,200	500	50	Riblet/1979
Rip's Ride/C-2 *	10,280	9,979	301	1,796	17%	1,200	350	35	Riblet/1980
T-Bar/S-2	12,214	10,980	1,234	3,941	33%	1,200	722	72	Doppelmayr/ 1984
Independence SuperChair/DC-6	11,380	10,015	1,365	7,525	18%	3,000	1,100	132	Poma/2002

LIFT NAME, LIFT TYPE	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. GRADE (%)	ACTUAL CAPACITY (PPH)	ROPE SPEED (FPM)	CARRIER SPACING (FT.)	LIFT MAKER/ YEAR INSTALLED
Imperial Express SuperChair/DC-4	12,836	11,894	942	2,716	37%	1,200	1,000	200	Poma/2005
Trygves Platter/S-1 *	10,169	10,090	79	605	13%	400	300	45	Poma/1997
Ski & Ride Carpet 3	9,980	9,970	10	62	16%	400	50	8	Magic Carpet
Ski & Ride Carpet 4	9,990	9,970	20	134	15%	400	50	8	Sunkid
Kinderhut Carpet *	9,975	9,970	5	54	9%	400	50	8	Sunkid/1997
Kids Kastle Carpet *	9,980	9,970	10	100	10%	400	50	8	Sunkid/1998
BreckConnect Gondola/DG-8 *	9,952	9,554	398	7,672	5%	2,800	1,000	171	Poma/2006
Kensho Super Chair/ DC-6	12,300	10,760	1,540	5,983	27%	3,000	1,000	120	Poma/2013
Zendo Chair/C-4	10,840	10,528	313	2,606	12%	2,000	450	54	Poma/2013
Freedom SuperChair/DC-4	11,430	10,402	1,029	5,735	18%	2,400	1,000	100	Poma/2021

Source: SE Group

Notes: * = located on private land

S-1 = platter lift / S-2 = T-bar lift / C-2 = fixed-grip double chairlift / C-3 = fixed-grip triple chairlift / C-4 = fixed-grip quad chairlift / DC-4 = detachable four-passenger chairlift / DC-6 = detachable six-person chairlift / DG-8 = detachable eight-person gondola

C. EXISTING TERRAIN NETWORK

The existing trail network at BSR spans a cross-section of terrain and accommodates the entire range of skier ability levels from beginner to expert. For further details on individual trails refer to the Table A-1 Terrain Specification – Existing Conditions in Appendix A.

Under current conditions, ski trails remain generally open during BSR’s core winter season. During BSR’s late-spring season, usually starting in late April, the resort typically closes most of the mountain and limits operations and available terrain to the north side of the resort. In addition, throughout the season, high-alpine and expert terrain often needs to be closed following large storms for avalanche mitigation. This has a minimal impact on resort capacity, as much of this terrain is considered undeveloped and is thus excluded from parts of this analysis.

1. TERRAIN VARIETY

The developed trail network at BSR includes approximately 1,958 acres of designated trails and lift-served bowls. In addition to the developed trail network, BSR maintains approximately 630 acres of managed hike-to skiing. In total, the operational area of BSR encompasses 3,920 acres. In addition, there are 1,633 acres of unmaintained hike-to-only backcountry within BSR's SUP area but outside the operational area.

Terrain Typology at BSR

1. DEVELOPED ALPINE TERRAIN — The existing developed, or formalized, alpine terrain network at BSR consists of the resort's named, defined, lift-serviced, maintained trails. 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 or ride. As such, the developed trail network represents a mostly accurate picture of the acreage utilized by the average skier or rider on a consistent basis, as well as that used by virtually all guests during inclement conditions. Thus, the full capacity of the resort must be accommodated by the total acreage of the developed terrain network, rather than relying on undeveloped terrain (which is not always available).

2. LIFT-ACCESSED BOWLS — BSR is well known for its high-alpine, lift-accessed terrain. Much of this area of the resort is occupied by expert-oriented alpine bowl terrain. While this terrain would typically be excluded from terrain analyses, BSR attracts a small but dedicated group of skiers and riders who are passionately dedicated to this form of terrain and who will typically avoid other parts of the resort when the alpine bowls are open. For this reason, Lift-Accessed Bowls are included in the terrain analysis for BSR with an assumed skier and rider density of 1 guest per 2 acres.

3. UNDEVELOPED TERRAIN — Undeveloped terrain consists of unnamed terrain that is routinely skied. The topography within the existing ski area includes steeper terrain and glades intermingled within, and outside of, the developed and maintained terrain network. There are also densely treed and less accessible gladed areas, consisting primarily of the natural (non-thinned or maintained) forested areas between the defined skiing areas and ski runs, and also accounts for some of the less accessible treed areas at BSR.

4. UNDEVELOPED, NOT ROUTINELY SKIED TERRAIN — This terrain type consists of major blocks of terrain within the SUP that are challenging to access due to dense vegetation or terrain barriers.

2. TERRAIN DISTRIBUTION BY ABILITY LEVEL

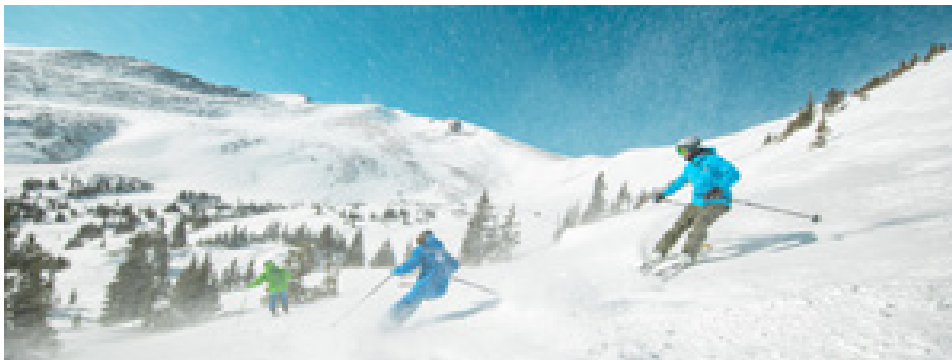
The developed ski trail network accommodates the entire range of skier ability levels, from beginner to expert. To ensure that BSR is meeting the needs and desires of its entire market, a terrain analysis has been conducted comparing the existing terrain distribution to market demand.

Ability Level

There is a significant difference between the ski run ability level ranking approach used in this document and that used by U.S ski areas on their trail map and on-mountain trail signs. The established approach used at resorts around the United States is to set the difficulty ranking of runs relative to other runs in that resort – i.e., the easiest runs at that resort are signed as green circles the most difficult are signed as black diamonds, and those runs in-between are identified as blue squares.

SE Group uses a different approach in as part of the Master Planning process and in this document. Terrain rankings in Master Plan Documents are aimed at comparing the terrain available at a given resort to the overall skier market. Using various criteria, including maximum sustained gradient, run width, sightlines, and others, SE Group makes an internal determination of which ability level each run falls into. This helps determine if there are opportunities to appeal to a broader range of skiers.

As shown in Chart 1, SE Group uses six categories of ability level, as opposed to the standard three used by most mountain resorts. From that data, terrain capacity and ability level distribution by capacity are determined by multiplying terrain acreage by the desired density. This capacity is then divided by the total trail network capacity of the resort to determine the percentage of total skiers that can be accommodated on terrain corresponding to each ability level. These numbers are then compared to the skier market, to reveal the surpluses and deficiencies of terrain by ability level, as compared to the overall skier market.



Trails for all skier ability levels, from beginner to expert

a) Lift-Served Terrain

As shown in Table 2 and Chart 1, BSR's current terrain configuration moderately conforms to market demands. Notably, there is a shortage of true beginner terrain, as first-time beginner skiers are limited in the available terrain area (2.8 acres) and are restricted to areas immediately adjacent to the existing magic carpets at the base areas of Peaks 8 and 9. There is no beginner terrain on Peaks 6, 7 or 10. Additional beginner terrain is needed at BSR in order to ensure that beginning skiers of all ages can access suitable terrain in multiple areas of the resort.

Ensuring the presence of high-quality beginner terrain is also important for the sport of skiing as a whole. Analyses by the National Ski Areas Association (NSAA) routinely show that the 'conversion rate' for new skiers is under 20 percent. That is, of beginners who try skiing, less than 20 percent will continue on to become core skiers who return to the sport season after season. Additional high-quality beginner terrain at BSR would allow new skiers and riders to feel welcome at the mountain and enhance the likelihood that new users will become a frequent participant in the sport.

BSR's novice terrain is primarily concentrated in Peak 9 on the QuickSilver SuperChair and on Peak 8 from Rip's Ride and 5-Chair. While there is enough novice terrain at BSR to meet demand, the lift and terrain networks make new skier progression difficult. Beginner skiers ready to "graduate" to novice terrain from the carpets and surface lifts must either take the busy QuickSilver SuperChair from the Peak 9 base area or the difficult-to-load Rip's Ride from the Peak 8 base area. Furthermore, there is no way for beginner or novice skiers or riders to transfer between these two terrain areas, further complicating progression. The novice terrain network and the lift network accessing them should be improved to ensure easy and fun progression.

BSR is known for its extensive high-quality intermediate terrain, the majority of which is groomed nightly. Intermediate terrain at BSR is dispersed throughout the mountain, from the long and steep advanced intermediate runs on Peak 10, to the family-friendly low-intermediate runs on Peak 7. The addition of Peak 7 in 2002 and Peak 6 in 2013 dramatically expanded the amount of intermediate terrain accessible to guests while reducing skier densities across the mountain on intermediate terrain.

The existing advanced intermediate and expert terrain network at BSR is noted to cause problems at the high visitation numbers BSR regularly experiences. The existing terrain network in the high alpine areas of BSR contains many runs that terminate below the lifts that are used to access them. This forces skiers and riders to return to the base area lifts, adding further to lower-mountain congestion.

The high elevation of BSR (12,998 feet at the summit of Peak 8) lends itself to excellent high-alpine terrain, including steeps, bowls, and chutes. The installation of the Imperial Express and Kensho SuperChairs, have allowed expedited access (lift and hike-to) to high-alpine terrain on Peaks 6, 7 and 8, further enhancing BSR's reputation for providing quality expert and extreme terrain.

BSR's developed terrain is well maintained. Historic problem areas are routinely rectified through summer trail work. One constraint that has been problematic to BSR has been the ability to effectively transfer skiers between Peak 8 to Peak 9. Currently, the majority of guests ski to Peak 9 using *4 O'Clock*, *Crosscut* and *Lower Sawmill* trails. These existing trails have sections that are flat (less than 3 percent grade). Providing skiers and riders a way to bypass this flat terrain on the way to Peak 9 by staying higher on the mountain would allow guests to move from Peak 8 more efficiently to Peak 9.

b) Managed Hike-To Terrain

In addition to the developed trail network, BSR maintains approximately 630 acres of lift-served, managed, and patrolled hike-to skiing, including the Peak 8 summit, Peak 7 summit, *The Back 9*, *Snow White*, *Lake Chutes*, *Broadway*, *Six Senses*, *Serenity Bowl* and *Beyond Bowl*. This expert and extreme terrain can be accessed from lifts on Peaks 6, 8, 9 and 10. The Peak 8 summit, Peak 7 summit, *Snow White* and the *Lake Chutes* are accessed from the Imperial SuperChair. *Windows*, *Broadway*, and *Twin Chutes* are accessed from E-Chair off of upper Peak 9. Finally, *Six Senses*, *Serenity Bowl* and *Beyond Bowl* are accessed from the top of Kensho Chair on Peak 6.

c) Backcountry Terrain

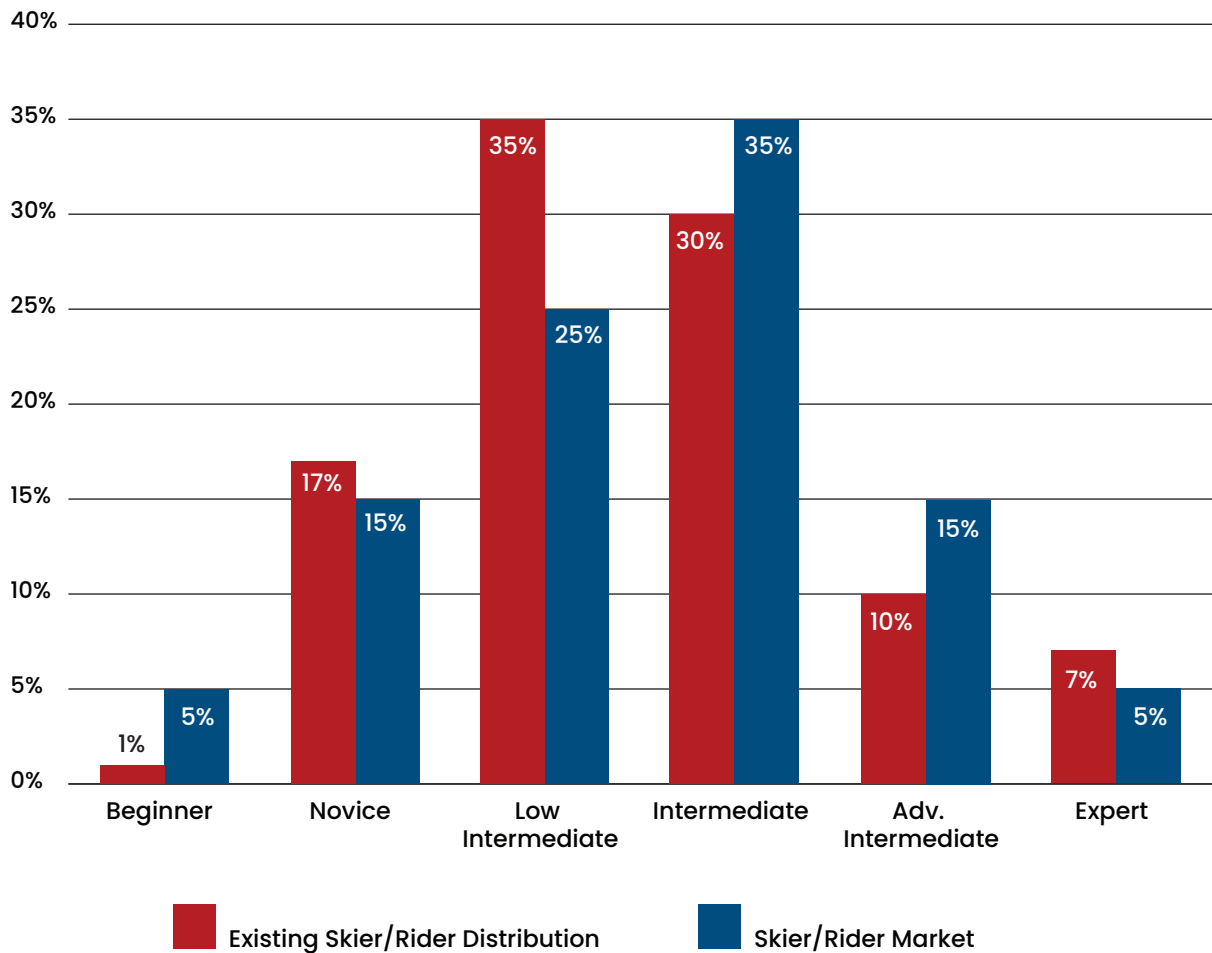
In addition to the hike-to skiing terrain, which is currently actively managed and maintained by BSR, an additional 1,633 acres of hike-to terrain are within the BSR SUP area but outside of the ski area operational boundary. This terrain is located on upper portions of Peak 9 and 10, in Carter Bowl to the southwest of the Peak 10 terrain and north of Peak 6 in Temptation Bowl. This backcountry terrain is accessible from Forest Service access points. Skiers primarily access this backcountry via ski area lifts but must hike further to access the terrain and/or to return to the resort. These areas are popular when conditions are favorable.

TABLE 2. Terrain Distribution by Ability—Existing

SKIER/RIDER ABILITY LEVEL	TRAIL AREA	SKIER/RIDER CAPACITY PER ACRE	SKIER/RIDER CAPACITY	SKIER/RIDER DISTRIBUTION	SKIER/RIDER MARKET
Beginner	2.8	30	84	1%	5%
Novice	116.8	14	1,635	17%	15%
Low Intermediate	412.8	8	3,302	35%	25%
Intermediate	456.0	6	2,736	30%	35%
Advanced – Traditional	211.2	4	845	10%	15%
Advanced – Bowl Skiing	173.4	0.5	87		
Expert – Traditional Piste	241.8	2	484	7%	5%
Expert – Bowl Skiing	342.7	0.5	171		
TOTAL	1,957.5		9,344	100%	100%

Source: SE Group

CHART 1. Terrain Distribution by Ability—Existing



D. EXISTING CAPACITY ANALYSIS

1. COMFORTABLE CARRYING CAPACITY

A detailed calculation of BSR’s existing Comfortable Carrying Capacity (CCC) was completed for this MDP. The overall existing CCC of BSR is 17,790 guests. The calculated capacities of individual lifts that were used to find the overall CCC of BSR can be found in Table 3.

What is Comfortable Carrying Capacity?

In ski area planning, a “design capacity” is established, which represents daily guest population around which all ski resort functions are balanced. The design capacity is a planning parameter that is used to establish the acceptable size of the primary facilities of a ski resort: ski lifts, ski terrain, guest services, restaurant seats, building space, utilities, parking, etc. The accurate estimation of the design capacity of a mountain is vital, as it functions as the primary planning criterion for the resort.

Design capacity is commonly expressed as “skier carrying capacity,” “skiers at one time,” and other ski industry-specific terms. This MDP uses the term Comfortable Carrying Capacity (CCC) when referring to BSR’s design capacity. The CCC describes the level of utilization that provides a pleasant recreational experience based on the number of people that the lift network can comfortably accommodate. Accordingly, the design capacity does not indicate a maximum level of visitation, but rather the number of visitors that can be “comfortably” accommodated on a daily basis. Design capacity is typically met on a resort’s fifth or tenth busiest day, and peak-day visitation at most resorts is at least 10 percent to 25 percent higher than the design capacity.

To calculate CCC, SE Group determines the total vertical transport capacity supplied by each lift in the system and divides it by the demand for uphill transport by the average individual guest riding that lift in a day to find the total number of guests that the lift can comfortably support. The carrying capacities of all lifts are then summed to find the total CCC of the resort.

a) Misloads

The design capacity of a lift system given in persons per hour (pph) represents the maximum number of passengers the lift can carry if the lift is continually operating at full speed and all carriers are fully loaded. While resorts strive to maintain a load factor close to design capacity, several factors inevitably reduce a lift’s vertical capacity below the designed capacity. First, even with lift attendants actively managing the loading process, some carriers will leave the station partially or wholly unfilled due to passenger error or preference. Second, the lift operator will occasionally slow or stop the lift, reducing the effective operating capacity of the lift. All lifts will

CHAPTER 2. EXISTING CONDITIONS

operate some amount below their design capacity. Generally, fixed-grip lifts and surface lifts have a higher stop rate than their detachable lifts. In addition, lifts that service beginner terrain are also more likely to stop or have empty or partially empty seats, as more inexperienced skiers and riders are more likely to make mistakes when loading or unloading a lift.

The misloading rates for lifts at BSR are typical, with the exception of QuickSilver SuperChair. It has a misload/stop rate and reduction in hourly capacity of approximately 20 percent, the highest at BSR. This is because of the QuickSilver SuperChair's unusual double-loading design. The bottom station of the QuickSilver SuperChair alternates between sending chairs on two different tracks, both of which have guest loading areas. While this design allows a shorter spacing of carriers, it is also difficult to manage and confusing for guests, leading to an increased misload rate.

TABLE 3. Lift Capacity—Existing

LIFT NAME, LIFT TYPE	SLOPE LENGTH (FT.)	VERTICAL RISE (FT.)	ACTUAL CAPACITY (PPH)	OPERATING HOURS (HRS.)	UP-MOUNTAIN ACCESS ROLE (%)	MISLOADING/ LIFT STOPPAGES (%)	ADJUSTED HOURLY (PPH)	VTF/DAY (000)	VERTICAL DEMAND (FT./DAY)	DAILY LIFT CAPACITY (GUESTS)
QuickSilver SuperChair/DC-6	5,600	632	3,600	7.00	45	20	1,260	5,574	6,410	870
A-Chair/C-3	4,684	620	1,600	6.90	0	15	1,360	5,818	5,330	1,090
Mercury SuperChair/ DC-4	7,557	1,466	2,400	6.90	5	5	2,160	21,849	14,626	1,490
C-Chair/C-2	5,796	1,253	1,130	6.80	70	5	283	2,407	12,164	200
Beaver Run SuperChair/DC-4	9,058	1,591	2,800	7.00	5	5	2,520	28,065	12,541	2,240
E-Chair/C-2	3,075	967	1,200	6.75	25	5	840	5,483	20,599	270
Falcon SuperChair/ DC-6	5,838	1,404	3,000	6.90	0	10	2,700	26,157	17,469	1,500
Camelback Platter/S-1	583	54	400	7.00	0	15	340	129	2,043	60
Ski & Ride Carpet D	153	15	400	7.00	0	5	380	40	635	60
Ski & Ride Carpet A	54	5	400	7.00	0	5	380	13	366	40
Ski & Ride Carpet B	200	22	400	7.00	0	5	380	59	874	70
Ski & Ride Carpet C	200	27	400	6.75	0	5	380	69	1,117	60
Eldorado Tow	90	25	400	6.75	0	5	380	64	1,442	40
Colorado SuperChair/DC-6	6,394	1,325	3,600	7.00	15	10	2,700	25,043	14,725	1,700

LIFT NAME, LIFT TYPE	SLOPE LENGTH (FT.)	VERTICAL RISE (FT.)	ACTUAL CAPACITY (PPH)	OPERATING HOURS (HRS.)	UP-MOUNTAIN ACCESS ROLE (%)	MISLOADING/ LIFT STOPPAGES (%)	ADJUSTED HOURLY (PPH)	VTF/DAY (000)	VERTICAL DEMAND (FT./DAY)	DAILY LIFT CAPACITY (GUESTS)
Rocky Mountain SuperChair/DC-4	5,629	1,248	2,400	7.00	5	5	2,160	18,870	16,196	1,170
Snowflake/C-2	2,630	405	1,200	7.00	100	0	-	0	7,906	-
Peak 8 SuperConnect Top/DC-4	3,251	930	1,300	6.90	30	5	845	5,422	24,056	230
Peak 8 SuperConnect/DC-4	8,377	1,425	1,300	6.90	100	0	-	0	22,448	-
5-Chair/C-2	3,578	711	1,200	7.00	10	10	960	4,778	8,972	530
6-Chair/C-2	3,400	990	1,200	6.35	0	5	1,140	7,167	14,805	480
Rip's Ride/C-2	1,796	301	1,200	7.00	0	15	1,020	2,149	5,870	370
T-Bar/S-2	3,941	1,234	1,200	6.35	0	10	1,080	8,463	20,702	410
Independence SuperChair/DC-6	7,525	1,365	3,000	6.35	0	10	2,700	23,403	15,971	1,470
Imperial Express SuperChair/DC-4	2,716	942	1,200	6.00	0	5	1,140	6,443	21,579	300
Trygves Platter/S-1	605	79	400	6.75	0	15	340	181	2,936	60
Ski & Ride Carpet 3	62	10	400	6.90	0	5	380	26	536	50
Ski & Ride Carpet 4	134	20	400	6.90	0	5	380	52	920	60
Kinderhut Carpet	54	5	400	7.00	0	5	380	13	390	30
Kids Kastle Carpet	100	10	400	7.00	0	5	380	27	600	50
BreckConnect Gondola/DG-8	7,672	398	2,800	7.00	100	0	-	0	9,422	-
Kensho Super Chair/DC-6	5,983	1,540	3,000	7.00	0	10	2,700	29,101	20,339	1,430
Zendo Chair/C-4	2,606	313	2,000	7.00	75	10	300	656	4,160	160
Freedom SuperChair/DC-4	5,735	1,029	2,400	7.00	5	5	2,160	15,555	11,993	1,300
TOTAL	115,075		49,130				34,128	243,076		17,790

Source: SE Group

Notes: S-1 = platter lift / S-2 = T-bar lift / C-2 = fixed-grip double chairlift / C-3 = fixed-grip triple chairlift / C-4 = fixed-grip quad chairlift / DC-4 = detachable four-passenger chairlift / DC-6 = detachable six-person chairlift / DG-8 = detachable eight-person gondola

2. DENSITY ANALYSIS

The density analysis below compares the uphill and downhill capacities at BSR. At any one time, skiers and riders are dispersed throughout the resort, using guest facilities, and milling areas, waiting in lift mazes, riding lifts, or descending on ski terrain. For the trail density analysis, 25 percent of each lift's CCC is presumed to be "inactive" (i.e., using guest service facilities or milling areas and otherwise not actively skiing or riding lifts).

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).

Table 8 shows that the average trail density at BSR is 6 skiers per acre, which is lower than the calculated target density of 7 skiers per acre. It is known through visual observations made by BSR staff and guest survey data that high trail densities do occur during high visitation periods; on average days during key egress periods; and on new snow days in areas of off-piste lift-served terrain. Furthermore, due to the skiers and riders that primarily visits BSR (an intermediate skier), certain pods at BSR are more popular than others, and as a result, receive a disproportionate concentration of use. Finally, some trails amass higher densities due to the merging of uphill trails, or the closure of trails for races, grooming, etc. Consequently, the actual densities of pods are expected to be uneven at most times, and lead to crowding in certain areas of the resort.

Providing a balanced resort experience



TABLE 4. Terrain Density Analysis—Existing Conditions

LIFT NAME, LIFT TYPE	DAILY LIFT CAPACITY	GUEST DISPERSEMENT				DENSITY ANALYSIS				
		SUPPORT FACILITIES	IN LIFT LINES	ON LIFT	ON TERRAIN	TERRAIN AREA (ACRES)	TERRAIN DENSITY (GUEST/AC.)	DESIRED TRL. DENSITY (GUESTS/AC.)	DIFF	DENSITY
QuickSilver SuperChair/ DC-6	870	218	42	107	503	55	9	14	-5	64%
A-Chair/C-3	1,090	273	45	270	502	44	11	12	-1	92%
Mercury SuperChair/ DC-4	1,490	373	252	247	618	116	5	7	-2	71%
C-Chair/C-2	200	50	47	55	48	47	1	6	-5	17%
Beaver Run SuperChair/ DC-4	2,240	560	420	380	880	124	7	7	0	100%
E-Chair/C-2	270	68	28	86	88	47	2	3	-1	67%
Falcon SuperChair/ DC-6	1,500	375	315	263	547	159	3	4	-1	75%
Colorado SuperChair/ DC-6	1,700	425	315	288	672	146	5	6	-1	83%
Rocky Mountain SuperChair/DC-4	1,170	293	180	184	513	67	8	7	1	114%
Peak 8 SuperConnect Top/DC-4	230	58	28	46	98	70	1	5	-4	20%
5-Chair/C-2	530	133	80	127	190	45	4	8	-4	50%
6-Chair/C-2	480	120	190	129	41	139	0.3	2	-2	15%
Rip's Ride/C-2	370	93	51	87	139	28	5	13	-8	38%
T-Bar/S-2	410	103	126	98	83	302	0.3	2	-1	19%
Independence SuperChair/DC-6	1,470	368	135	308	659	122	5	6	-1	83%
Imperial Express SuperChair/DC-4	300	75	95	52	78	250	0.3	0.5	-0.2	60%
Kensho Super Chair/ DC-6	1,430	358	225	269	578	117	5	5	0	108%
Zendo Chair/C-4	160	40	25	29	66	9	7	8	-1	88%
Freedom SuperChair/ DC-4	1,300	325	252	206	517	57	9	7	2	125%
Total	17,210	4,308	2,851	3,231	6,820	1,945	6	7	-1	85%

Note: The density analysis includes aerial lifts and major surface lifts. Carpets and other surface lifts were not included in the analysis and account for the remaining 580 guests of the existing total BSR daily lift capacity. S-2 = T-bar lift / C-2 = fixed-grip double chairlift / C-3 = fixed-grip triple chairlift / C-4 = fixed-grip quad chairlift / DC-4 = detachable four-passenger chairlift / DC-6 = detachable six-person chairlift

a) Lift Network Efficiency

Within the context of ski area design, the term “lift network efficiency” refers to the amount of effort and cost required to operate and maintain the lift network, as compared to the number of guests served by the lift network. The energy and costs related to the lifts include power use, operational labor, maintenance costs and labor, indirect administrative costs, and various direct and indirect costs associated with higher staff levels to perform these tasks. From this standpoint, the most efficient scenario is to have the fewest number of lifts possible that can comfortably and effectively serve the capacity and circulation requirements of the resort.

One way to analyze *lift network efficiency* is to calculate the average CCC per lift at a given resort. While this calculation does not relate to the overall capacity of the resort, it can indicate if (1) the resort is not getting maximum utilization out of its lifts or (2) if there are more lifts than necessary for the capacity levels of the resort. When calculating this average, conveyors used for teaching, as well as lifts that are used for access only, are not included. Optimally, and in general, the average CCC per lift would likely be close to 1,000 guests. Industry-wide, the average CCC per lift is approximately 650. The average CCC per lift at BSR is 800. This indicates that BSR has an efficient lift network which serves the needs of the resort.

While the overall lift network efficiency of BSR is within acceptable bounds, an analysis of the efficiency of individual lifts reveals both challenges and opportunities in specific areas of the resort. Many of the lifts accessing parts of Peaks 8 and 9 (including 5-Chair, Rip’s Ride, C-Chair, 6-Chair, and the T-Bar) also do not have enough capacity to achieve target densities on the terrain they serve. Thus, for both novice skiers and advanced intermediates, the lift network does not efficiently serve the terrain available.

b) Terrain Network Efficiency

The resort density analysis shows the efficiency of the terrain network compared to the lift network serving it. This, in turn, provides a good estimate of how efficient the resort’s terrain maintenance operations are. That is to say, maintaining a certain acreage of terrain incurs a set of fixed costs (e.g., for snowmaking, grooming, ski patrol and maintenance).⁶ If the lift network is unable to carry as many guests as would comfortably fit on the terrain, then the resort is not serving as many people as its fixed terrain maintenance costs would allow.

The most efficient scenario is to have a quantity of terrain that closely meets the target density requirements. A terrain density index of 100 percent would imply that the resort has exactly the right amount of terrain to match target densities. As shown below, BSR has a density index of 85 percent, meaning that lift network densities are 85 percent of target densities. This illustrates overall the terrain at BSR is efficient; however, as previously noted, during high visitation periods, egress periods and new snow days, certain parts of the BSR get highly congested.

⁶ The developed terrain network is used for the terrain network efficiency calculations because it is largely the developed terrain that incurs the core operational and maintenance costs.

E. EXISTING GUEST SERVICES FACILITIES, FOOD SERVICE SEATING & SPACE USE ANALYSIS

1. GUEST SERVICES

Guest service facilities constitute an essential component of the recreation experience at ski areas. These areas provide visitors with shelter from the elements, bathrooms, as well as food and beverage. These facilities must have the appropriate capacity to meet visitors' needs. A complete inventory of existing guest services described below are located in Appendix A.

Space Use Planning

To provide a balanced resort experience, sufficient guest service space should be provided to accommodate the existing resort CCC. The distribution of the CCC is used to determine guest service capacities and space requirements at base area 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 base area and on-mountain 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.

BSR's existing guest service facilities are spread throughout the resort, both on-mountain and at base areas. Service facilities at BSR are spread across four base areas (including BreckConnect Gondola terminal), four on-mountain dining establishments and four on-mountain warming huts. Additional services, particularly food service, equipment rental/repair, and retail are provided in several village locations by third party entities. A number of non-Vail Resorts owned and operated businesses also provide services to BSR guests; however, they are not part of this analysis. Finally, Breckenridge Ski Patrol operates from huts throughout the mountain and maintains a network of emergency phones located at strategic points around the mountain.

a) BreckConnect Gondola Terminal

The BreckConnect Gondola originates in the Town of Breckenridge, adjacent to the North and South Gondola Parking Lots. In 2021, a parking structure was completed on the South Gondola Parking lot. Breckenridge's gondola serves a key role in the overall mass transit system for the Town and the resort. The gondola serves as a primary access point for day skiers, providing direct access to the Peak 8 and Peak 7 base areas. The ease of access from the Town of Breckenridge and the adjacent day skier parking lots makes this a popular and convenient staging destination.

The BreckConnect Gondola effectively creates a central base area with skier services and streamlined link to transport large numbers of visitors between the Town, residences on Shock Hill, and lodging at the Peak 7 and 8 base areas. The gondola serves the dual purpose of transporting day skiers to the mountain as well as transporting guests staying at the Peak 7 and 8 accommodations back and forth to the Town, significantly decreasing traffic volumes on Ski Hill Road and increasing the number of visitors to the Breckenridge downtown.

The Town of Breckenridge operates a transit center with restrooms at the bottom of the BreckConnect Gondola that the Town's Free Ride Buses and the Summit Stage Buses use as a hub. Currently, the only resort service provided at the bottom terminal is ticket sales. The North Gondola Lot, at the bottom terminal of the BreckConnect Gondola, is being proposed for mixed-use development including commercial uses, townhomes, condos and a public park. This development could drive additional visitation to Town, not directly associated with BSR's winter and summer attractions. An additional transportation gondola is also planned to connect the North Gondola Lot with the North Gold Rush Lot, where another parking structure is proposed.

b) Peak 7 Base Area

The BreckConnect, constructed in 2006, provides access from public transit and parking lots to the base area. At Peak 7 base area, overnight accommodations and associated services are primarily offered at the Grand Lodge at Peak 7 (including Sevens Restaurant) and Crystal Peak Lodge. During the egress period, long lines can result as skiers and riders descend the mountain. Due to the two base areas the gondola serves, empty cabins reduce the efficiency of getting skiers and riders from the base areas to the parking lots and public transit. In order to ride the gondola directly from Peak 7 to bottom terminal, guests walk down and around the terminal and back up to the loading platform. This can be challenging for newer and younger skiers and riders. The Peak 7 portal accommodates 13 percent - or 2,312 - of the total guests skiing at BSR.

c) Peak 8 Base Area

The Peak 8 base area provides skier services for day skiers that park in the adjacent day skier lots or arrive via the BreckConnect Gondola or local shuttle/bus service. Peak 8 also provides services for overnight guests staying in adjacent accommodations, who access the base area via the local shuttle/bus service or the Snowflake Lift.

The Peak 8 portal accommodates 44 percent - or 7,828 - of the total guests skiing at BSR. The base area facilities consist of the following: One Ski Hill Place, Grand Colorado on Peak 8, Breckenridge Ski and Ride School, BSR Ski Rental, Kid's Castle, Administration, and Employee Locker building. A ski school yurt and sprung structure currently provide additional temporary space. The Peak 8 Base Area offers the following dining experiences: Ski Hill Grill, T-Bar, Ullr Café, Robbie's Tavern at the Grand Colorado on Peak 8 and The Living Room at One Ski Hill Place.

Peak 8 base area has transformed over the last decade and will continue to transformation to better utilize the base area milling space and with the proposed East Peak 8 hotel. Currently, guest service space services the current level of visitation; however, operational space has decrease since the 2007 MDP and on high visitation days the base area is congested. The ski school sprung structure, yurt and Kid’s Castle will be removed with future base area development, as well as reconfiguration of space with the replacement Chair 5.

d) Peak 9 Base Area

The Peak 9 base area (QuickSilver SuperChair and Beaver Run SuperChair) provides staging services for day skiers that park in the adjacent day skier lots or arrive at the base area via the local shuttle/bus service. In addition, Peak 9 provides services for overnight guests staying in adjacent accommodations, who may walk to the base area from their units or arrive via the local shuttle/bus service.

The Peak 9 portal accommodates 43 percent – or 7,650 – of the total guests skiing at BSR. Skier services are provided in a number of locations throughout the base area: The Maggie, Main Street Station, the Village at Breckenridge, and Beaver Run. Each of these facilities was constructed during approximately the same time in the mid-1980s, over a decade after Peak 9 was first developed in 1971. The resort has steadily renovated and maintained restaurants, guest service facilities and lodging in this area.

The Peak 9 base area has one restaurant operated by BSR: The Maggie. In addition, the Peak 9 Base Area has a variety of third-party rental, retail and food service locations within walking distance that are utilized by skiing guests throughout the day.

e) On-Mountain Services

Services are provided on-mountain in seven locations:

- Peak 6 – Horizon
- Peak 7 – Pioneer Crossing Restaurant
- Peak 8 – Vista Haus Restaurant, Imperial Warming Hut, T-Bar Warming Hut
- Peak 9 – The Overlook Restaurant
- Peak 10 – TenMile Station (serves Peak 9 and 10), Peak 10 Warming Hut

Sufficient guest service space should be provided to accommodate the existing resort CCC of 17,790 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, this report uses the distribution of the CCC 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 who would be utilizing the lifts and terrain associated with each facility.

Resort Service Space Functions

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 directly associated with ski school is included in this total.

KIDS' 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 above functions.

2. SPACE USE ANALYSIS

The following section describes guest service locations in detail and analyzes the current space use allocation for each area of the mountain. For each area of the base areas and on-mountain locations, and for the mountain as a whole, the at-capacity per-person square footage for each function is compared to the recommended square footage per person. This helps identify areas that are underserved or overserved by guest services facilities, as well as to determine the overall resort capacity balance.

Based upon a CCC of 17,790 skiers, Table 5 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 BSR. 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.

This analysis finds that, while the distribution of skier services facilities throughout BSR provides guests a variety of options and limits congestion between different parts of the mountain, there is a significant overall deficit of guest service space compared BSR’s existing lift capacity. This deficit is detrimental to the guest experience and BSR’s operational efficiency.

TABLE 5. Space Use Recommendations—Existing Conditions

SERVICE FUNCTION	EXISTING TOTAL	RECOMMENDED RANGE	
		SKIER/RIDER CAPACITY PER ACRE	SKIER/RIDER CAPACITY
Base of Peak 7	8,555	12,999	15,729
Base of Peak 8	46,486	65,636	80,829
Base of Peak 9	89,265	89,849	111,321
On Mountain Peak 6	1,908	2,265	2,766
On Mountain Peak 7	15,186	14,704	17,999
On Mountain Peak 8	21,189	21,090	25,786
On Mountain Peak 9	11,760	12,474	15,257
On Mountain Peak 10	14,572	23,625	28,865
TOTAL SQUARE FEET	208,920	242,641	298,551

Source: SE Group

3. FOOD SERVICE SEATING

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

- Peak 7 Base Area – Sevens Restaurant
- Peak 8 Base Area – Ski Hill Grill, T-Bar, and kid’s ski school program space
- Peak 9 Base Area – The Maggie and kids’ ski school program space
- Peak 7 On-mountain – Pioneer Crossing
- Peak 8 On-mountain – Vista Haus
- Peak 9 On-mountain – The Overlook
- Peak 10 On-mountain – TenMile Station (serves Peak 9 and 10)

A key factor in evaluating restaurant capacity is the turnover rate of the seats during the busy lunchtime period. 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 will spend more time indoors than on sunny days. Due to the mix of restaurant types and the typically good weather, a turnover rate of three and three and a half was used for BSR.

The following table summarizes the seating requirements at BSR, based on a logical distribution of the CCC to each base area or on-mountain location.

TABLE 6. Restaurant Seats—Existing Conditions

	BASE AREA			ON-MOUNTAIN					TOTAL
	PEAK 7	PEAK 8	PEAK 9	PEAK 6	PEAK 7	PEAK 8	PEAK 9	PEAK 10	
Lunchtime Capacity	1,434	2,301	2,674	398	2,894	3,361	1,943	3,675	18,680
Average Seat Turnover	3.0	3.0	3.0	3.5	3.5	3.5	3.5	3.5	
Existing Indoor Seats	150	909	930	50	440	600	315	315	3,709
Required Seats	478	767	891	114	827	960	555	1,050	5,642
Difference	-328	142	39	-64	-387	-360	-240	-735	-1,933
Existing Outdoor Seats	160	370	475	0	0	160	100	270	1,535

Source: SE Group

As shown in the Table 6, there is a deficit of indoor seating capacity at all locations with the exception of Peak 8 and Peak 9 base areas. Outdoor seating makes up for some of this deficit.

It is assumed that skiers will prefer to dine at the facility closest to the area where they are skiing. To allow for this convenience, it is important to provide adequate restaurant seating within each of the base areas and on-mountain terrain pods to accommodate the lunchtime capacity requirement of the area.

F. EXISTING PARKING CAPACITY AND RESORT ACCESS

Parking for BSR day skiers is located in several locations including paid and free parking lots and structures. Pay parking is located at the Stables Parking Structure at Peak 8 base area (67 spaces, bottom level), Beaver Run portal on Peak 9 (201 spaces), F Lot adjacent to the Village at Breckenridge (357 spaces), the Riverwalk Center (204 spaces), the Gold Rush lots (300 spaces), Postal lot (180 spaces pending lot improvements), and at the base of the BreckConnect Gondola in the North and South Gondola lots (608 and 950 spaces, respectively).⁷ Free day skier parking is available in Town at the Ice Rink lot (270 spaces) and the Airport Road lot (minimum 500 spaces, up to 1,400 spaces). The table below indicates that BSR maintains 3,637 parking spaces. With the assumption that approximately 40 percent of visitation is day skiers, the total required parking spaces to accommodate a CCC and other guests of 18,680 guests (CCC plus 5% non-skier guests) is 3,675 spaces.

Employee parking is provided in the Admin Lot for 120 spaces. Many employees will ride the free Town of Breckenridge transit from employee housing. This works well and is better managed when the Town transit and accommodate a number of different guests accessing the mountain.

TABLE 7. Recommended Parking—Existing Conditions

	MULTIPLIER	TOTAL
CCC + other guests		18,680
% Parking at portal	40%	7,472
% Within walking distance of base lifts	30%	5,604
% Arriving by public transit	30%	5,604
# Parking at portal		7,472
# Of guests arriving by car	97%	7,248
# Of guests arriving by charter bus	3%	224
Required car parking spaces	2.5	2,899
Required charter bus parking spaces	35.0	6.4
Equivalent car spaces (1 bus=4.5 car)	4.5	28.8
Required employee car parking spaces	4%	747
Total required spaces		3,675
Existing parking spaces		3,637
Surplus/Deficit		-38

Source: SE Group

⁷ The 950 spaces in the South Gondola includes the parking structure completed in 2021.

Based on a CCC plus other guests (5% of CCC) of 18,680, Table 5 indicates a slight deficit of 38 parking spaces to accommodate 7,472 guests arriving by car (2.5 guests per vehicle) and bus (35 guests per bus). The overall guest capacity at the day-skier parking lots, excluding buses, would be 9,093 guests (3,637 spaces x 2.5 guest/vehicle).

It is important to note that the slight deficit depicted in Table 7 is influenced by an additional 450 spaces in the recently completed South Gondola parking structure. Prior to the creation of these additional spaces, it was not uncommon for Town-owned lots, which are most proximate to the BreckConnect Gondola bottom terminal and Peak 9 base area, to be completely filled approximately 20 times per season. These “park-out” days for Town lots have generally overlapped holidays, key winter weekends, and other peak days. It is anticipated that the additional parking spaces that will come online with the parking structure will reduce the number of days that Town lots are filled by approximately 50 percent. Additionally, it is important to note that even in past seasons, when Town lots were filled, the satellite lots along Airport Road are rarely ever completely filled, with the only exceptions being the Town Snow Sculpture Event and one holiday weekend per year. There are a minimum of 500 spaces in the Airport Road lot with an additional 700 spaces possible (these 700 spaces were not accounted for in this analysis).

G. EXISTING RESORT OPERATIONS

1. SNOWMAKING AND GROOMING

Snowmaking generally begins mid-October and ends around Christmas. The existing total snowmaking coverage at BSR is displayed in Table 8 and is approximately 700 acres or approximately 36 percent of the total lift-served terrain (1,952 acres). The existing snowmaking infrastructure (i.e., water supply, pipes, hydrants, guns) provides consistent top to bottom trail coverage for every out-of-base lift. Historically Peak 8 is generally the first to open as the BreckConnect Gondola is the primary mode of transportation from Town; thereby reducing bus traffic, associated costs, and emissions to transport guests to Peak 9 from Town parking in the early season.



**Plentiful
snow and
a long ski
season**

TABLE 8. Existing Snowmaking Coverage Area

SNOWMAKING COVERAGE		
Silverthorne	Pioneer	Frosty's
Columbia	Angel Rest	Spruce
Bonanza	Lehman	Shock
Cashier	Little Harrys	Freeway
Gold King	Lost Horizon	Fort Mary B
Peerless	Twister	Forget Me Not
Crosscut	Dukes	American
4 O'clock	Crystal	Double Jack
Trygve's	Cimarron	Centennial
Columbine	Red Rover	Claimjumper
Springmeier	Sundown	Park Lane
Lower Crescendo	C Transfer	Mach 1
Northstar	Sawmill	American

The existing capacity of the snowmaking system is 6,000 gallons per minute (gpm) of water and 27,886 standard cubic feet per minute (scfm) of compressed air. The system consists of 50 air/water guns, 32 fan guns, and 560 tower guns with water supplied by 1,022 hydrants across the mountain. BSR provides an average depth of 18-24 inches of snowmaking coverage over approximately 70 days during the season beginning around October 16th and finishing late December or early January. There are typically 11 vehicles used in an 8-hour grooming shift. These vehicles will typically groom approximately 1,050 acres per night.

Table 9 provides operational statistics for BSR's existing snowmaking demands.

TABLE 9: Snowmaking Operational Statistics

FIVE YEAR AVERAGE	OPERATION (HOURS)	WATER CONSUMPTION (GALLONS)	ACRE-FEET PRODUCED
2015-2020	1,427	214,946,000	1,200

2. MAINTENANCE FACILITIES

BSR has one principal maintenance area composed of two buildings located on Peak 8 approximately 600 feet north of the Snowflake Lift angle station on private land. The primary maintenance building is approximately 17,000 square feet and includes a 14-bay garage, vehicle maintenance and fueling (discussed below), a wash bay, full-scale parts room, and tool room.

Lift maintenance also occurs in this facility with a key component being the continuous Non-Destructive Testing (NDT), utilizing Mag particle technology, for the grip mechanisms of the detachable lifts. This facility also includes locker space, mechanical and storage space, welding space, and restrooms. The second floor of the primary building includes six offices. The other maintenance building is an approximate 13,240 square feet, two-floor structure that houses storage, staging, and employee/administrative space. These facilities are adequately sized for existing use and could accommodate a slightly increased fleet of vehicles.

3. INFRASTRUCTURE AND UTILITIES

The existing utilities that supply water, sewer, gas, power, fuel storage, and communications to on-mountain facilities, including restaurants, lifts, duty stations, and snowmaking (discussed above) are adequately sized and include sufficient supply loads. Further, existing capacities sufficiently cover peak days in excess of 22,000 guests. Xcel Energy (previously called Public Service Company of Colorado) provides electric power and gas, and the Upper Blue Sanitation District provides sewer service. Many of the utilities are currently reaching the end of their useable lifespan and will require replacement in the lifespan of this MDP.

4. DOMESTIC WATER AND WASTEWATER TREATMENT

Information concerning water use, water rights, and Colorado River fisheries Section 7 consultation is available in documents outside of this MDP. BSR's water rights plans are dynamic and subject to diligence proceedings with the Water Court. State of Colorado Water Court decrees should be considered the official and most current source of information concerning BSR's water rights. Likewise, USFWS Biological Opinions should be considered the official source of information concerning Section 7 consultation related to Colorado River threatened and endangered fish. The WRNF has been provided up-to date water sufficiency records, which will be reviewed prior to any project that could increase water use.

5. MOUNTAIN ROADS

Mountain access roads exist between the private, base area lands and the SUP area. It is noted that the existing "Peak 9 access road" is a County Road (County Road 751) that is open to the public and receives frequent use by Breck Stables guests, bikers, hikers and sightseers traveling by highway legal vehicles during the non-winter months. Aside from the skiing public unknowingly skiing over this road, it is not open to public during winter months. Portions of this road are also used by BSR for operational needs and the uppermost segment provides access to hike-to terrain within the BSR SUP area during the winter season.

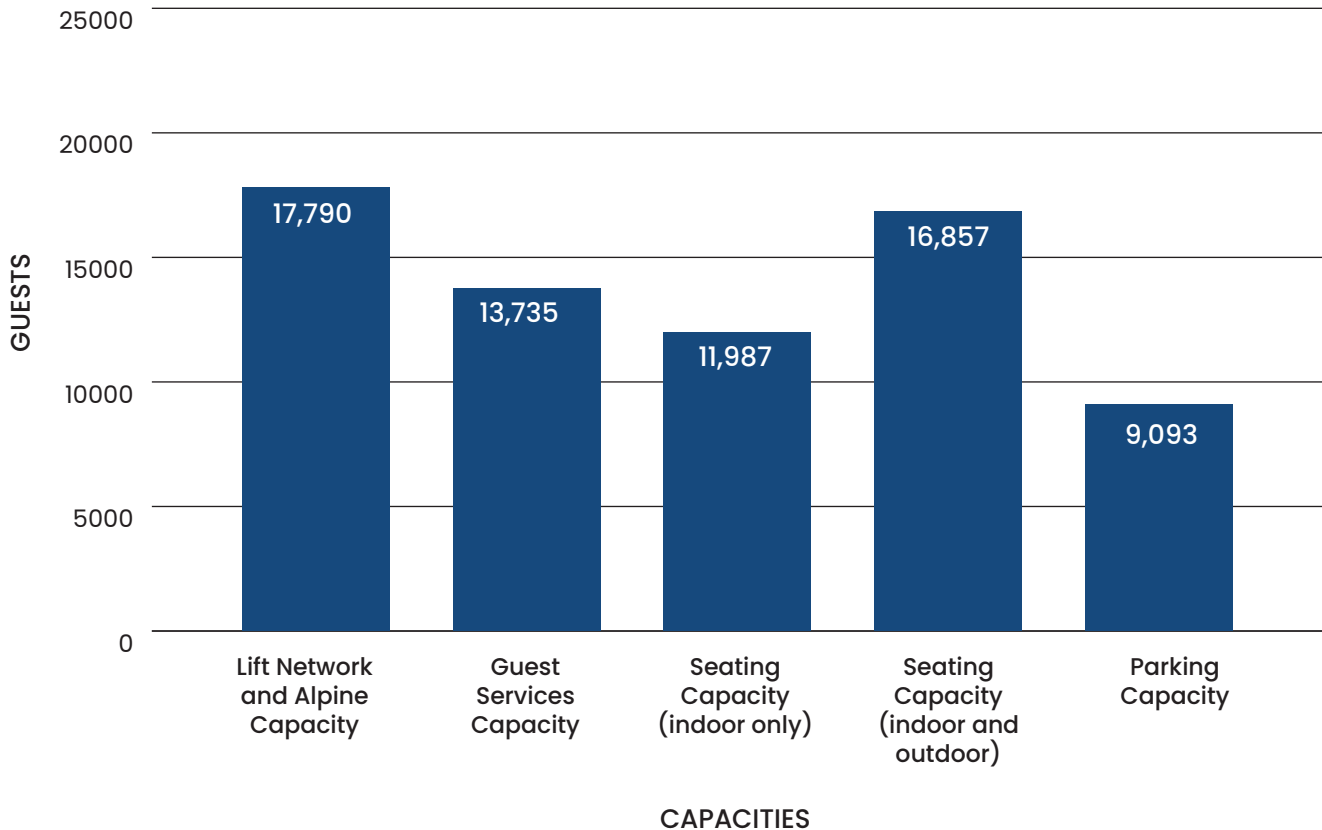
Although located outside of the ski area boundary, Green Gate Road (FDR 995) and County Road 3 are used for ski area maintenance purposes. The Green Gate Road is also used seasonally by the Tailor Lode property owners to access their inholding within BSR's SUP. A special use authorization and operating plan for the Tailor Lode Access is on file at the Dillon Ranger District Office.

Overall, the mountain road network is adequate for BSR's needs. Routine maintenance and the repair of utilities located within road alignments is not uncommon, but overall, the connectivity serves the operational needs of the resort well.

H. RESORT CAPACITY BALANCE AND LIMITING FACTORS

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 above discussed capacities are shown in Chart 2.

CHART 2. Resort Capacity—Existing Conditions



As the above chart indicates, the existing resort needs to achieve an improved balance of skier support facilities (i.e., guest services and restaurant seating). Guest service space is recognized as a specific constraint at BSR, with facilities provided not being sufficient for the existing resort capacity on-mountain. The restaurant seating capacity for only the indoor seating is significantly lower than the existing CCC of 17,790. On fair weather days, enough seats are available; however, on colder winter days, seats can be challenging to find indoors. Additional on-mountain seating and guest service space would address these deficiencies.

Parking also shows a deficit. Skiers and riders arriving by car is estimated at 40% of CCC with the remaining 60% of guests within walking distance to the resort from surrounding accommodations or arriving by transit.

I. SUMMER AND MULTI-SEASON OPERATIONS

Non-skiing year-round and summer recreational activities are an important aspect of BSR's operations. These activities provide an opportunity for guests to experience the National Forest in a comfortable setting. Most of the non-skiing recreational activities offered at BSR occur primarily in the summer, but some, such as the GoldRunner Mountain Coaster, are available year-round (conditions permitting). The existing summer activities and facilities are illustrated in Figure 6 and are described below.

1. SUMMARY OF THE EXISTING MULTI-SEASON ACTIVITIES AND THE GUEST EXPERIENCE

BSR has been offering non-skiing recreational activities since the 1970s. For many years, activities were primarily concentrated on non-forest-service land in the Peak 8 Base Area, with some dispersed activities (including scenic lift rides and mountain biking) occurring on forest service land. In the 2010s, following the passage of the Ski Area Recreational Opportunities Enhancement Act (SAROE), BSR significantly expanded its summer offerings in accordance with the Zoning Plan outlined in the 2013 MDP amendment with the construction of the Alpine Camp Activity Center at the top of Colorado SuperChair.

The current summer guest experience at BSR, branded as Epic Discovery, is centered on the Peak 8 area. More developed activities take place at Peak 8 Base Camp and in Alpine Camp at the top of Colorado SuperChair, while the rest of the resort primarily hosts dispersed guest activities such as hiking and mountain biking.

Offering non-skiing recreational activities since the 1970s



During the summer, the Town of Breckenridge is a sought-after destination for summer recreationists. BSR provides the Town an additional draw for tourists hoping to visit the High Rockies in the summer while summer activities at BSR, in turn benefits from the Town’s attractive qualities.

Zoning Concept

In line with the requirements of set forth in SAROEA, BSR has developed summer activities within its EIS according to a system of “summer activities zones.” These zones are delineated and defined based on the existing setting of the SUP area and the existing level of development within the area to support snow sports. The setting and guest experience within different landscapes across the SUP area is ranked according to four characteristics: access, remoteness, naturalness, and infrastructure.

2. LIFTS

BSR currently operates four lifts in the summer: BreckConnect Gondola, 5-Chair, Rip’s Ride, and Colorado SuperChair. Together, these lifts serve a variety of guest service functions for summer operations at BSR.

For most guests, the summer experience at BSR begins on the BreckConnect Gondola. As there is limited parking available in the Peak 8 base Lots, the gondola is the primary means by which guests can access the Peak 8 base area and Epic Discovery. As it does in the winter, the BreckConnect gondola allows guests to load in both directions.

Rip’s Ride is the shortest lift operational in the summer. This lift provides access to the Breck Flyer Zipline, as well as bike haul for beginner riders. Rip’s Ride is an up-loading only lift in the summer.

In the summer, 5-Chair operates with a summer-only mid-station to allow guests to access the alpine slide (discussed below). In addition, 5-Chair is fitted with hooks that allow the alpine slide sleds to be hauled by the lift. The 5-Chair is an up-loading only lift in the summer.

Colorado SuperChair operates for both uploading and downloading throughout the summer. The serves a variety of functions. The lift is the primary means by which Epic Discovery guests can access the Alpine Camp. Guests not participating in adventure park activities can purchase scenic ride tickets and ride the lift for dramatic views of BSR. Additionally, the lift serves intermediate and advanced downhill and cross-country mountain bikers.

**Expedition
Guided
Canopy
Tour**



3. EPIC DISCOVERY ADVENTURE PARK

Epic Discovery is BSR's summer adventure area. Based out of Peak 8, Epic Discovery offers guests thrilling and family-friendly adventure experiences in the alpine environment of the Tenmile Range. Epic Discovery is divided into three camps: Base Camp, Kid's Camp and Alpine Camp, plus one satellite facility at the top of Peak 7.

a) Peak 8 Base Camp

Peak 8 Base Camp is located on private land adjacent to NFS lands, interspersed between the bottom terminals of the four operational lifts. Base Camp serves as the starting point for summer fun and adventure at BSR. Tickets are purchased at the Base Camp, at the T-Bar Café and at Ski Hill Grill. Developed recreation opportunities available at Peak 8 Base Camp include a miniature golf course, gemstone panning and the Silver Summit climbing wall. Base Camp also serves as the terminus for several on-mountain activities, including the Alpine Slides and the Breck Flyer Zipline, as well as the load and unload station for the Gold Runner Alpine Coaster.

b) Kids' Base Camp

To the Southeast of the Peak 8 Base Camp is the Kid's Base Camp. This area, also located on non-NFS land, is primarily geared towards younger guests. Kids test their mettle on the Lil' Climber Ropes Course, perform acrobatics on bungee trampolines, soar through the air on the Lil' Flyer Zipline, or get a taste of winter on the Lil' Nugget Summer Tubing Course.

c) Alpine Camp

The newest addition to BSR's summer offerings is Alpine Camp at the top of Colorado SuperChair. This camp is located on NFS land and provides some of the most unique activities at BSR. There are three main adventure activities in Alpine Camp. First, the Gold Summit Climbing Wall is a far larger and more challenging climbing wall than Silver Summit at the base. Second is the Alpineer

Challenge Course, a significant challenge course with spectacular views that is fun for both older kids and adults. Finally, the Vista Point Overlook is a viewing tower that lets guests take in the majesty of the Upper Blue Valley, Swan Mountain, and the Tenmile Range.

In addition to adventure activities, Alpine Camp also has a variety of interactive “Learn Through Play” experiences interspersed along the trails between activities. The Vista Haus restaurant and Ski Hill Grill is also open for hungry adventure park guests as well as scenic riders and bikers.

d) Expedition Canopy Tour

The Expedition Guided Canopy Tour offers guests a spectacular experience on Peak 7. This installation, which consists of 7 zipline segments, allows guests to take a guided tour down the top half of Peak 7 in the Ore Bucket area. The tour begins slightly above the top terminals of Freedom and Independence SuperChairs and terminates near the Freedom SuperChair lift line on the Peak 7/8 Mountain Road. After the tour concludes, the guests are picked up by resort vehicles.

4. BIKING

A developed mountain bike trail network based out of the Peak 8 and 9 base areas provides trails for a variety of ability levels. Trails located on Peak 8 can be accessed by the Colorado SuperChair for a downhill ride or guests can ride directly out of the base area. Currently, the on-mountain mountain bike network is mostly on Peak 8. One mountain bike trail is primarily located on Peak 7 in addition to a trail connecting the Peak 7 base with the Peak 8 base area. The Peak 9 mountain bike trail network can be accessed via the *Frosty’s Challenge* or *Wanderer* trails connecting Peak 8 to Peak 9 via Sawmill Gulch, which topographically separates Peak 8 from Peak 9. Additional mountain biking trails on Peak 9 are not lift served, but guests can bike through town and take the BreckConnect Gondola to return to Peak 8 Base Area.



The bike trail network provides trails for a variety of ability levels

5. FACILITIES

As discussed above, the Peak 8 base area provides staging services for day users that park in the adjacent day skier lots or arrive via the BreckConnect Gondola or via the local shuttle/bus service. Peak 8 also provides services for overnight guests staying in adjacent accommodations. The Peak 8 base area provides dining and beverages, rest rooms, guest services, ticket sales, first aid, retail sales and rentals, and employee and administrative space. The two facilities at the base of Peak 8 are the Ski Hill Grill and T-Bar. The Vista Haus is located at the top of the Colorado SuperChair, and during the summer season this facility provides only shelter, water and restrooms and food to the public.

Peak 7 can be accessed via the BreckConnect Gondola or via the local shuttle/bus service. The Peak 7 base area currently does not offer any staging area for on-mountain activities, although mountain bike and hiking trails may be accessed from this point. Presently, there is no ticket office at the Peak 7 base area for accessing Epic Discovery at BSR. The Peak 7 base area provides rest rooms in addition to food service through Sevens Restaurant. Currently, Peak 7 is an underutilized summer portal to the National Forest. Pioneer Crossing, located at the top of the Freedom and Independence SuperChairs on Peak 7 is utilized to support the Expedition Canopy Tour. Additionally, restrooms in the building are open to the public and the building can also provide guests shelter during inclement weather.

On Peak 9, TenMile Station is located near the top terminal of the QuickSilver SuperChair. During the summer months, TenMile Station's well landscaped facility serves as a wedding and special events venue.

6. SUMMER ACCESS ROADS

The Peak 9 access road (County Road 751) is a designated Forest Service Road used frequently by the general public for summer recreation and by BSR for ski area operations and maintenance. The road provides access the Peaks 9 and 10 areas as well as the Briar Rose mine site atop Peak 10. The Peak 9 Road is also utilized by hunters during hunting season. Furthermore, the lower section of Peak 9 Road is used by BSR to access TenMile Station for weddings and group events. This road is also used by Breckenridge Stables operating under a separate SUP with the Forest Service. The Peak 7/8 Road is restricted to administrative use only and not open to the public for motorized travel.



CHAPTER 3

Previously Approved, Not Yet Implemented Projects

CHAPTER 3. PREVIOUSLY APPROVED, NOT YET IMPLEMENTED PROJECTS

The projects detailed in this section have been previously approved through the NEPA process but have not yet been implemented. Prior to project implementation the Forest Service will review project consistency with Forest Plan standards and guidelines and determine if additional analysis is warranted due to new or changed conditions.

Several documents over the past two decades include authorizations for projects that have not yet been implemented by BSR. Specifically, the following documents include authorization the projects enumerated on Table 10:

- 2002 Breckenridge Ski Resort Peak 9 Lifts and Facilities Improvements Plan, Environmental Assessment, Decision Notice and Finding of No Significant Impact.
- 2003 Breckenridge Ski Resort Restaurant Water System Upgrade and Replacement, Country Boy/Eldorado Trail Snowmaking, Relocation of the Peak 7 Restaurant Site, and Mid-Station Unload on the Independence SuperChair, Environmental Assessment, May 2003 Decision Notice and Finding of No Significant Impact.
- 2005: Breckenridge Ski Resort Peak 8 Summit Lift and 6–Chair Replacement, Environmental Assessment, Decision Notice and Finding of No Significant Impact
- 2015: Breckenridge Ski Resort Multi-Season Recreation Projects Final Environmental Impact Statement, Record of Decision

Previously approved, not yet implemented plans are briefly summarized in the table below, while detailed discussions of the previously approved changes that are planned for implementation in the next decade are included in Chapter 4 alongside not-yet-approved planned changes.

TABLE 10. *Previously Approved, Not Yet Implemented Projects*

PROJECT NAME	APPROVED IN	ALIGNMENT WITH CURRENT PLAN
6–Chair Upgrade	2005 Peak 8 DN/FONSI	Planned for implementation
Independence Mid-Station	2003 DN/FONSI	Not planned for implementation
A–Chair Upgrade	2002 Peak 9 DN/FONSI	Planned for implementation
Peak 9 Cabriolet		Not planned for implementation
Peak 9 Ski School & Services Building		Not planned for implementation
Peak 7 Zipline	2015 Multi-season FEIS/ROD	Planned for implementation as approved (all summer activities are subject to change based on developments in the summer rec sector)
Peak 7 Bike Skills Course and Hiking Trails		
Sawmill Canopy Tour		



CHAPTER 4

Upgrade Plan

This upgrade plan has been assembled to improve the quality of the recreational experience and BSR. As designed, the terrain, lift network and guest services infrastructure upgrades will fulfill BSR's plan vision of creating a resort that is Better Not Bigger by enabling BSR to better accommodate guest visitation. To do so, BSR plans to replace aging lift infrastructure to improve out-of-base capacity and facilitate improved circulation of existing on-mountain routes, to engage in targeted guest services and terrain improvements, and to complete a variety of infrastructure improvements that will improve the on-mountain experience. As part of the planning process, BSR has worked to ensure resort balance, as well as alignment of planned changes with both the resort's design criteria and forest service policy direction. The upgrade plan correlates with Figures 9 – 12.

A. SUMMARY OF THE UPGRADE PLAN

In the next decade, BSR plans to make improvements throughout the resort that align with this plan's vision of *Better Not Bigger*. Taken as a whole, the planned changes are intended to improve up-mountain access and circulation, reduce congestion points and enhance the guest experience. The plan is not intended to drive further visitation, but rather to give the resort the ability to better handle busy days.

This plan contemplates redesign of Peak 8 and Peak 9 base areas, the replacement of all remaining Riblet fixed-grip lifts, as well as other lift infrastructure upgrades, upgrade to guest services facilities, and numerous terrain modifications that will improve guest circulation across the mountain. As a result, the Comfortable Carrying Capacity of BSR is planned to increase by approximately 2,400 guests to 20,190 guests. This increase is due to lift upgrades; however, these improvements are solutions to improve beginning-of-day ingress and reduce congestion points on the mountain.

B. UPGRADED LIFT NETWORK

In the next decade, BSR plans to replace and upgrade lifts throughout the resort. Lift improvements are not intended to open additional terrain. Rather, the upgraded lift network is designed to create a three-fold improvement in conditions at BSR. First, the resort plans to replace all remaining Riblet fixed-grip with more comfortable, faster, modern detachable lifts. Second, BSR plans to improve the lift network such that intermediate and advanced guests are encouraged to repeat ski the upper mountain without returning to the often-congested base area. Finally, the improved lift network will provide better access to novice and beginner terrain, reducing the time spent waiting in line for those new to skiing and riding. Taken together, the lift network upgrade plan is oriented around the goal of alleviating congestion points and improving circulation as a whole.

1. PEAK 7

a) Peak 7 Learning Area

Two carpet conveyors are planned in the base area of Peak 7 adjacent to the existing Independence SuperChair. These surface conveyors would provide a learning area on 6 acres of

2. PEAK 8

a) Peak 8 Learning Area (Non-NFS Lands)

The Peak 8 learning area is planned to have a new teaching lift and surface lift. This area, which currently encompasses the top terminal of Snowflake Lift, as well as all of Rip's Ride, Trygve's Platter, and the Peak 8 carpets, is located entirely on private land. Likewise, all improvements in this area are planned to take place on private land and are not subject to the NEPA approval process. Nevertheless, BSR plans several changes that may impact resort capacity and/or resort ingress.

First, BSR plans to replace the aging Rip's Ride with a high-speed detachable quad. This new infrastructure will be easier to load for beginner and novice guests and will carry new skiers and riders more quickly and comfortably up the hill. The new, higher capacity lift is planned to follow a similar alignment to the existing Rip's Ride while providing better access to Peak 9 and egress on the 4 O'Clock ski trail to Town.

Second, BSR plans to develop two new lifts adjacent to Trygve's Platter between Trygve's and Lower Crosscut ski trails, and accompanying terrain, ascending from above the existing vehicle maintenance area to the top of Rip's Ride. These two lifts would create a small amount of additional novice and beginner capacity on the mountain while providing an opportunity for new skiers and riders to experience purpose-built beginner terrain that allows for progression in a separate pod from the congested Peak 8 base area. New carpets may also be added in this area to facilitate learning.

In addition to the two new lifts, BSR also plans to install new carpets or relocate existing carpets adjacent to the bottom of Rip's Ride and Chair 5 and engage in targeted terrain modification to minimize on-mountain congestion and maximize the beginner friendliness of the terrain.

b) 5-Chair

BSR plans to replace 5-Chair out of the Peak 8 base area with a high-speed detachable quad. The existing lift is 50 years old, prone to misloads by beginner and novice using the lift and contributes to congestion at the base of Peak 8. A replacement and slight realignment of 5-Chair is planned to improve circulation. The new lift would have a design capacity of 2,400 pph and a daily comfortable carrying capacity of 890 guests. A non-detaching mid-station assembly, operating only in summer and usable only when the lift is running at low speeds, would be installed near the existing 5-Chair mid-station to provide access to the alpine slide.

c) 6-Chair

A replacement of 6-Chair was previously approved as part of the 2005 Environmental Assessment. The proposed 6-Chair will replace the existing over 40-year-old lift with a detachable quad following the same alignment as the existing lift. The new lift would have a design capacity of 2,400 pph and a daily comfortable carrying capacity of 840 guests.

3. LOWER PEAK 9

Peak 9 base area is one of the most heavily used base areas at BSR and serves a variety of terrain options. The proximity of the base to the Village of Breckenridge and several parking lots means that approximately 43% of daily guests access BSR from Peak 9 (Peak 8 is used by approximately 44% of guests). Peak 9 base area can be thought of as two separate sub-bases that serve very different terrain and types of guests. The area closest to the Town of Breckenridge contains most of Peak 9's guest services facilities and is serviced by the QuickSilver SuperChair and several beginner platter and carpet lifts. Lifts accessed from this area primarily serve beginner and novice terrain.

The bottom terminal of Beaver Run SuperChair is located about a quarter mile from the base of QuickSilver SuperChair. Beaver Run SuperChair does not access novice or beginner terrain. Additionally, because of the location of its bottom terminal, the lift requires guests to arrive by bus or first ride QuickSilver. Thus, most guests access BSR via QuickSilver SuperChair and the lift frequently has extremely long lines, especially in the morning. This leads to a suboptimal guest experience both for novice skiers and riders hoping to lap QuickSilver's extensive novice terrain, and delays for more advanced skiers who wish to use QuickSilver to access the upper mountain. This plan proposes several lift projects to relieve crowding in the Peak 9 base area.

a) Frontier Teaching Gondola

BSR plans to install a new gondola adjacent to the QuickSilver bottom terminal. This lift would ascend from lower Peak 9 base to a new ski school teaching terrain area between Red Rover and Lower Lehman runs. The gondola will be primarily dedicated to ski school, and will allow beginner guests who are not yet comfortable skiing or riding on QuickSilver terrain to access beginner terrain away from the typically congested Peak 9 base area. Additionally, if new skiers and riders do not feel comfortable skiing down to the base area at the end of the, they will be able to ride the gondola instead. The gondola is planned to be an 8- or 10- person gondola, primarily an access lift and has a daily comfortable carrying capacity of 230 guests.

b) Frontier Learning Area

At the top of the new Frontier Teaching Gondola, two new carpet lifts would be constructed. These carpets would allow beginner skiers to make their first turns in a more controlled environment, away from the congestion of the Peak 9 base area. These carpets would be primarily used by ski school and would contribute a relatively small amount to the resort's overall CCC.

c) A-Chair

A-Chair is planned to be removed and replaced with a detachable or fixed-grip quad on a shortened alignment. A slightly different replacement of the A-Chair was approved in the 2002 DN/FONSI. The new A-Chair will allow novice skiers and riders to access the existing learning terrain and lifts on the Eldorado ski trail quickly and comfortably. In addition, the improved A-Chair would have an increased throughput of 2,000 pph. This would allow better utilization of A-Chair and the existing teaching terrain for novice skiers, rather than trying to navigate the congested lower mountain of Peak 9. The new A-Chair would accommodate 1,230 guests.

4. UPPER PEAK 9

To access Peak 9 from the north, guests must first descend into Sawmill Gulch. Once there, guests may either ascend to Peak 9 on one of two lifts (E-Chair or C-Chair) or use the flat Lower Sawmill trail to the Peak 9 base area. However, both E-Chair and C-Chair are older Riblets lifts and do not effectively serve BSR’s existing terrain network. Both lifts are planned to be replaced as part of this MDP.

a) C-Chair

The existing C-Chair is a long fixed-grip Riblet double with an approximate 10-minute ride time. Due to its extended ride time, many guests skiing and riding from Peak 8 to Peak 9 choose to bypass C-Chair and ski down to Beaver Run SuperChair in the Peak 9 base area. This creates congestion on the flat lower *Sawmill* ski trail, and further contributes to the overcrowding of the Peak 9 base area. To alleviate these issues, BSR plans to replace C-Chair with a detachable 6-person lift.

The replacement C-Chair is planned to follow the same alignment as the existing C-Chair. The bottom terminal will be moved slightly uphill the current lift’s bottom terminal, while the line will be extended and top terminal will be located above the Overlook restaurant and able to provide access to expert terrain on the north side of Peak 9. The new C-Chair is planned to have a design capacity of 3,000 pph. The lift’s role will be to provide circulation from Peak 8 and service underutilized terrain on the north of Peak 9. The replacement will help spread guests out and keep guests on the mountain to circulate rather than return to the base area.

b) E-Chair

E-Chair is a Riblet double ascending from upper Sawmill Gulch. The lift primarily serves advanced intermediate and expert skiers and riders transferring from Peak 8, as well as expert skiers and riders lapping the upper north face of Peak 9. As with all the Riblet lifts at BSR, E-Chair is 40 years old and is planned to be replaced. The new E-Chair is planned to be replaced in the same alignment with an hourly design capacity of 2,400 pph.

5. STAGING LIFTS

a) Gold Rush Gondola

A new gondola is planned to be constructed on non-NFS lands between the Gold Rush Parking Lot and the base of the BreckConnect Gondola in the North Gondola Parking Lot. This gondola will allow guests who are parking in the future North Gold Rush Parking Structure or are staying in the planned real estate development to access the BreckConnect gondola without having to cross North Park Avenue.

6. MISCELLANEOUS UPGRADES

Additional lift maintenance projects are project through the life of this MDP. BSR plans to replace the haul rope on existing lifts and perform other lift maintenance projects as needed.

TABLE 11. Lift Specifications—Upgrade Plan

LIFT NAME LIFT TYPE	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. GRADE (%)	ACTUAL CAPACITY (PPH)	ROPE SPEED (FPM)	CARRIER SPACING (FT.)	LIFT MAKER/ YEAR INSTALLED
QuickSilver SuperChair/DC-6	10,266	9,634	632	5,600	11%	3,600	1,100	110	Poma/1999
A-Chair/C-4	10,381	9,931	450	3,258	14%	2,000	450	54	Planned Replacement
Mercury SuperChair/DC-4	11,521	10,055	1,466	7,557	20%	2,400	1,100	110	Poma/1997
C-Chair/DC-6	11,231	9,972	1,259	5,862	22%	3,000	1,000	120	Planned Replacement
Beaver Run SuperChair/DC-4	11,307	9,716	1,591	9,058	18%	2,800	1,000	86	Poma/1990
E-Chair/DC-4	11,548	10,581	967	3,075	33%	2,400	1,000	100	Planned Replacement
Falcon SuperChair/DC-6	11,602	10,198	1,404	5,838	25%	3,000	1,000	120	Poma/2017
Camelback Platter/S-1	9,709	9,655	54	583	9%	400	300	45	Poma/1994
Ski & Ride Carpet D	9,660	9,645	15	153	10%	400	50	8	Sunkid/2005
Ski & Ride Carpet A	9,639	9,634	5	54	9%	400	50	8	Sunkid/1997
Ski & Ride Carpet B	9,656	9,634	22	200	11%	400	50	8	Sunkid/1998
Ski & Ride Carpet C	10,227	10,200	27	200	14%	400	50	8	Sunkid/1998
Eldorado Tow	10,325	10,300	25	90	29%	400	50	8	Sunkid/1998
Colorado SuperChair/DC-6	11,273	9,948	1,325	6,394	21%	3,600	1,000	100	Poma/2014
Rocky Mountain SuperChair/DC-4	11,196	9,948	1,248	5,629	23%	2,400	1,100	110	Poma/1997
Snowflake/C-2	10,330	9,699	631	5,322	12%	1,200	500	50	Poma/1996
Peak 8 SuperConnect Top/DC-4	11,275	10,345	930	3,251	30%	1,300	1,000	185	Poma/2002
Peak 8 SuperConnect/ DC-4	11,275	9,850	1,425	8,377	17%	1,300	1,000	185	Poma/2002
5-Chair/DC-4	10,682	9,962	720	3,413	22%	2,400	1,000	100	Planned Replacement
6-Chair/DC-4	11,963	10,577	1,387	4,625	32%	2,400	1,000	100	Planned Replacement
Rip's Ride/DC-4	10,280	9,979	301	1,796	17%	2,000	1,000	120	Planned Upgrade

LIFT NAME LIFT TYPE	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. GRADE (%)	ACTUAL CAPACITY (PPH)	ROPE SPEED (FPM)	CARRIER SPACING (FT.)	LIFT MAKER/ YEAR INSTALLED
T-Bar/S-2	12,214	10,980	1,234	3,941	33%	1,200	722	72	Doppelmayr/ 1984
Independence SuperChair/DC-6	11,380	10,015	1,365	7,525	18%	3,000	1,100	132	Poma/2002
Imperial Express SuperChair/DC-4	12,836	11,894	942	2,716	37%	1,200	1,000	200	Poma/2005
Trygves Platter/S-1	10,169	10,090	79	605	13%	400	300	45	Poma/1997
Ski & Ride Carpet 3	9,980	9,970	10	62	16%	400	50	8	Magic Carpet
Ski & Ride Carpet 4	9,990	9,970	20	134	15%	400	50	8	Sunkid
Kinderhut Carpet	9,975	9,970	5	54	9%	400	50	8	Sunkid/1997
Kids Kastle Carpet	9,980	9,970	10	100	10%	400	50	8	Sunkid/1998
BreckConnect Gondola/DG-8	9,952	9,554	398	7,672	5%	2,800	1,000	171	Poma/2006
Kensho Super Chair/DC-6	12,300	10,760	1,540	5,983	27%	3,000	1,000	120	Poma/2013
Zendo Chair/C-4	10,840	10,528	313	2,606	12%	2,000	450	54	Poma/2013
Freedom SuperChair/DC-4	11,430	10,402	1,029	5,735	18%	2,400	1,000	100	Poma/2021
Planned Pk 8 Teaching Chair/C-3	10,244	10,101	143	927	16%	1,200	500	75	Planned
Planned Carpet 1 (Peak 8)	10,106	10,089	17	108	16%	400	50	8	Planned
Planned Carpet 2 (Peak 8)	10,150	10,092	58	352	17%	400	50	8	Planned
Planned Carpet 3 (Frontier)	10,090	10,077	12	122	10%	400	50	8	Planned
Planned Carpet 4 (Frontier)	10,075	10,058	6	206	8%	400	50	8	Planned
Peak 7 Carpet 1	10,016	10,013	3	40	8%	400	50	8	Planned
Peak 7 Carpet 2	10,016	10,013	3	40	8%	400	50	8	Planned
Frontier Gondola/ DG-8	10,094	9,639	456	4,763	10%	2,200	800	175	Planned

Source: SE Group

Notes: S-1 = platter lift / S-2 = T-bar lift / C-2 = fixed-grip double chairlift / C-3 = fixed-grip triple chairlift / C-4 = fixed-grip quad chairlift / DC-4 = detachable four-passenger chairlift / DC-6 = detachable six-person chairlift / DG-8 = detachable eight-person gondola / DG-10 = detachable ten-person gondola

C. UPGRADED TERRAIN NETWORK

As this upgrade plan is implemented, BSR plans to construct several new trails, as well as to undertake strategic grading and trail widening on trails on all five peaks. These projects are designed to eliminate steep, abrupt pitches; improve access to trails; aid in early-season snowmaking operations; alleviate congestion with infill trails; and improve on-mountain circulation with upgraded infrastructure. Grading, trail construction and trail widening projects are depicted in Figure 9. Overall, BSR plans to cut approximately 70 acres of new developed terrain. A detailed list of terrain plans follows.

1. NEW DEVELOPED TERRAIN

a) Peak 6

As it was the most recent to be developed, Peak 6 has the fewest planned trail projects. A cutoff trail between Delirium and Barton Breezeway is planned to improve circulation and increase guest choice on the runout of upper Peak 6. In addition, a trail to the south of Zendo Chair is planned to be cut, easing Peak 6's most significant congestion point by increasing the number of intermediate egress routes from Peak 6 from two to three. Additional grading or earthwork could also be warranted to help improve the Zendo Chair unload.

b) Peak 7

A number of new trails are planned for Peak 7 with the primary goal of significantly improving guest circulation between Peaks 6 and 8. To ease congestion for guests heading from Peak 7 to Peak 8, two new trails are planned to be cut between *Claimjumper* and *Northstar*, and one new cutoff is planned to be cut between *Pioneer* and *Claimjumper*. Finally, in order to ease Peak 7 congestion overall, a new infill run between *Wirepatch* and *Swan City* is planned, and *Northstar*, *Claimjumper* and the upper part of *Pioneer* are all planned to be widened.



Strategic
trail
planning

c) Peak 8

Terrain work on Peak 8 is planned to address areas of congestion and improve circulation for skiers and riders of all levels. BSR plans to improve the beginner and novice experience on non-forest service lands at the bottom of Peak 8 by introducing new novice trails to be accessed by a new beginner lift to the east of Rip's Ride. This will relieve congestion in the Peak 8 base area and on *Twister* and *Trygve's* by allowing novices to learn on terrain that does not return to the base area. BSR also plans to expand the Dragon Trail Kids' adventure zone. For both novice and low intermediate skiers, BSR plans to widen *4 O'Clock* ski trail between the top of 5-Chair to the top of Rip's Ride to accommodate the increase capacity of 5-Chair. For intermediate skiers and riders, BSR plans to relieve crowding and improve circulation by cutting new connector trails from *Northstar* to *Duke's* and from *Duke's* to *Little Johnny*. To improve circulation for advanced intermediate and expert riders hoping to access BSR's high alpine terrain, several new trails and a new skiway are planned to improve access to 6-Chair from the top of Colorado SuperChair. In total, the terrain improvements on Peak 8 are planned to add approximately 8 acres of additional terrain.

d) Peak 9

In order to complement existing beginner terrain adjacent to the QuickSilver SuperChair, BSR plans to construct a new beginner learning area at the top terminal of Frontier Gondola. This improvement will allow new skiers to begin skiing or riding partway up the mountain, rather than remain in the Peak 9 base area until their skills improve. Improvements to this area will include expansion and grading on *Frontier* run, as well as a newly cut learning area between *Lower Lehman* and the Frontier Gondola top terminal.

In addition to the terrain improvements on lower Peak 9, BSR plans to improve the top of Mine Shaft at the junction with Volunteer to improve utilization of the trail. This will include select tree removal, wind fencing and trail improvements at the top of the trail to improve the trail entrance point.

e) Peak 10

Several new infill trails are planned for advanced intermediate and expert skiers on Peak 10. Four new infill trails or glading are planned to be constructed on the north face of Peak 10 between the existing *Spitfire*, *Corsair* and *The Burn* ski trails. In addition, three cutoff trails are planned from *Double Jack*—two to *Cimarron* and one to *Flapjack*. These trails will help to relieve congestion on *Double Jack* near the bottom of Peak 10. *Flapjack* is also planned for grading from the junction with *Cimarron* to junction with *Centennial*.

2. GLADING AND OTHER PROJECTS

In addition to upgrades to the developed terrain network, this upgrade plan includes additional expert glades to be incorporated within BSR’s lift-served trail network. Glading will occur on the north and south faces of Peak 9 and on the south face of Peak 8.

BSR will work with its Forest Service counterparts to assemble a glading plan that is both responsive to the resort’s operational/recreational needs, the resort’s Vegetation Management Plan, as well as the WRNF’s forest health objectives. The glading plan will address elements such as, but not limited to species and size selection, tree mortality (i.e., targeting dead/dying trees), percent removal, and habitat characteristics.

Additional projects are also planned to support operations on the terrain such as new snowcat winch points, snow fencing and snow retention and other miscellaneous trail widening to improve circulation.

3. TERRAIN DISTRIBUTION BY ABILITY LEVEL

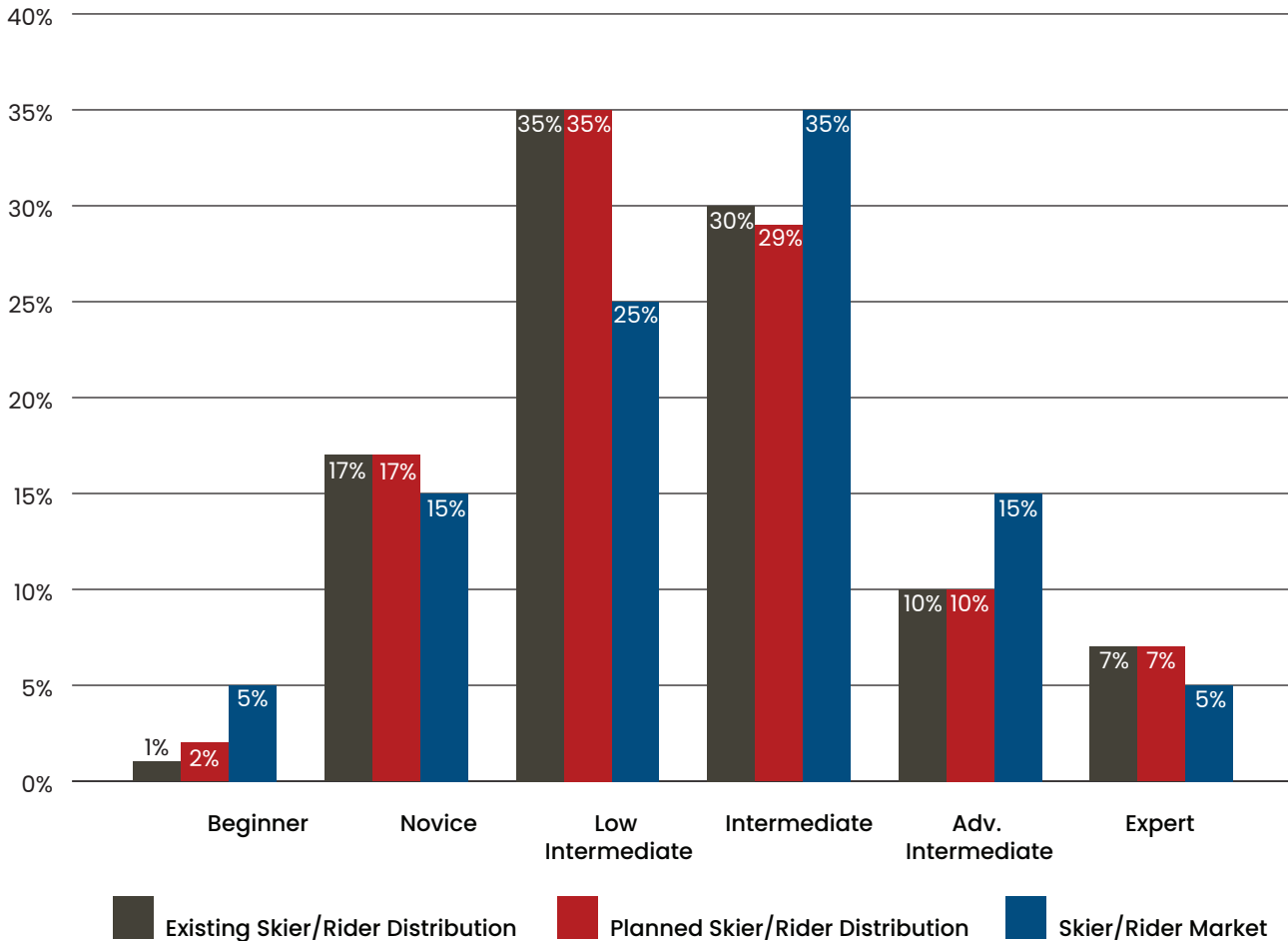
As is shown in Table 12 and Chart 3, the planned terrain improvements in this MDP improve the alignment between BSR’s trail distribution for beginner and novice terrain and market demands. Specifically, this plan more than doubles BSR’s beginner capacity, while roughly maintaining terrain capacity for skiers and riders of all other levels.

TABLE 12. Terrain Distribution by Ability Level—Upgrade Plan

SKIER/RIDER ABILITY LEVEL	TERRAIN TYPE	TRAIL AREA (ACRES)	SKIER/RIDER CAPACITY (GUESTS)	SKIER/RIDER DISTRIBUTION (%)	SKIER/RIDER MARKET (%)
Beginner		6.0	180	2%	5%
Novice		117.5	1,645	17%	15%
Low Intermediate		439.0	3,512	35%	25%
Intermediate		474.3	2,846	29%	35%
Adv. Intermediate	Traditional	224.9	900	10%	15%
	Bowl Skiing	173.4	87		
Expert	Traditional	249.5	499	7%	5%
	Bowl Skiing	342.7	171		
Total:		2,027.3	9,839	100%	100%

Source: SE Group

CHART 3. Terrain Distribution by Ability Level—Upgrade Plan



D. UPGRADED CAPACITY ANALYSIS

1. COMFORTABLE CARRYING CAPACITY

As discussed in the existing conditions analysis, CCC is a measure of the daily comfortable capacity of the resort and as such represents the planning parameter around which the rest of the resort components should be balanced. The calculation of BSR’s CCC under the upgrade plan is an important measure by which the resort’s overall balance of facilities can be evaluated and planned.

It is reiterated that Comfortable Carrying Capacity does not represent the maximum number of individuals that can conceivably be fit onto a mountain. Moreover, this number is not associated with a ‘cap’ on the number of skiers and riders permitted to use the lift network at the resort on a given day. Rather, the CCC represents the number of skiers who can use the lift network without excessive lines, terrain congestion or crowding. Because BSR is one of the most popular resorts in the United States, daily attendance exceeds CCC many days during the season. It is the negative guest experience that results from resort attendance exceeding CCC that BSR hopes to address in this plan. Therefore, the increase in resort CCC that occurs as the result of this plan is not intended or expected to significantly increase resort visitation, but rather to improve the overall resort experience for guests.

TABLE 13. Daily Chairlift Capacity—Upgrade Plan

LIFT NAME, LIFT TYPE	SLOPE LENGTH (FT.)	VERTICAL RISE (FT.)	ACTUAL CAPACITY (PPH)	OPERATING HOURS (HRS.)	UP-MOUNTAIN ACCESS ROLE (%)	MISLOADING/ LIFT STOPPAGES (%)	ADJUSTED HOURLY (PPH)	VTF/DAY (000)	VERTICAL DEMAND (FT./DAY)	DAILY LIFT CAPACITY (GUESTS)
QuickSilver SuperChair/DC-6	5,600	632	3,600	7.00	45	10	1,620	7,167	6,410	1,120
A-Chair/C-4	3,258	620	2,000	6.90	10	15	1,500	6,417	5,225	1,230
Mercury SuperChair/ DC-4	7,557	1,466	2,400	6.90	5	5	2,160	21,849	14,626	1,490
C-Chair/DC-6	5,862	1,259	3,000	6.80	70	5	750	6,422	18,667	340
Beaver Run SuperChair/DC-4	9,058	1,591	2,800	7.00	5	5	2,520	28,065	12,541	2,240
E-Chair/DC-4	3,075	967	2,400	6.75	25	5	1,680	10,966	25,180	440
Falcon SuperChair/ DC-6	5,838	1,404	3,000	6.90	0	10	2,700	26,157	17,469	1,500
Camelback Platter/S-1	583	54	400	7.00	0	15	340	129	2,043	60
Ski & Ride Carpet D	153	15	400	7.00	0	5	380	40	635	60
Ski & Ride Carpet A	54	5	400	7.00	0	5	380	13	366	40
Ski & Ride Carpet B	200	22	400	7.00	0	5	380	59	874	70
Ski & Ride Carpet C	200	27	400	6.75	0	5	380	69	1,117	60
Eldorado Tow	90	25	400	6.75	0	5	380	64	1,442	40
Colorado SuperChair/DC-6	6,394	1,325	3,600	7.00	15	10	2,700	25,043	14,725	1,700
Rocky Mountain SuperChair/DC-4	5,629	1,248	2,400	7.00	5	5	2,160	18,870	16,196	1,170
Snowflake/C-2	2,630	405	1,200	7.00	100	0	-	0	7,906	-
Peak 8 SuperConnect Top/DC-4	3,251	930	1,300	6.90	30	5	845	5,422	24,056	230
Peak 8 SuperConnect/DC-4	8,377	1,425	1,300	6.90	100	0	-	0	22,448	-
5-Chair/DC-4	3,413	712	2,400	7.00	10	5	2,040	10,282	11,532	890
6-Chair/DC-4	4,625	1,387	2,400	6.35	0	5	2,280	20,076	23,915	840
Rips Ride/DC-4	1,796	301	2,000	7.00	0	5	1,900	4,003	7,732	520
T-Bar/S-2	3,941	1,234	1,200	6.35	0	10	1,080	8,463	20,702	410

LIFT NAME, LIFT TYPE	SLOPE LENGTH (FT.)	VERTICAL RISE (FT.)	ACTUAL CAPACITY (PPH)	OPERATING HOURS (HRS.)	UP-MOUNTAIN ACCESS ROLE (%)	MISLOADING/ LIFT STOPPAGES (%)	ADJUSTED HOURLY (PPH)	VTF/DAY (000)	VERTICAL DEMAND (FT./DAY)	DAILY LIFT CAPACITY (GUESTS)
Independence SuperChair/DC-6	7,525	1,365	3,000	6.35	0	10	2,700	23,403	15,971	1,470
Imperial Express SuperChair/DC-4	2,716	942	1,200	6.00	0	5	1,140	6,443	21,579	300
Trygves Platter/S-1	605	79	400	6.75	0	15	340	181	2,936	60
Ski & Ride Carpet 3	62	10	400	6.90	0	5	380	26	536	50
Ski & Ride Carpet 4	134	20	400	6.90	0	5	380	52	920	60
Kinderhut Carpet	54	5	400	7.00	0	5	380	13	390	30
Kids Kastle Carpet	100	10	400	7.00	0	5	380	27	600	50
BreckConnect Gondola/DG-8	7,672	398	2,800	7.00	100	0	-	0	9,422	-
Kensho Super Chair/DC-6	5,983	1,540	3,000	7.00	0	10	2,700	29,101	20,339	1,430
Zendo Chair/C-4	2,606	313	2,000	7.00	75	10	300	656	4,160	160
Freedom SuperChair/DC-4	5,735	1,029	2,400	7.00	5	5	2,160	15,555	11,993	1,300
Planned Pk 8 Teaching Chair/C-3	927	143	1,200	7.00	20	15	780	779	3,338	230
Planned Carpet 1	108	17	400	7.00	0	5	380	45	883	50
Planned Carpet 2	352	58	400	7.00	0	5	380	154	1,316	120
Planned Carpet 3	122	12	400	7.00	0	5	380	33	589	60
Planned Carpet 4	206	17	400	7.00	0	5	380	45	581	80
Peak 7 Carpet 1	40	3	400	7.00	0	0	400	8	242	30
Peak 7 Carpet 2	40	3	400	7.00	0	0	400	8	242	30
Frontier Gondola/G-8	4,763	456	2,200	7.00	75	5	440	1,404	6,200	230
TOTAL	121,333		61,600				42,575	277,509		20,190

Source: SE Group

Notes: S-1 = platter lift / S-2 = T-bar lift / C-2 = fixed-grip double chairlift / C-3 = fixed-grip triple chairlift / C-4 = fixed-grip quad chairlift / DC-4 = detachable four-passenger chairlift / DC-6 = detachable six-person chairlift / DG-8 = detachable eight-person gondola

2. DENSITY ANALYSIS

As discussed in Chapter 2, an important aspect of resort design is the balancing of uphill lift capacity with downhill trail capacity and evaluating overall resort efficiency. An in-depth discussion of BSR's density analysis, including the lift and terrain network, can be found in Chapter 2. The density analysis for the upgrade plan is illustrated in Table 14.

a) Lift Network Efficiency

This upgrade plan maintains BSR's high lift network efficiency. The Lift Network Efficiency for the BSR under the Upgrade Plan is 856, a slight increase over existing conditions of 800.

b) Terrain Network Efficiency

The planned upgrades to BSR's lift and terrain networks optimize the terrain density at BSR. Overall terrain network efficiency will be 98%, indicating that the number of guests transported by the improved lift network is very well matched to terrain available. Individually, most lifts will sit between 65% and 100% efficiency, meaning that BSR's lift network will be optimized to transport guests throughout the resort without overcrowding the trail network.



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TABLE 14. Terrain Density Analysis—Upgrade Plan

LIFT NAME, LIFT TYPE	DAILY LIFT CAPACITY	GUEST DISPERSEMENT				DENSITY ANALYSIS				
		SUPPORT FACILITIES	IN LIFT LINES	ON LIFT	ON TERRAIN	TERRAIN AREA (ACRES)	TERRAIN DENSITY (GUEST/AC.)	DESIRED TRL. DENSITY (GUESTS/ AC.)	DIFF	DENSITY
QuickSilver SuperChair/DC-6	1,120	280	54	137	649	47.0	14	14	0	100%
A-Chair/C-4	1,230	308	50	181	691	32.4	21	12	9	175%
Mercury SuperChair/ DC-4	1,490	373	252	247	618	124.8	5	8	-3	63%
C-Chair/DC-6	340	85	50	73	132	46.8	3	6	-3	50%
Beaver Run SuperChair/DC-4	2,240	560	420	380	880	124.3	7	7	0	100%
E-Chair/DC-4	440	110	56	86	188	53.0	4	4	0	100%
Falcon SuperChair/ DC-6	1,500	375	315	263	547	180.0	3	4	-1	75%
Colorado SuperChair/ DC-6	1,700	425	315	288	672	152.7	4	6	-2	67%
Rocky Mountain SuperChair/DC-4	1,170	293	180	184	513	73.8	7	7	0	100%
Peak 8 SuperConnect Top/DC-4	230	58	28	46	98	70.4	1	5	-4	20%
5-Chair/DC-4	890	223	170	116	381	45.5	8	8	0	100%
6-Chair/DC-4	840	210	266	176	188	140.1	1.3	2	-1	65%
Rip's Ride/DC-4	520	130	95	57	238	27.9	9	13	-4	69%
T-Bar/S-2	410	103	126	98	83	301.6	0.3	2	-1	19%
Independence SuperChair/DC-6	1,470	368	135	308	659	134.6	5	6	-1	83%
Imperial Express SuperChair/DC-4	300	75	95	52	78	249.9	0.3	0.5	-0.2	60%
Kensho Super Chair/ DC-6	1,430	358	225	269	578	118.5	5	5	0	108%
Zendo Chair/C-4	160	40	25	29	66	11.9	6	9	-3	65%
Freedom Superchair/ DC-4	1,300	325	252	206	517	62.5	8	7	1	113%
Planed Pk 8 Teaching Chair/C-3	230	104	65	24	37	2.8	13	14	-1	93%
Frontier Gondola /G-8	230	92	22	44	72	10.0	7	15	-8	47%
Total	19,240	4,895	3,196	3,264	7,885	2,010.3	7	7	0	98%

Note: The density analysis includes aerial lifts and major surface lifts. Carpets and other surface lifts were not included in the analysis.

S-2 = T-bar lift / C-3 = fixed-grip triple chairlift / C-4 = fixed-grip quad chairlift / DC-4 = detachable four-passenger chairlift / DC-6 = detachable six-person chairlift / DG-8 = detachable eight-person gondola

E. UPGRADED GUEST SERVICES FACILITIES, FOOD SERVICE SEATING & SPACE USE ANALYSIS

1. PLANNED GUEST SERVICES IMPROVEMENTS

The guest service facilities upgrade plan includes one previously approved guest services building to be constructed on forest service land, facility improvements at TenMile Station and Pioneer Crossing.

a) TenMile Station Improvements

BSR plans to improve and expand TenMile station. This expansion would increase the seating available at TenMile Station to improve the guest experience at the popular restaurant. The nature and scale of the expansion will be determined by BSR based on market trends in the coming years.

b) Pioneer Crossing Improvements

With the installation of Freedom SuperChair, the business of the Pioneer Crossing restaurant on Peak 7 is expected to increase. BSR plans to increase seating both indoors and outdoors at Pioneer Crossing. Outdoor seating would be provided on a proposed deck space on the east side of the building.

2. SPACE USE ANALYSIS

Sufficient guest service space should be provided to accommodate BSR's planned CCC of 20,190 guests. CCC calculations are used to determine guest service capacities and space requirements for guest 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.

The following tables and text address the upgrade plan space use needs at BSR's planned base area and on-mountain facilities. The space recommendations are directly related to the distribution of the resort's capacity to various guest service facilities located in the base area and on-mountain. Table 15 shows planned size ranges for the facilities, based on industry averages for space use by service function.

Overall, planned resort guest service space conditions do not differ greatly from existing conditions. Recommended ranges increase by around just under 60,000 square feet (recommended low) to just over 75,000 square feet (recommended high range) – almost entirely in on-mountain facilities. BSR plans to increase the existing total space use square footage with the planned TenMile Station and Pioneer Crossing improvements, as well as the Peak 9 ski school facility and relocation of Peak 9 ski patrol. These planned on-mountain upgrades would likely improve space use conditions for ski patrol, storage, kids and adult ski school, restrooms, equipment rental, restaurant seating and food services. Additional space use recommended ranges for the base areas and on-mountain facilities are detailed in Appendix A.

TABLE 15. Space Use Recommendations—Upgrade Plan

SERVICE FUNCTION	EXISTING TOTAL	RECOMMENDED RANGE	
		LOW SKIER/RIDER CAPACITY PER ACRE	HIGH SKIER/RIDER CAPACITY
Base of Peak 7	8,555	28,980	35,249
Base of Peak 8	46,486	78,068	96,012
Base of Peak 9	89,265	99,708	123,396
On Mountain Peak 6	1,908	2,013	2,457
On Mountain Peak 7	15,186	14,820	18,102
On Mountain Peak 8	21,189	32,756	40,068
On Mountain Peak 9	11,760	22,313	27,300
On Mountain Peak 10	14,572	26,943	32,949
TOTAL SQUARE FEET	208,920	305,599	375,533

3. FOOD SERVICE SEATING

BSR plans to upgrade on-mountain food service spaces to include additional seating. Improvements at the existing TenMile Station and Pioneer Crossing restaurants would both contribute to the needed on-mountain seats. Table 16 summarizes the seating requirements of BSR, based on a logical distribution of the planned CCC to each service building/ location.

TABLE 16. Restaurant Seats—Upgrade Plan

	BASE AREA			ON-MOUNTAIN				TOTAL	
	PEAK 7	PEAK 8	PEAK 9	PEAK 6	PEAK 7	PEAK 8	PEAK 9		PEAK 10
Lunchtime Capacity	1,518	3,284	2,974	398	2,894	3,918	2,272	3,943	21,200
Average Seat Turnover	3.0	3.0	3.0	3.5	3.5	3.5	3.5	3.5	
Existing Indoor Seats	150	1,079	1,120	50	440	716	490	395	4,440
Required Seats	506	1,095	991	114	827	1,119	649	1,127	6,427
Difference	-356	-16	129	-64	-387	-403	-159	-732	-1,987
Existing Outdoor Seats	160	520	475	0	0	160	100	385	1,800

Source: SE Group

Seating and restaurant space recommendations are directly related to lunchtime capacity. The lunchtime capacity is determined by the distribution of each lift pod's CCC. It is assumed that guests will prefer to dine at the facility closest to the area they are using. To allow for this convenience, it is important to provide restaurant seating to accommodate the lunchtime capacity requirement of the area. Restaurant seating should be supplied per the recommendations in the previous table. As shown, there would be a 1,987-seat deficit under the upgrade plan. Note that Table 16 does not include the additional restaurant seats from planned facilities. Therefore, the seating deficit would be addressed by the improvements at the existing TenMile Station and Pioneer Crossing restaurants. Both improvements would increase the available space for food services and seating for guests proximate to the Peak 10 and Peak 7 terrain pods.

F. UPGRADED PARKING CAPACITY AND RESORT ACCESS

Table 17 analyzes BSR's day skier parking capacity and needs under the upgrade plan. There is no additional parking planned aside from the planned new parking structure at the North Gold Rush Parking Lot that is anticipated to come online during the 2024-2025 winter season. As previously described, the recently completed South Gondola Lot parking structure adds 450 additional parking spaces, which is anticipated to cut the number of days in which Town lots are filled in half.

Table 17 highlights that under the upgrade plan, there is still a surplus of parking spaces when the upgrade CCC is compared to the number of existing spaces (including the additional spaces from the new parking structure that was completed in November of 2021). While there is a surplus shown in Table 17, this surplus is necessary on days in which visitation exceeds the upgrade CCC due to the town lots being used by people not skiing and riding or more employees using spaces. This surplus also accounts for parking in the overflow Airport Lot.

In other words, it is likely that parking conditions under the upgrade plan will largely resemble those of the seasons leading up to the South Gondola Lot parking structure spaces becoming available. There will continue to be a slight deficit of parking design capacity days; however, peak and other holiday visitation will likely result in days in which the Town lots are completely filled. Further, satellite lots on Airport Road will continue to provide additional parking options even on these days that exceed the CCC.



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As part of Vail Resorts' *Commitment to Zero* pledge, BSR plans to continue to encourage carpooling to reduce guests vehicle miles traveled and carbon emissions and the number of days that in-town parking lots are over capacity.

TABLE 17. Recommended Parking—Upgrade Plan

	MULTIPLIER	TOTAL
CCC + other guests		21,200
% Parking at portal	40%	8,480
% Within walking distance of base lifts	35%	7,420
% Arriving by public transit	25%	5,300
# Parking at portal		8,480
# Of guests arriving by car	97%	8,225
# Of guests arriving by charter bus	3%	254
Required car parking spaces	2.7	3,046
Required charter bus parking spaces	35.0	7.3
Equivalent car spaces (1 bus=4.5 car)	4.5	32.7
Required employee car parking spaces		120
Total required spaces		3,199
Existing parking spaces		3,919
Surplus/Deficit		720

G. UPGRADED RESORT OPERATIONS

1. SNOWMAKING AND GROOMING

Snowmaking and grooming are planned as part of the upgrade plan for BSR and will extend across most of the resort. Select trails and sections of trails that currently do not have existing snowmaking infrastructure but receive snowmaking from dragging hoses to mobile guns are proposed for permanent snowmaking in this MDP. These trails include *Volunteer*, *Eldorado* and *Upper Cashier* among others. Trails proposed for snowmaking would be a spur line to middle Cashier on Peak 9 as well as trails currently without snowmaking and infrastructure on Peak 9, including *Lower Lehman*, *Volunteer*, *Upper Lehman*, *Briar Rose*, *Sizzler*, and *Snowflake Trails*. On Peak 8, snowmaking is planned to be installed on *Upper 4 O’Clock*, *Powerline*, *Swinger*, and *Crescendo*. Peak 7 and Peak 6 expansion of snowmaking trails would most likely be *Upper Claimjumper*, from *Columbine* up to *Lower Forget-Me-Not*, the spur between *Pioneer* and *Claimjumper*, *Wirepatch*, *Lincoln Meadows*, as well as *Delirium*. The overall expanded system

and improved automation of the snowmaking system is planned along with upgrades to pipelines, hydrants, fan guns, compressor cooling systems and increased power to 480 volts. The additional infrastructure for the snowmaking would be constructed in existing trail space, where practical to mitigate impact.

The intake and pumphouse at Maggie Pond, located on private land, is also planned for a redesign and rebuild to better service the snowmaking system.

2. SKI PATROL

Planned projects to improve ski patrol operations within the resort include a lift evacuation training site on Peak 9 and the addition of a remote avalanche system to aid snow safety and ski patrol in their avalanche hazard mitigation of the resort.

It is generally considered best practice to position ski patrol facilities in such a way that lift-accessed terrain can be reached by patrol without having to ride a lift, hike or take a snow machine. For this reason, BSR plans to install a small ski patrol outpost concurrent to the installation of the upgraded E-Chair at the top terminal of that lift.

3. MAINTENANCE FACILITIES

There are no new additional maintenance facilities planned but upgrades to the existing facilities may be needed. Upgraded lifts may also require new maintenance facilities at either the top or bottom terminals. The existing vehicle maintenance facility is located on private land.

4. INFRASTRUCTURE AND UTILITIES

The proposed Peak 9 ski school facility would require additional utilities infrastructure (water, sewer, power, gas, etc.), but the existing capacities would accommodate the proposed facility and use.

All planned lift upgrades will require improvements to existing utilities. Such improvements will be analyzed more thoroughly as part of the NEPA process. Most, if not all, of the planned lift projects will require utility installation or upgrade. The Peak 8 base area learning center will require relocated, upgraded and or additional utilities to provide service to the planned upgrades. New infrastructure will also be needed to provide power, water, fiber optics and sewer to the new Peak 9 ski school building and area improvements.

Additional infrastructure and utilities will be needed for the expanded outdoor seating planned at Pioneer crossing and the TenMile Station expansion.

Solar panels and composting facilities are also planned for facilities, and this may require new or upgraded infrastructure and utilities.

Where practical, the infrastructure and utilities would be constructed in skiways or already disturbed areas to help mitigate any impacts.

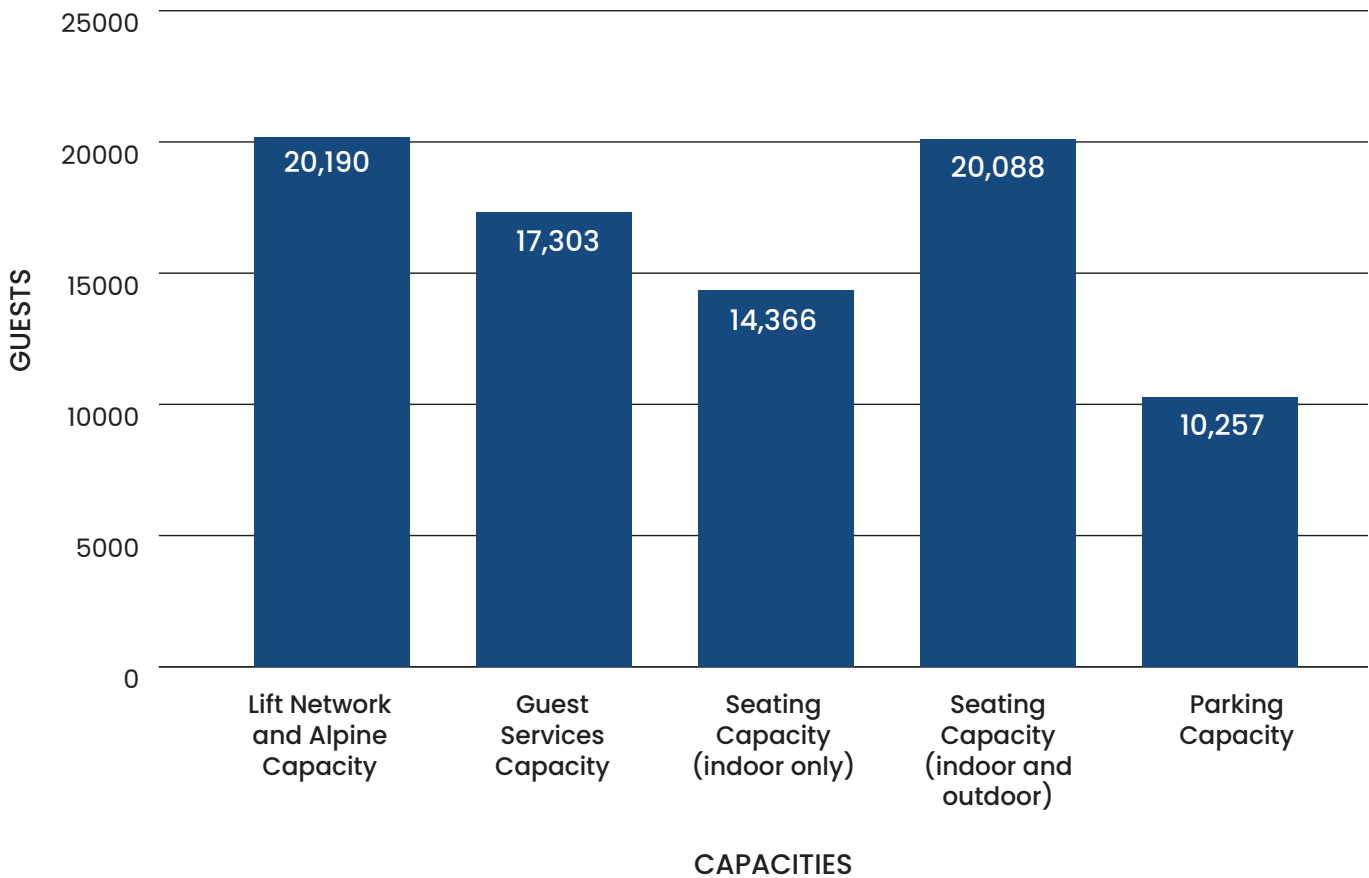
5. MOUNTAIN ROADS

No new mountain roads are planned as a result of the planned upgrade projects. Nevertheless, existing roads may need improvements when planned lift upgrades occur.

H. RESORT CAPACITY BALANCE AND LIMITING FACTORS

The overall balance of the ski area is evaluated by calculating the capacities of the resort’s various facilities, as compared to the resort’s CCC. The above discussed capacities are shown in Chart 4.

CHART 4. Resort Capacity—Upgrade Plan



The upgrade plan has been developed to address a number of constraints at BSR. One of the main concerns is base area congestion and circulation. The current configuration allows expert and advance skiers to use planned lift upgrades of E-Chair and 6-Chair to circulate between Peaks 8 and 9 (injunction with the upper portion of the SuperConnect). Although the improved circulation is not represented on the balance chart, it will help alleviate area of congestion and improve circulation. The Peak 9 base area and teaching zone is one of these areas where congestion can be challenging. The construction of the Frontier Gondola and Peak 9 learning terrain will help alleviate congestion in the Peak 9 base area and add needed on-mountain guest service space.

The imbalance for indoor seating and parking are similar to existing conditions. On fair weather days when outdoor seating can be utilized, seating is not a challenge. The parking capacity also accounts for 40 percent of skiers and riders, while the remainder of guests arrive by public transit or from housing within walking distance of the three base areas.

I. UPGRADED SUMMER AND MULTI-SEASON OPERATIONS

This seasonal and year-round facilities upgrading plan is designed to continue expanding on BSR’s summer recreational experience and help the resort continue to provide guests an enhanced appreciation of the natural environment through natural resource-based recreation. This expansion will further allow a wider demographic of users to experience their public lands and to recreate on the WRNF while promoting an appreciation of the environment and the natural world through both adventure and discovery.

As it has expanded its summer operation, BSR has worked to ensure that guests understand they are recreating on and enjoying the National Forest. As part of the implementation of this upgrade plan, BSR will continue to work with the Forest Service to maintain its strategic, consistent approach to branding the National Forest at BSR. Projects identified in the upgrade plan will be consistent with 2002 Forest Plan direction, and additional design details will be evaluated through a site-specific NEPA process.

1. ZONES CONCEPT

As discussed in Chapter 2 of this document and in 2013 BSR MDP Amendment, BSR uses a “Zoning concept” to determine what areas of its SUP are appropriate for various summer activities. As part of this upgrade plan, the summer activities zoning plan has been reevaluated in light of planned changes to winter operational infrastructure. The first step of this process was ensuring that the existing zoning area aligns with existing conditions. For this the setting and the proximity to infrastructure to support snow sports are checked throughout the resort. As in the 2013 MDP, features such as watersheds, topography, vegetation structure, level of existing disturbance, and existing infrastructure were all considered in establishing zoning boundaries across the entire SUP area. Step two in the zoning process was applying a score for each characteristic on a scale of 1 to 3 (refer to Table 18), with 1 being the most disturbed setting and 3 being the least disturbed.



**Opportunities
for all guests**

For BSR, the zoning plan reanalysis found that, under the upgrade plan, one new zone is to be created, and several existing zones are to have their boundaries adjusted. Specifically, the cutting of the Peak 9 to Peak 10 skiway, designated E-12, will create a new zone 4 area between Sawmill Creek, Peak 9, Peak 10 and the high alpine areas. Further changes to the zone scheme under the upgrade plan include the Zone 1 in the Peak 9 base area will extend to include the new Peak 9 ski school building. Specifications for each zone area are described below and in Table 18.

a) Zone 1

Setting

Zone 1 areas are highly developed and disturbed and are usually the first areas guests encounter when arriving for summer activities. Within Zone 1, the built environment dominates the landscape. In general, high-use and high-density activities, including indoor operations, are the preferred use of Zone 1 areas. Two areas within the BSR SUP area were designated as Zone 1—the combined Peak 8 and 7 base areas and the Peak 9 base area.

Desired Experiences

Within Zone 1, guests are expected to encounter a high concentration of other guests. Further development of these areas will reflect the current setting and function of these areas as hubs of activity and portals to other activities across the ski area. Zone 1 is a portal to the National Forest, so the concepts in the Built Environment Image Guide (BEIG)⁸ will be followed to ensure appropriate design guidelines for landscape architecture and built architecture are adhered to. Due to the current setting, Zone 1 abuts Zone 3 at the developed base areas where the built environment meets a less disturbed setting. At this junction guests expect to return to the built environment at the end of their mountain biking ride, hike or other on-mountain activity.

Compatible Activities and Facilities

Services and activities either existing or proposed on or adjacent to Zone 1 include food and beverage operations, shelter and emergency services, restroom facilities, landscaped plazas, climbing walls, bungee trampolines, and other activities. The Zone 1 areas and the private lands which they abut serve as the gateway for guest arrival and orientation, ticketing, staging for access to facilities and activities in other zones.

b) Zone 2

Zone 2 areas are moderately disturbed and often provide guests their first real ‘introduction’ to the more rugged aspects of the mountain environment. Guest can expect to see many other guests present, but also begin to get a sense of the vastness of the mountains. Zone 2 often serves as the ‘starting-off’ point for activities that allow guest to head deeper into the mountains. Four areas within the BSR SUP area are designated as Zone 2: the top of Independence SuperChair, the top of Colorado SuperChair, Peak 9 Restaurant and TenMile Station.

Based on the setting, two areas on Peak 9 were designated as Zone 2—the Peak 9 Restaurant and the TenMile Station. Except for already existing functions, BSR does not anticipate the development of these areas as outposts for activities and functions due to their location on the mountain. However, from a planning standpoint, infrastructure is presently available for seasonal or year-round use to promote experiences in the National Forest.

8 The Built Environment Image Guide for the National Forests and Grasslands, USDA Forest Service, September 2001.

Desired Experiences

Zone 2 offers a wider variety of experiences in a more controlled and concentrated setting, compared to Zones 3, 4 and 5. At BSR, each of the Zone 2 areas is located around an existing on-mountain dining location. To access Zone 2, one must take trails, a scenic lift ride, or a mountain road. Guests in Zone 2 interface with the National Forest.

Guests choose to remain in Zone 2 for developed or more passive activities enjoy close proximity to existing infrastructure and facilities. The experience within Zone 2 continues to feel relatively developed. Due to the higher concentration of guests and facilities within Zone 2, human activity are greater compared to less developed zones. Providing a comfortable environment for recreation is critical to the success of Zone 2 and BSR's summer operations as a whole.

Compatible Activities and Facilities

Zone 2 uses existing chairlift infrastructure and guest service facilities, supplemented by compatible, minimally intrusive adventure park structures. Services in Zone 2 include food and beverage operations, shelter and emergency services, restroom facilities, group functions, satellite ticketing and operations. Passive activities include educational/interpretive opportunities, sightseeing and light hiking or simply visiting with friends and family. Zone 2 provides enhanced sightseeing opportunities compared to Zone 1. Active offerings in Zone 2 include access to ziplines and canopy tours, extended hiking trails, mountain biking trails, challenge courses, climbing walls and other yet-to-be defined natural resource-based activities.

The goal of Zone 2 is twofold. First, Zone 2 areas provide satellite facilities in a less developed setting than Zone 1. These satellite facilities provide an outpost for natural resource-based activities and are the second portal to the National Forest. These locations are concentrated around the tops of existing chairlifts with facilities and offer a visual experience similar to what guests experience at these locations in the winter season. Satellite operations which occur in Zone 2 (e.g., ticketing and/or guided tour formation) prepare the guest to venture into the less developed areas of Zones 3 and 4. Second, Zone 2 provides access to moderately impactful recreational facilities that also provide adventure experiences not available in Zone 1 areas, such as view towers, challenge courses, and suspension bridges. Expansions in Zone 2 may include the development of new Epic Discovery Activities that are compatible BSR's existing summer activities plan.

c) Zone 3

Setting

The existing setting of Zone 3 contains disturbance from ski trail and chairlift development, but guests can find a greater degree of remoteness and naturalness depending on the location of the area they are within. Generally speaking, Zone 3 includes areas where existing chairlifts are present; however, this was not the determining factor for the designation. Constructed facilities will at a minimum be consistent with scenery direction included in the 2002 Forest Plan, which states that a very low Scenic Integrity Objective (SIO) refers to landscapes that are "heavily altered," and deviations may strongly dominate the valued landscape. Additionally, facilities will be constructed in a manner that harmonizes with the natural environment, to the extent practicable.

Five areas within the BSR SUP area were designated as Zone 3—Peak 7 and 8 (Cucumber Creek to *Four O’Clock* trail below tree line); Imperial and 6-Chair (Peak 8/Imperial Ridge to *Snow White*); Sawmill Creek (*Four O’Clock* to *Volunteer* to skier’s left E-Chair); Peak 9 (*Volunteer* to upper and lower *Lehman*); and Peak 10 (upper/lower *Lehman* to the southern operational boundary). Through the evaluation process, not all of the areas which received a Zone 3 designation are equal in characteristics. For example, Sawmill Creek is less accessible and includes a higher degree of remoteness when compared to Peak 7 and 8; however, both locations scored in the point range to be characterized as Zone 3. Similarly, the upper areas of 6-Chair and Imperial represent a unique high alpine setting. While this area is designated as Zone 3, it is primarily due to the existing presence of lifts and infrastructure, and many of the Zone 3 compatible amenities, detailed below, would not be suitable within this high alpine area.

Desired Experiences

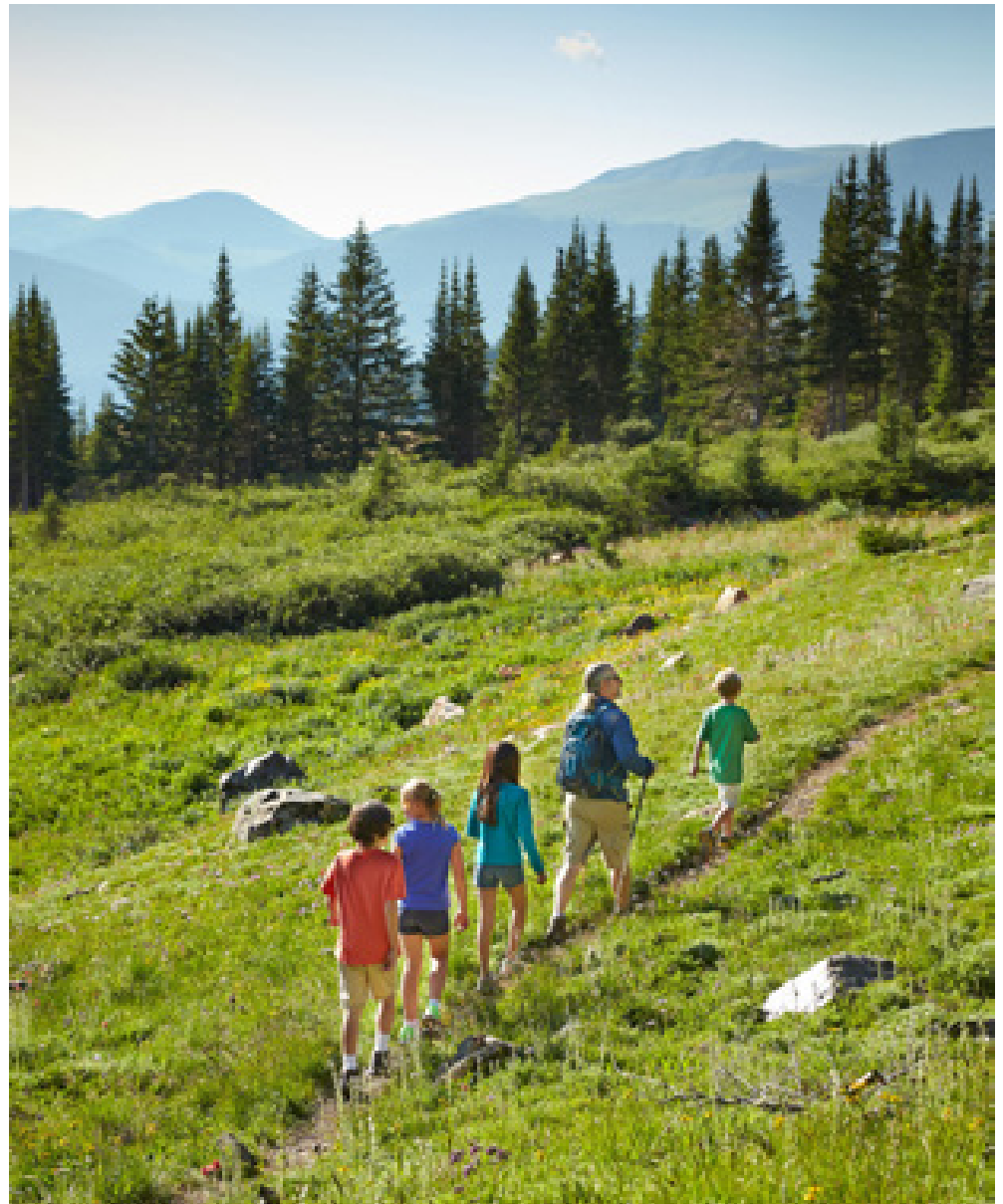
Most guests initially experience Zone 3 during a scenic chairlift from Zone 1 to Zone 2. In addition to the beautiful views of the Breckenridge valley, this “fly over” exposure allows guests to see a variety of vegetation and stream channels as they make their way up the mountain. Once in Zone 3 guests have a variety of opportunities to engage in their surroundings in a relatively more natural environment.

Unmatched vistas



The desired experience is achieved through activities and facilities. In Zone 3, guests can enjoy nature hikes with interpretive signage that will provide education on the ecology and history of BSR's high mountain environment. These features will help guests learn the importance of forest health and stewardship of the cultural and natural environment of the mountains.

In Zone 3, guests can ride family oriented biking trails through forested and open settings or experience the forested setting through canopy tours in unique locations to offer the beauty of the National Forest. Guests can also ride ziplines over the canopy to achieve amazing views of the Breckenridge area and their natural surroundings. Scenic chairlift rides also provide guests with unique opportunities to engage in portions of Zone 3 that they otherwise would not experience. Visitors in Zone 3 may encounter small groups of other users including hikers, mountain bikers and the overhead passing of guests on chairlifts, ziplines or canopy tours. Although users will experience more solitude than in Zone 2, human activities will be more noticeable than they would be in Zones 4 and 5.



**Providing a
memorable
experience**

Compatible Activities and Facilities

Activities compatible with Zone 3 include riding on and maintained mountain biking trails, scenic chairlift rides, hiking trails, multi-use trails, overlook/viewing structures, ziplines, canopy tours, alpine slides and alpine coasters and tubing and other similar natural resource-based activities. Select activities such as canopy tours and ziplines may be utilized on a year-round basis. Activities within Zone 3 will not require substantial modifications to the natural topography to facilitate construction of activities. Zone 3 will utilize existing chairlifts to expose guests to unique areas of the SUP area and to provide amazing sightseeing opportunities. Existing ski area development (ski trails and chairlifts) exist to varying degrees within Zone 3, and potential seasonal and year-round facilities and activities will be consistent with the level of existing development for the ski area operation.

Future development in Zone 3 will include the further expansion of BSR’s mountain biking trail network, the addition of e-bike trails, the installation of a suspension bridge from Peak 8 to the north, and the potential construction of new ziplines which fly over this area.

d) Zone 4

Setting

Zone 4 provides guests with a sense of remoteness for guests in areas where ski resort activity is still detectable. Ski area development is limited, and larger tree islands are prevalent when ski trails are present. Few summer activities take place in Zone 4 beyond those which would occur in other parts of the WRNF. These areas support low-density recreation and a relatively untouched. Nevertheless, BSR may make modifications (e.g., bike trail construction) to improve access for more remote activities.

Three areas within the BSR SUP area were designated as Zone 4—Peak 6 (south of Middle Barton Creek to South Barton Creek), Peak 6 (south of South Barton Creek to Cucumber Creek), and High Alpine (Peak 8 to Peak 6). Peak 6 includes lifts and trails, but the trail development is limited, and large tree islands are the most dominate features. The area between the Peak 7 trail development (Cucumber Creek) and South Barton Creek includes chairlifts and trails but possesses a remote character due to the northeastern facing aspect of the terrain. Streams, wetlands, natural glades, and rock fields within the Ore Bucket area provide a unique setting and year-round opportunities for guests.

Desired Experiences

In Zone 4, guests connect with the more natural setting in a relatively undisturbed environment. The setting in Zone 4 directly affects the guest experience and maintaining a more remote setting with opportunities for solitude is necessary to continue to meet the guests’ expectations.

Compatible Activities and Facilities

Activities will promote the surroundings and inform guests of similar environments throughout the National Forest. Activities include slower moving actions to match the setting and character, which provide an even greater degree of environmental education and exposure to unique environments. These activities include hiking trails and biking trails with potentially interpretive and wayfinding signage. Activities within Zone 4 will require minimal site modification to maintain the current level of naturalness. In this Zone, the low density of guests is expected to help maintain the area’s remote character. Zone 4 will utilize existing chairlifts to support access to these locations.

e) Zone 5

Setting

The setting of Zone 5 is undisturbed by ski area activities. Zone 5 includes high alpine environments and large intact below-tree-line stands of spruce-fir habitats. Very few people recreate in these areas of the SUP boundary. No ski area roads or infrastructure are present in Zone 5.⁹

Two areas within the BSR SUP area were designated as Zone 5—Peak 5 (north of Middle Barton Creek to the northern SUP Boundary) and High Alpine and undisturbed stands (Peak 10 and 9 to Snow White).

Desired Experiences

Zone 5 represents the most remote sectors within the SUP and is only accessible by dispersed hiking. The desired experience is remote and more natural. Guests within this zone would not expect to encounter many other guests.

Compatible Activities and Facilities

The areas with the Zone 5 designation should be left as-is with no developed seasonal or year-round activities or facilities. Dispersed activities like hiking and limited motorized/mechanized use by the public occurs and will continue to occur within the upper Peak 10 area. The Peak 5 area represents the most remote sector within the SUP and is only accessible by hiking and the Miner's Creek section of the Colorado Trail as it crosses the Ten Mile Range.

2. PLANNED SUMMER AND MULTI-SEASON ACTIVITIES AND FACILITIES

The following is an overview of summer activities planned to be constructed at BSR. Due to the rapidly changing nature of the summer mountain activities market, the locations of planned activities are subject to change, and additional activities may be pursued in coordination with the Forest Service. The summer zoning described above is designed to accommodate this rapidly changing market environment while still ensuring that summer activities are thoughtfully planned to be compatible with existing resort operations.

The core of BSR's summer plan is developing the Peak 7 base area as a second hub of summer operations. To do so, BSR plans to implement several new and previously approved projects.

a) Peak 7 Base Camp

BSR plans to relieve business at the existing Epic Discovery by adding activities at Peak 7. The Peak 7 base area will be transformed into a second Base Camp. Guests will be able to access Peak 7 from the BreckConnect gondola. The Base Camp, which will be split between NFS and non-NFS land, will have ticketing facilities, guest services operations, bike rentals and the terminals for the Peak 7 Zipline Adventure, Peak 7 Mountain Coaster and planned Peak 7 summer tubing. In addition, Sevens restaurant, which currently remains open for the summer, will continue to operate.

⁹ As previously noted, the Peak 9 Road is a designated Forest Service Road which extends from the top of the Peak 9 portion of the developed ski area high onto Peak 10. The Peak 9 Road receives dispersed motorized and mechanized public use.

b) Peak 7 Mountain Coaster and Summer Tubing

The existing Peak 8 Mountain Coaster (known as the GoldRunner Coaster), experiences relatively high levels of congestion and many mountain adventurers wish to experience more of the mountain following their ride. A second complimentary coaster, starting at the Peak 7 Base Camp, is planned to extend halfway up Peak 7. Guests on the GoldRunner Coaster who are seeking a greater thrill will be able to travel to Peak 7 for a more “advanced” mountain coaster experience. The coaster will be designed to operate year-round without interfering with winter skiing operations. Summer tubing is also planned out the Peak 7 base area to alleviate summer congestion in the Peak 8 base during the summer.

c) Independence SuperChair Summer Operations (Previously Approved)

BSR plans to operate the Independence SuperChair in the summer to provide scenic rides, bike haul and access to the Pioneer Crossing Epic Discovery Camp. Lift operations will be coordinated between BSR and WRNF.

d) Peak 7 Zipline Adventure (Previously Approved)

The 2015 BSR Summer Activities EIS approved the installation of a three stage Zipline Adventure descending from Pioneer Crossing Camp to the base of Peak 7. This activity is planned to be implemented as approved and may either operate seasonally or year-round.

e) Bike and Hiking Trails

Breckenridge plans to add to its mountain biking and hiking trail networks with new and rerouted alignments, as well as constructing previously approved trails. On Peak 8 a downhill bike trail, as well as a number of reroutes are planned to improve the bike and hike experience. Reroutes on Swinger and Pioneer are meant to increase separation of these popular trails. New sections of Pioneer and Frosty’s are planned to remove the trail from road grade and actively used mountain roads. Game Trail and Dwight’s also have a minor reroutes to improve the bike experience. A new top to bottom hiking trail is also planned to the north of Dwight’s trail.

The 2015 BSR Summer Activities EIS approved the construction of several new downhill bike trails and hiking trails from the top of Independence SuperChair to the top of Colorado SuperChair that have not yet been completed. These bike and hike trails are planned to be constructed generally as approved. Overall, these improved and newly constructed trails will improve the trail network at Breckenridge.

f) E-Bike Trails

In addition to downhill, pedal-powered mountain biking trails, BSR also plans to install single track e-bike trails. These multi-directional trails would accommodate the use of hybrid pedal/battery powered e-bike for bikers seeking a less strenuous biking experience.

g) Peak 8 Suspension Bridge

BSR plans to construct a suspension bridge above Horseshoe Bowl to the north of Peak 8 Alpine Camp. This bridge would allow guests in the winter and the summer to experience thrilling and scenic views of the Town of Breckenridge and the Tenmile Range. The suspension bridge would be designed to ensure minimal interference with existing ski resort operations.

CHAPTER 4. UPGRADE PLAN

TABLE 18. Summer Area Boundaries and Appropriate Zones

AREA BOUNDARIES	SCORE	APPROPRIATE ZONE	AREA BOUNDARIES	SCORE	APPROPRIATE ZONE
Peak 5 (North of Middle Barton Creek to Northern SUP Boundary)			Imperial and 6 Chair (Peak 8 Spine to Snow White)		
Access	3		Access	2	
Remoteness	3		Remoteness	2	
Naturalness	3		Naturalness	3	
Infrastructure	3		Infrastructure	2	
Total Score	12	Zone 5	Total Score	9	Zone 3
Peak 6 (South of Middle Barton Creek to South Barton Creek)			Sawmill Creek (Four O'Clock to Volunteer to Skier Left E-Chair)		
Access	3		Access	2	
Remoteness	3		Remoteness	3	
Naturalness	2		Naturalness	2	
Infrastructure	2		Infrastructure	2	
Total Score	10	Zone 4	Total Score	9	Zone 3
Peak 6 (South of South Barton Creek to Cucumber Creek)			Peak 9 (Volunteer to Upper and Lower Lehman)		
Access	3		Access	2	
Remoteness	2		Remoteness	2	
Naturalness	3		Naturalness	2	
Infrastructure	2		Infrastructure	2	
Total Score	10	Zone 4	Total Score	8	Zone 3
High Alpine (Peak 8 to Peak 6)			Peak 9 Base Area		
Access	3		Access	1	
Remoteness	2		Remoteness	1	
Naturalness	3		Naturalness	1	
Infrastructure	2		Infrastructure	1	
Total Score	10	Zone 4	Total Score	4	Zone 1
Peak 7 & 8 (Cucumber Creek to Four O'Clock Trail Below Treeline)			Peak 10 (Upper/Lower Lehman to Southern Operational Boundary)		
Access	1		Access	2	
Remoteness	2		Remoteness	3	
Naturalness	2		Naturalness	2	
Infrastructure	2		Infrastructure	2	
Total Score	7	Zone 3	Total Score	9	Zone 3
Peak 7 and 8 Base Areas			High Alpine and Undisturbed Stands (Peak 10 and 9 to Snow White)		
Access	1		Access	3	
Remoteness	1		Remoteness	3	
Naturalness	1		Naturalness	3	
Infrastructure	1		Infrastructure	3	
Total Score	4	Zone 1	Total Score	12	Zone 5
Top of Independence, Colorado, Peak 9 Restaurant, TenMile Station					
Access	1				
Remoteness	1				
Naturalness	2				
Infrastructure	1				
Total Score	5	Zone 2			



CHAPTER 5

Figures



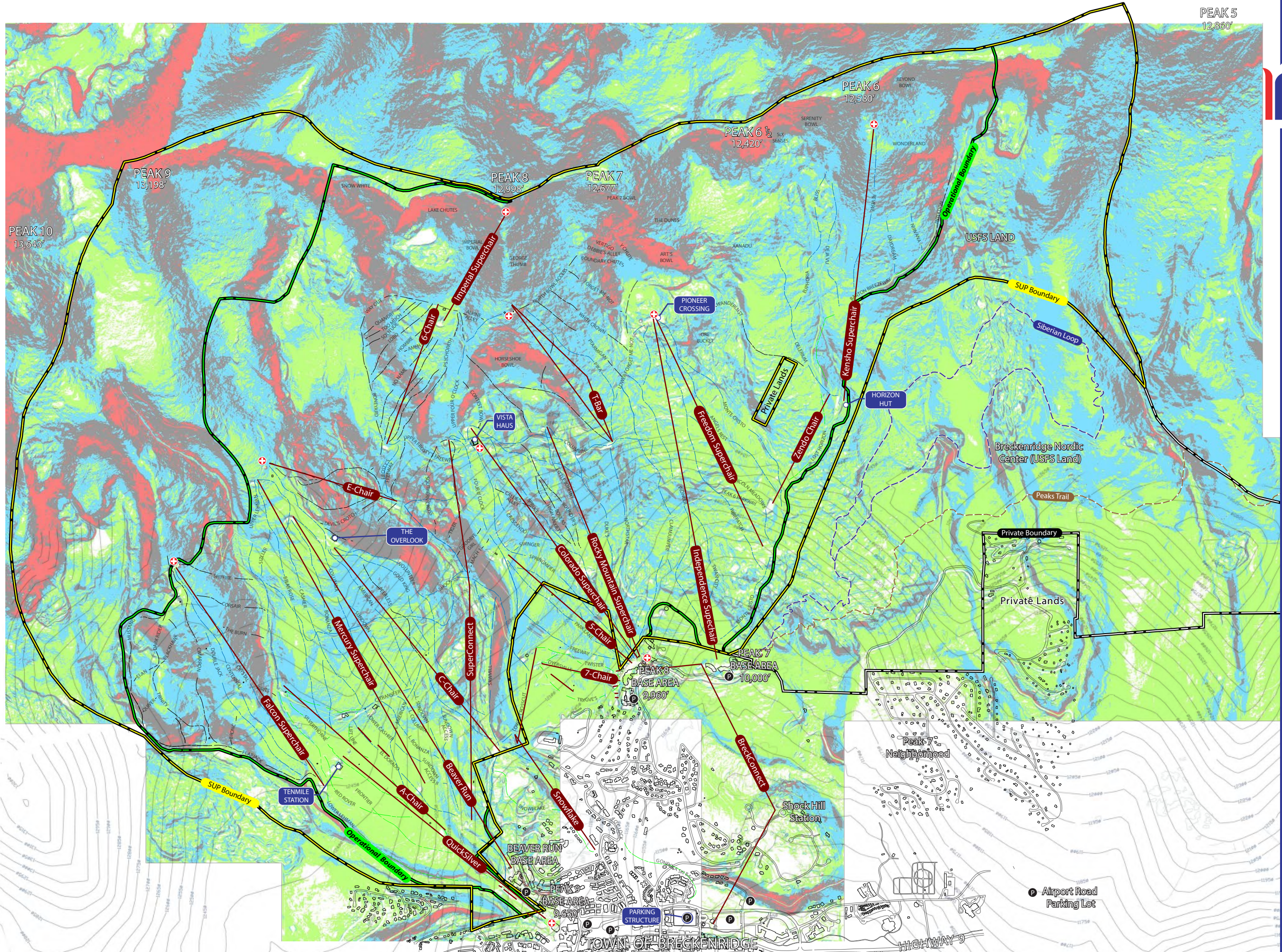
**BRECKENRIDGE
SKI RESORT**

Vicinity Map

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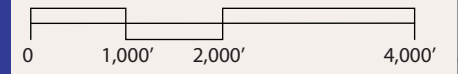
Figure 2
Slope Analysis



- Special Use Permit Boundary (Public Lands)
 - BSR Operational Boundary
 - Existing Lift
 - Nordic Trails
 - Beginner Trail
 - Intermediate Trail
 - Expert Trail
 - Existing Mtn Roads
 - Peaks Trail
 - Parking
 - Ski Patrol
-
-
- 70% and Above Expert only
 - 45-70% Most Difficult
 - 25-45% More Difficult
 - 8-25% Easier
 - 0-8% Unsuitable for Skiing

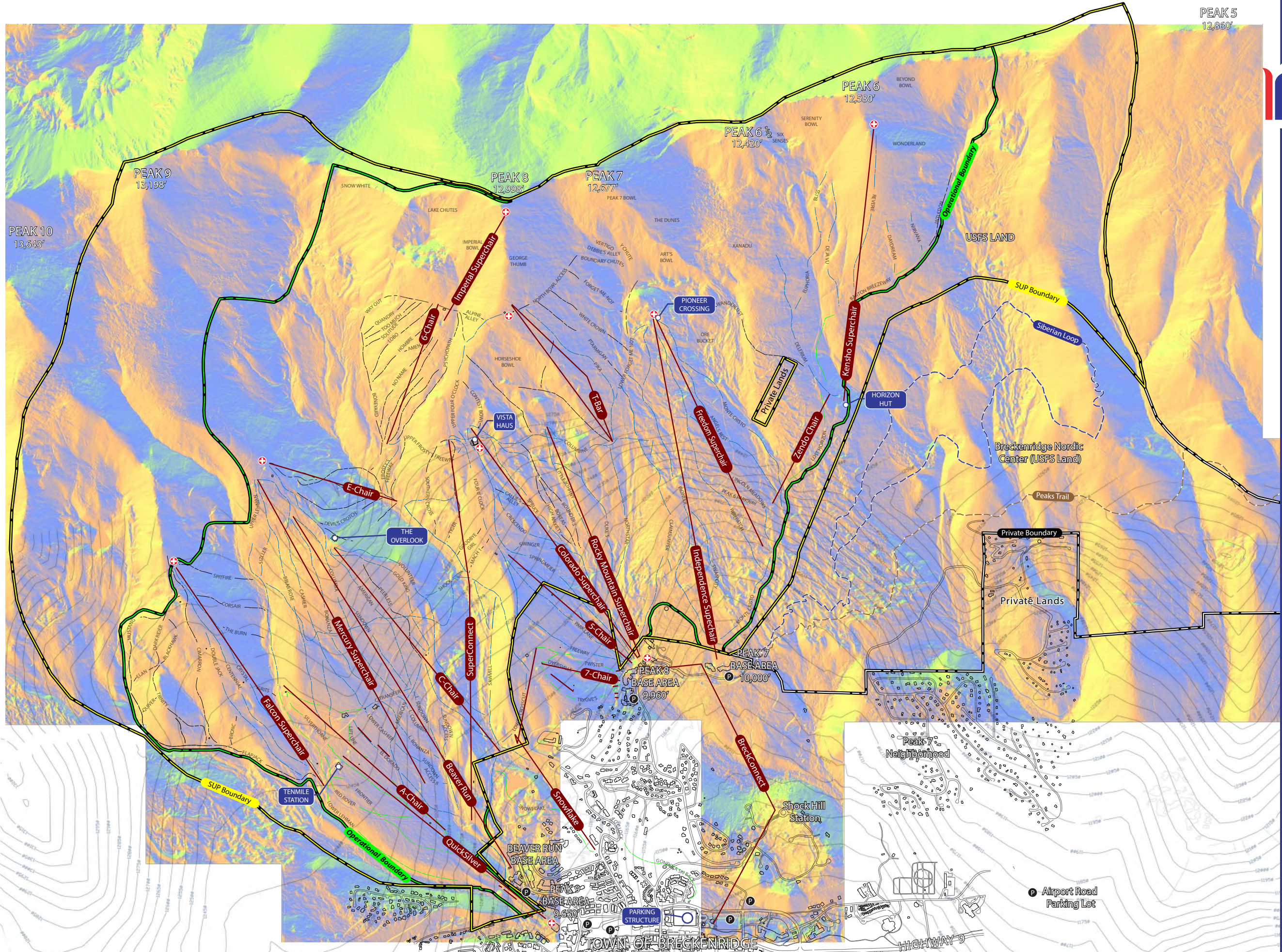
Prepared By:
SE GROUP

10' Contours Intervals

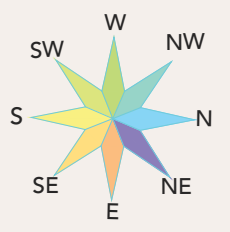


Airport Road Parking Lot

Figure 3
Aspect Analysis



- Special Use Permit Boundary (Public Lands)
- BSR Operational Boundary
- Existing Lift
- Nordic Trails
- Beginner Trail
- Intermediate Trail
- Expert Trail
- Existing Mtn Roads
- Peaks Trail
- Parking
- Ski Patrol



Prepared By:
SE GROUP

10' Contours Intervals

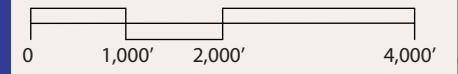
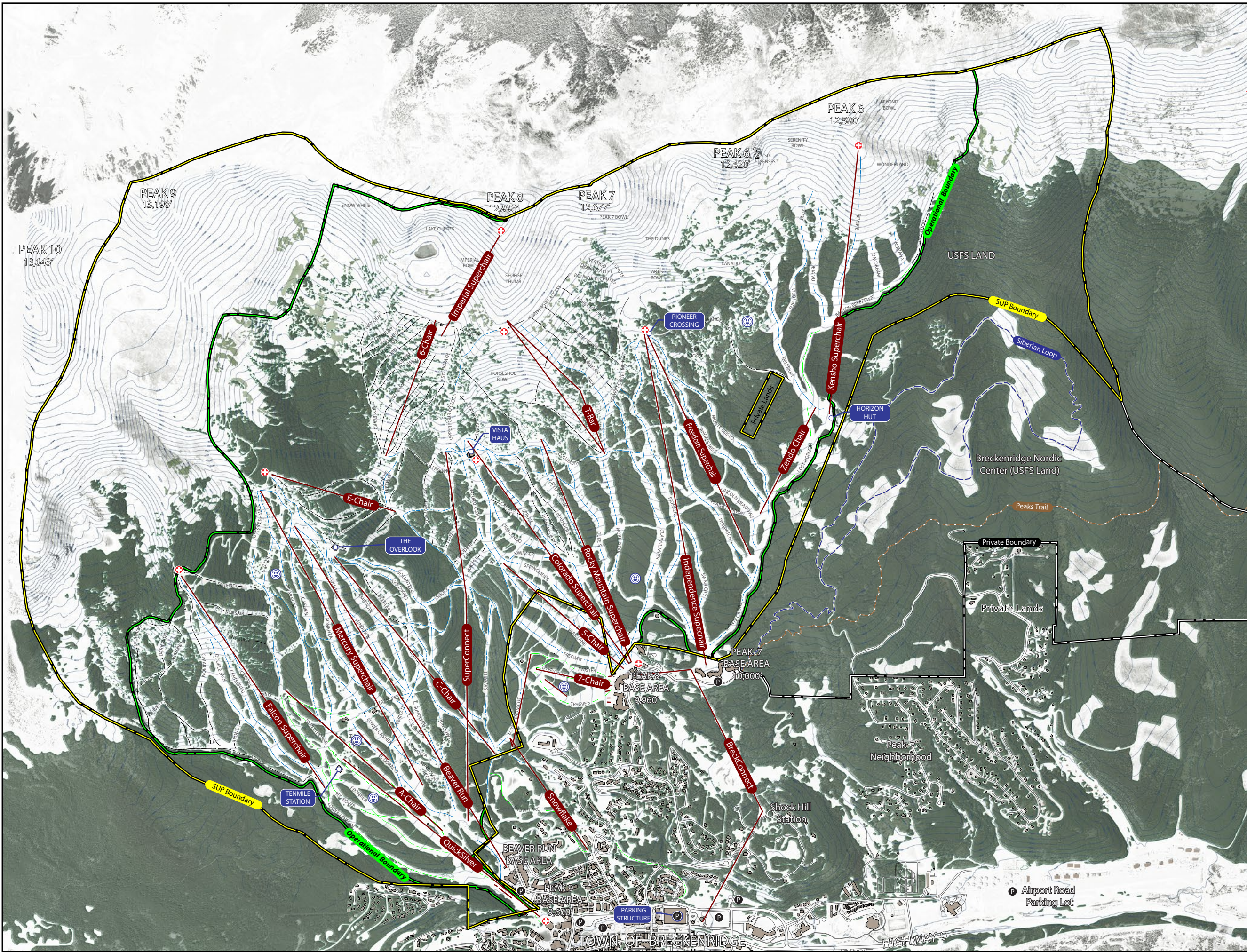


Figure 4
Existing Winter Conditions

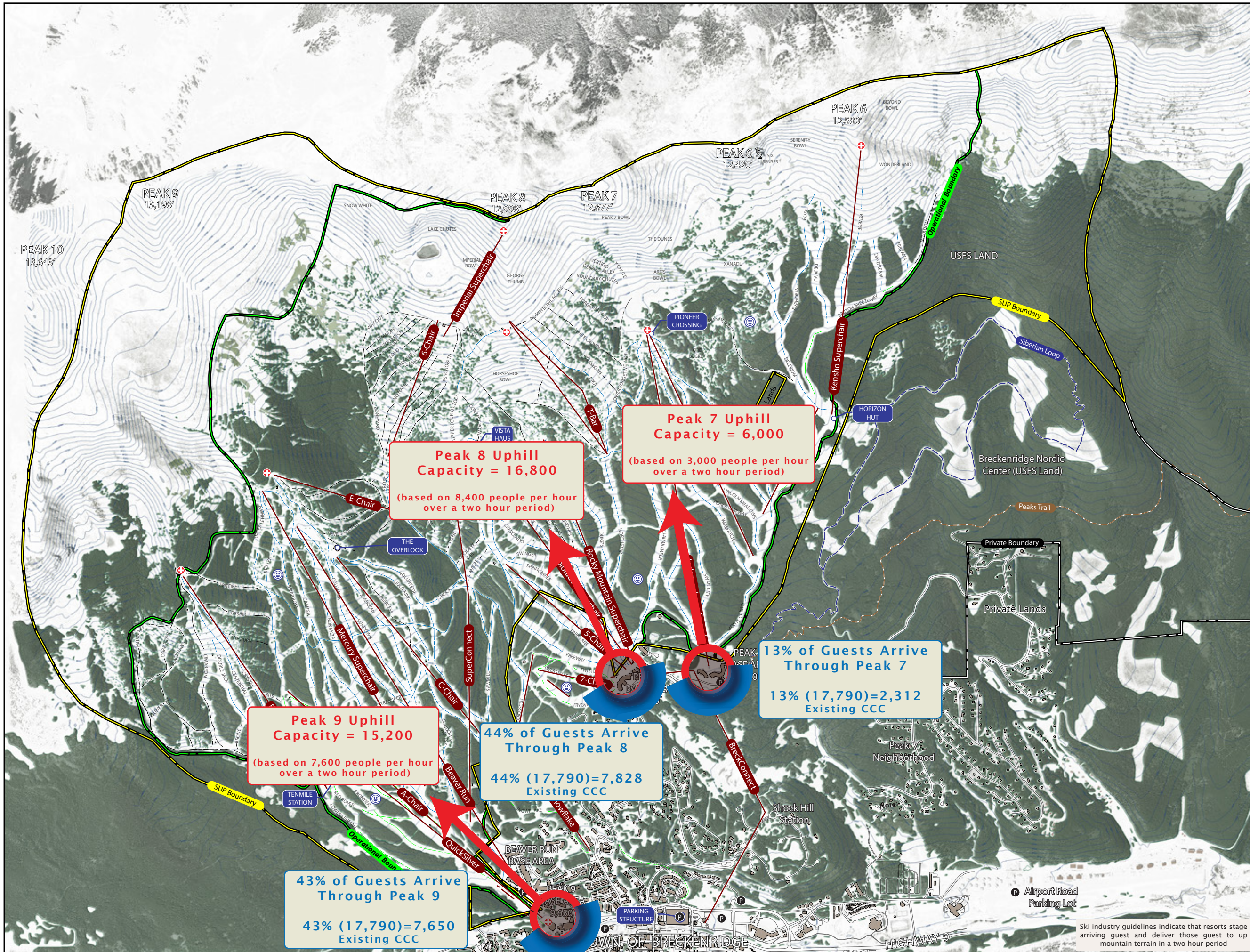


- Special Use Permit Boundary (Public Lands)
- BSR Operational Boundary
- Existing Lift
- Nordic Trails
- Beginner Trail
- Intermediate Trail
- Expert Trail
- Existing Mtn Roads
- Peaks Trail
- Parking
- Ski Patrol
- Kid's Adventure Zones

Prepared By:

10' Contours Intervals
 North

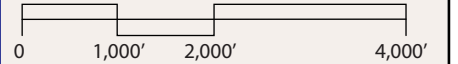
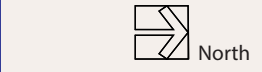
Figure 5
Existing Winter Staging Plan



- Special Use Permit Boundary (Public Lands)
- BSR Operational Boundary
- Existing Lift
- Nordic Trails
- Beginner Trail
- Intermediate Trail
- Expert Trail
- Existing Mtn Roads
- Peaks Trail
- Parking
- Ski Patrol
- Kid's Adventure Zones

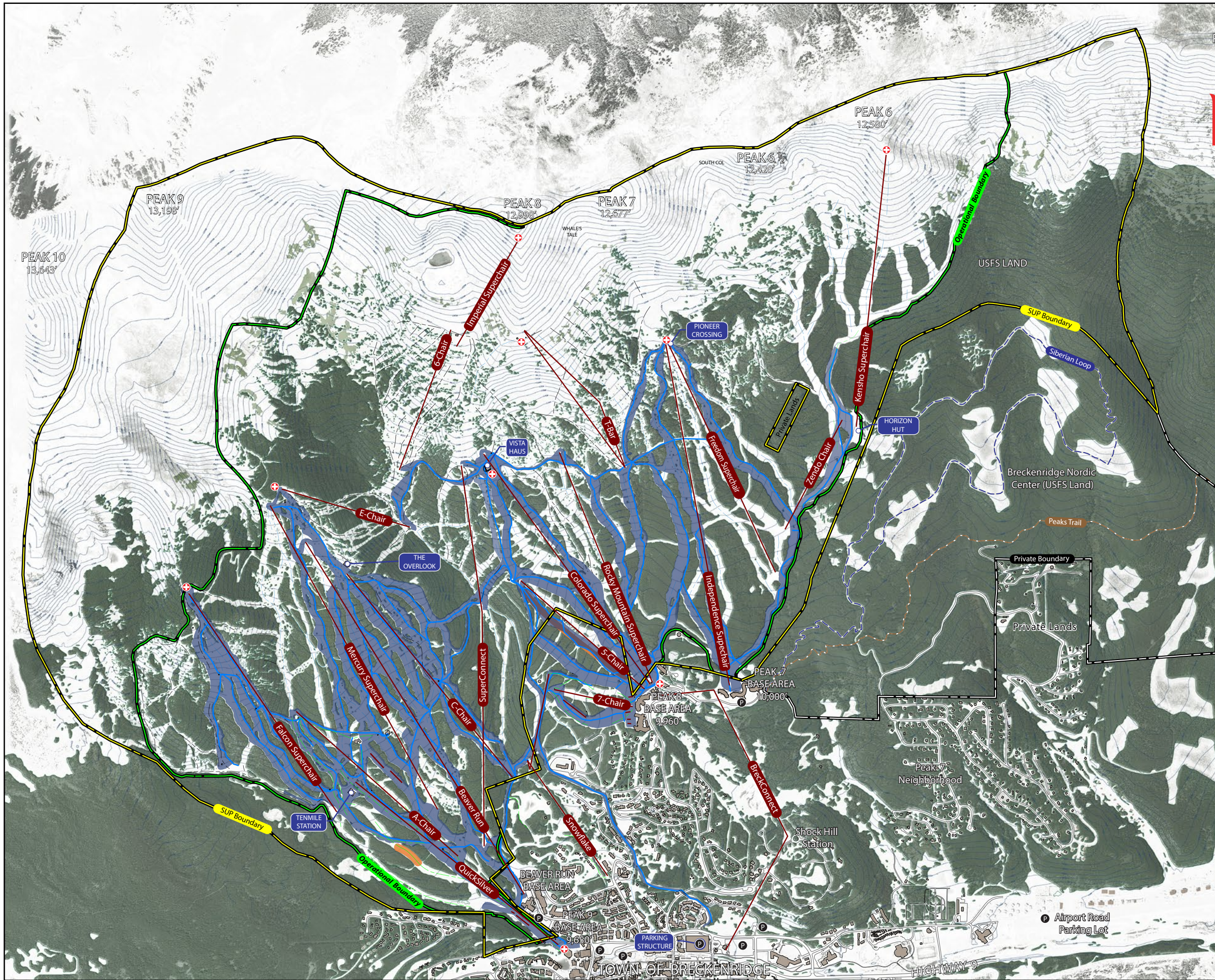
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10' Contours Intervals



Ski industry guidelines indicate that resorts stage arriving guest and deliver those guest to up mountain terrain in a two hour period

Figure 6
Existing Snowmaking Plan



- Existing Snowmaking Coverage
- Existing Snowmaking Pipe
- Special Use Permit Boundary (Public Lands)
- BSR Operational Boundary
- Existing Lift
- Nordic Trails
- Beginner Trail
- Intermediate Trail
- Expert Trail
- Existing Mtn Roads
- Peaks Trail
- Parking
- Ski Patrol

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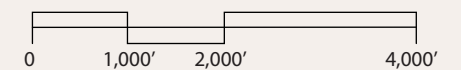
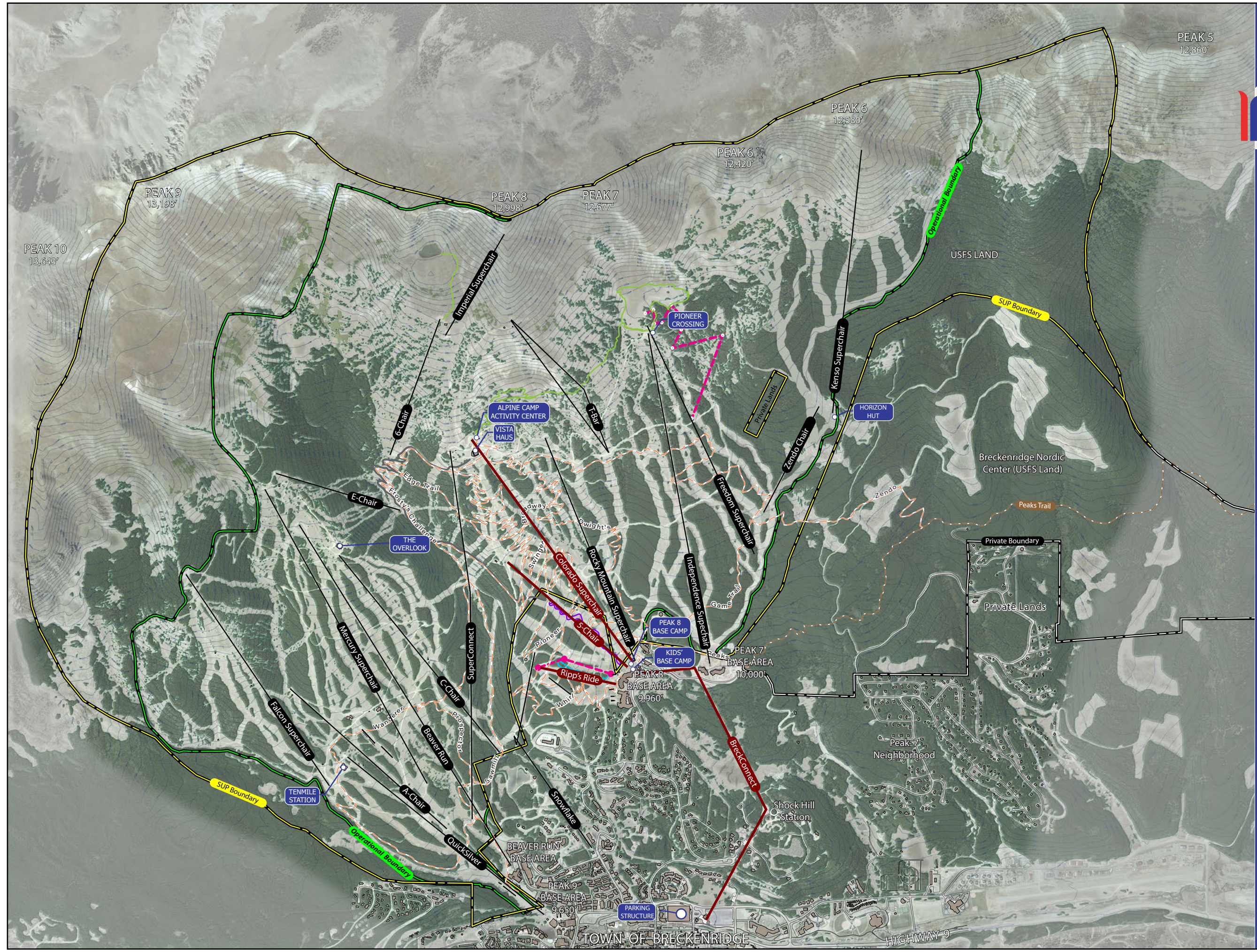


Figure 7
Existing Summer Conditions

- SUP Boundary (Public Lands)
- BSR Operational Boundary
- Existing Lift Summer Use
- Existing Lift Winter Use
- Mtn Bike Trail
- Hiking Trail
- Alpine Slide
- Mountain Coaster
- Zipline
- Peaks Trail

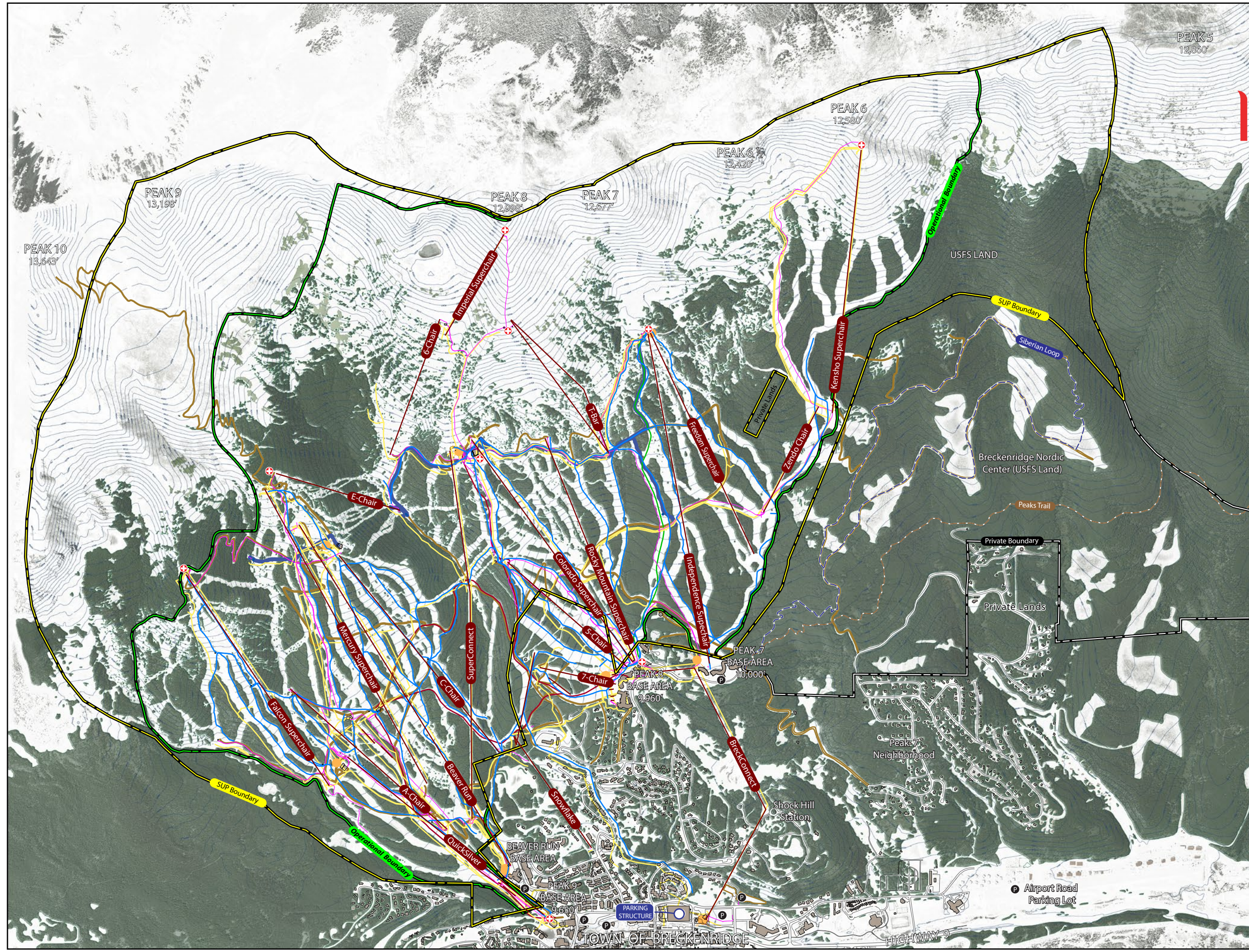


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10' Contours Intervals

North

Figure 8
Existing Utilities
and Infrastructure



- Special Use Permit Boundary (Public Lands)
- BSR Operational Boundary
- Existing Lift
- Sewer Line
- Snowmaking Pipe
- Electricity and Telecom
- Water Line
- Xcel Energy Line
- Existing Mountain Roads
- Peaks Trail
- Cell Towers
- VR Lines

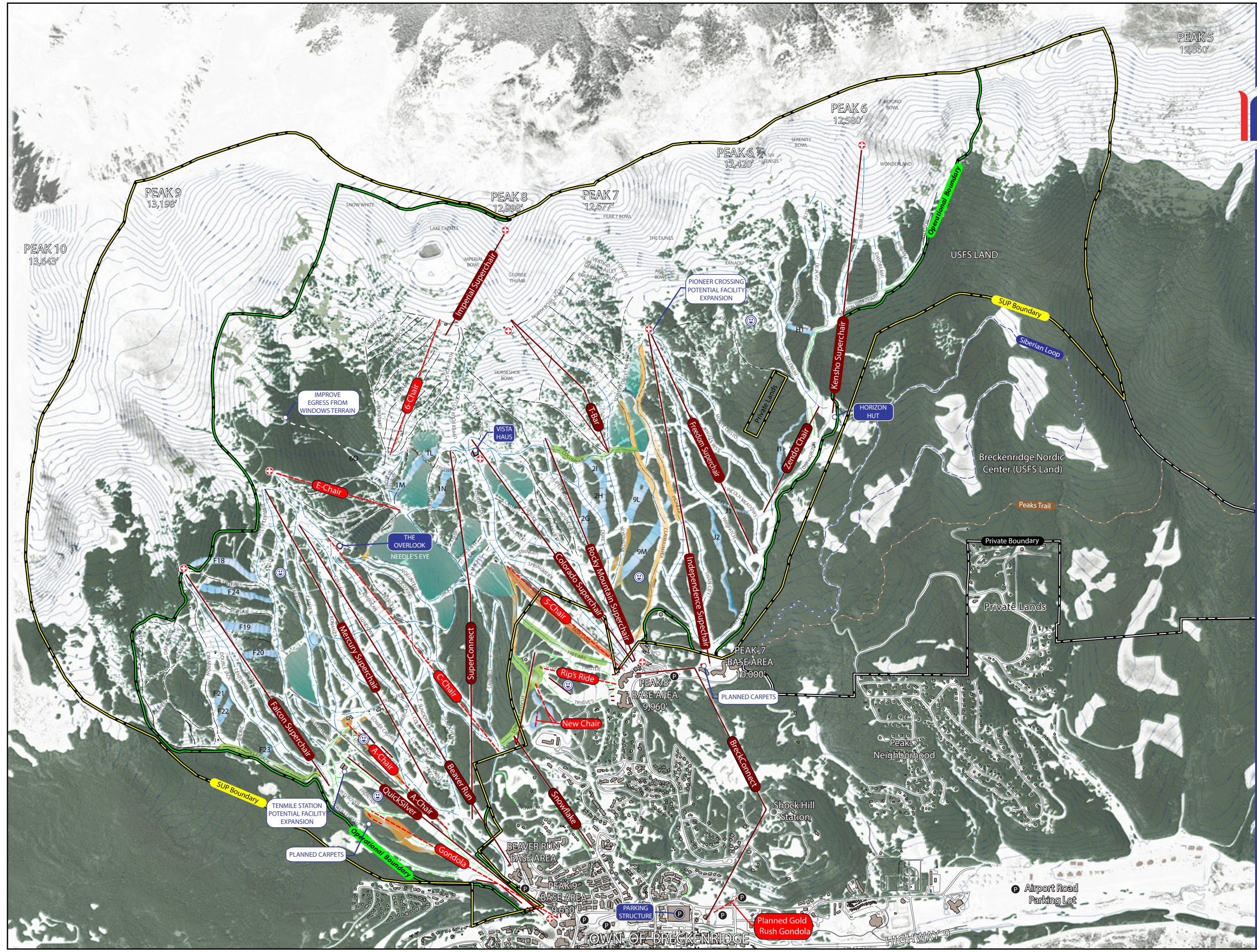
Prepared By:
SE GROUP

10' Contours Intervals

North

0 1,000' 2,000' 4,000'

**Figure 9
Winter Upgrade
Plan**



- Special Use Permit Boundary (Public Lands)
- Existing BSR
- Operational Boundary
- Existing Lift
- Planned Lift
- Previously Approved Lift
- Lift to be Removed
- Nordic Trails
- Ski Run by Ability Level
- Peaks Trail
- Existing Kid's Adventure Zones
- Existing Parking
- Ski Patrol
- Terrain Park Existing
- Planned Ski Run
- Planned Run Widening
- Planned Run Improvements
- Planned Gladed Trail
- Planned Site Work
- Previously Approved Teaching Facilities
- Facility Improvement

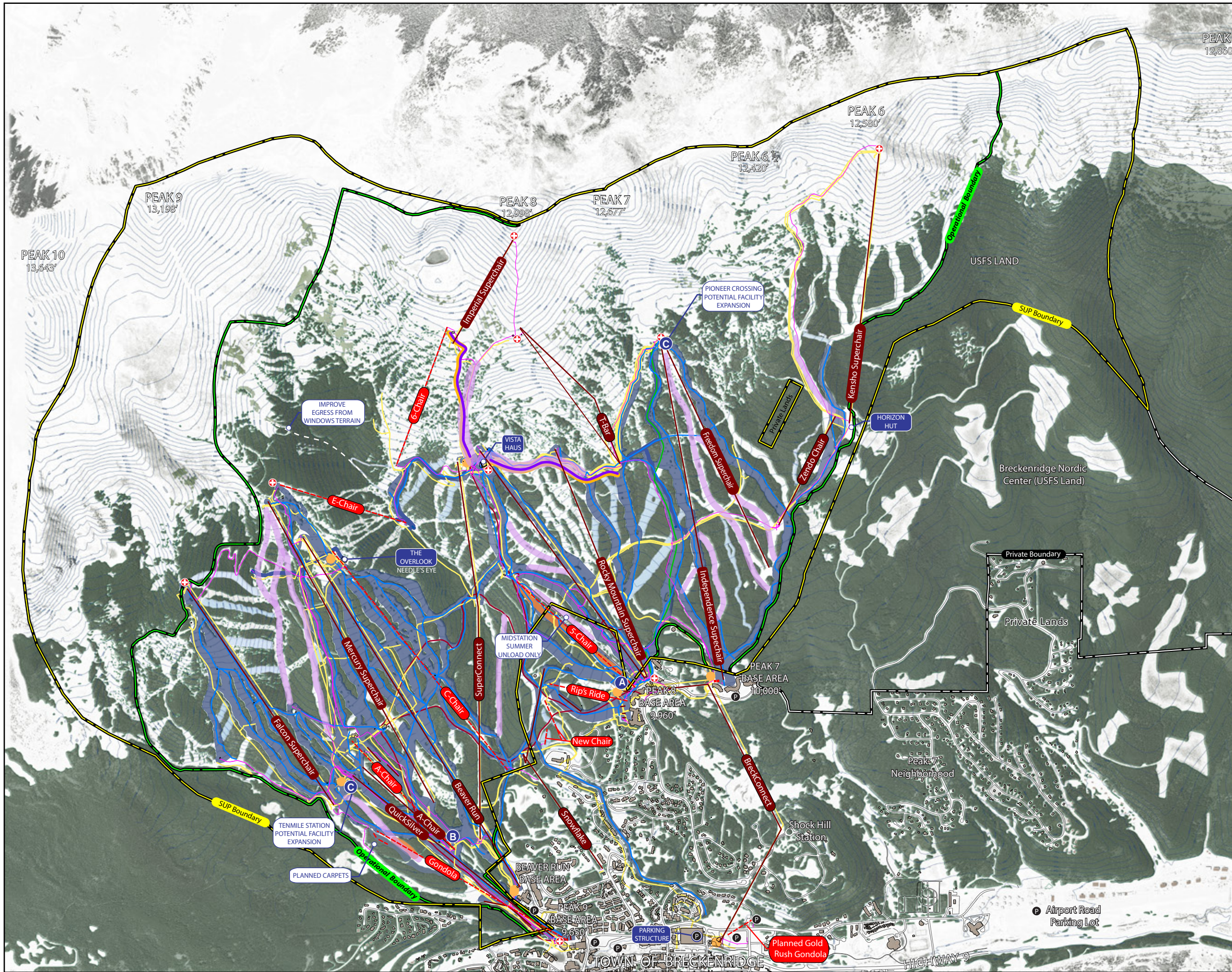
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10' Contours Intervals

North

0 1,000' 2,000' 4,000'

Figure 10 Utilities and Infrastructure Upgrade Plan



- Special Use Permit Boundary (Public Lands)
- Existing BSR Operational Boundary
- Existing Lift
- Planned Lift
- Previously Approved Lift
- Existing Sewer Line
- Existing Snowmaking Pipe
- Existing VR Lines
- Existing Electricity and Telecom
- Existing Water Line
- Existing Xcel Energy Line
- Existing Snowmaking Coverage
- Existing Cell Tower
- Planned Snowmaking Pipe
- Planned Snowmaking Coverage
- Planned Electricity
- Existing Parking
- Ski Patrol
- Planned Site Work
- Previously Approved Teaching Facilities
- Facility Improvement

Prepared By:
SE GROUP

10' Contours Intervals

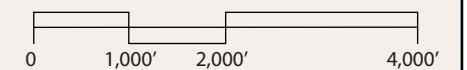
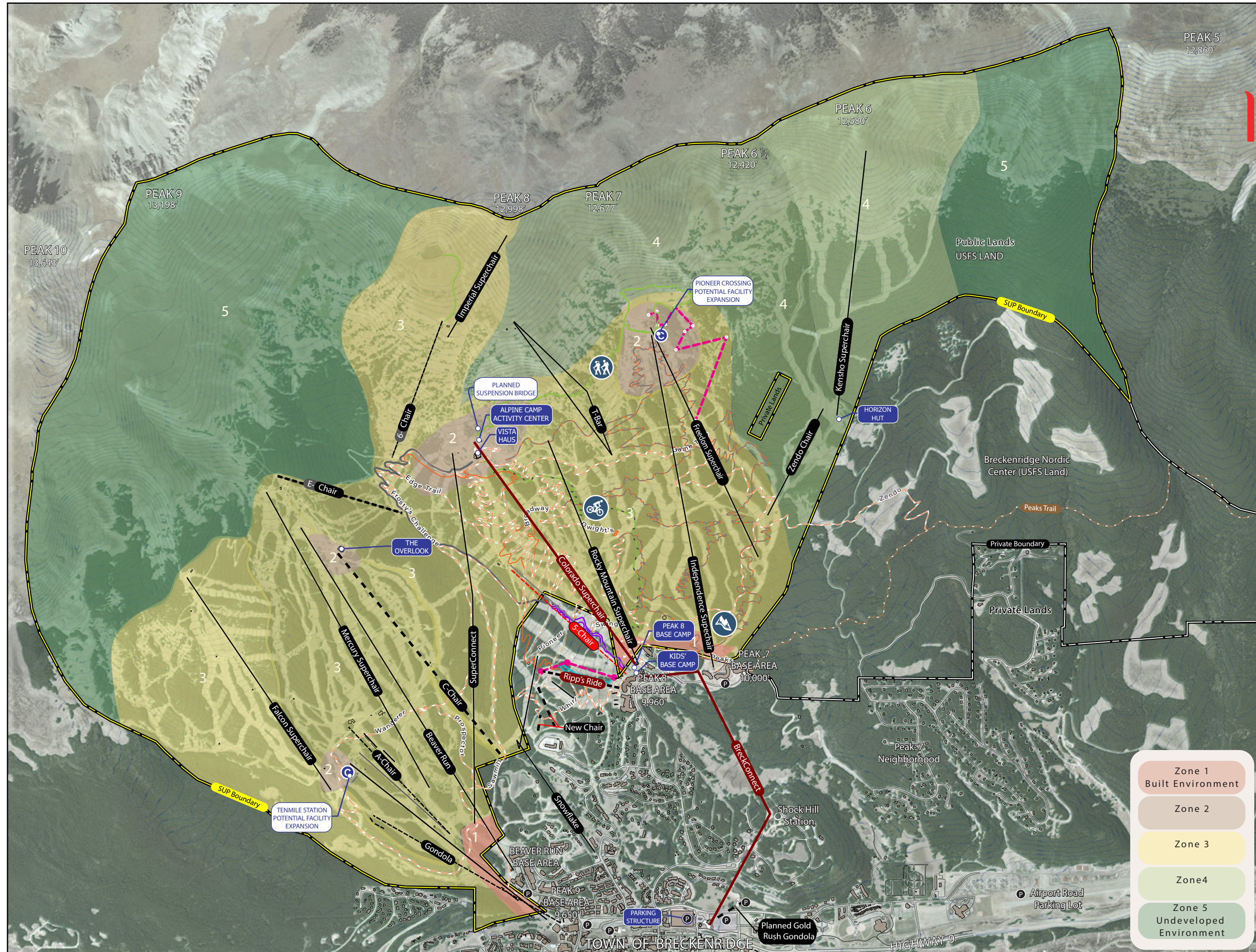


Figure 11
Summer Upgrade Plan



- Special Use Permit Boundary (Public Lands)
- Existing BSR Operational Boundary
- Existing Lift Summer Use
- Existing Lift Winter Use
- Planned Summer Use Lift
- Planned Winter Use Lift
- Previously Approved Lift
- Lift to be Removed
- Mtn Bike Trail
- Planned MTB Bike Trail Reroute
- Hiking Trail
- Previously Approved Biking Trail
- Alpine Slide
- Mountain Coaster
- Zipline
- Peaks Trail
- Planned Mountain Coaster Area
- Mountain Biking
- Hiking
- Facility Improvement

Zone 1
Built Environment

Zone 2

Zone 3

Zone 4

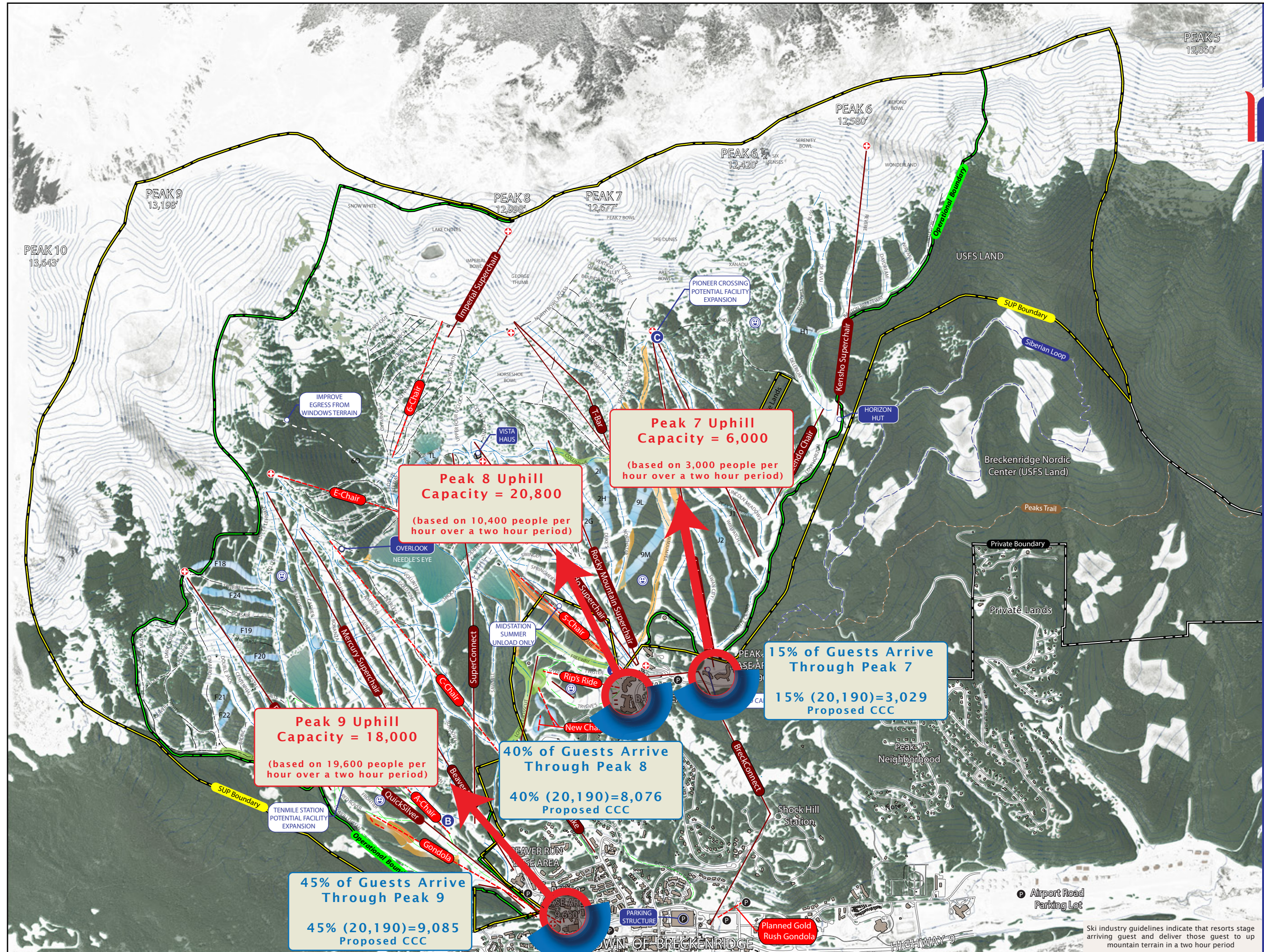
Zone 5
Undeveloped Environment

Prepared By:
SE GROUP
10' Contours Intervals

North

0 1,000' 2,000' 4,000'

Figure 12
Winter Upgrade Staging Plan



- Special Use Permit Boundary (Public Lands)
- Existing BSR Operational Boundary
- Existing Lift
- Planned Lift
- Previously Approved Lift
- Nordic Trails
- Ski Run by Ability Level
- Peaks Trail
- Existing Kid's Adventure Zones
- Existing Parking
- Ski Patrol
- Terrain Park Existing
- Planned Ski Run
- Planned Run Widening
- Planned Run Improvements
- Planned Gladed Trail
- Planned Site Work
- Previously Approved Teaching Facilities
- Facility Improvement

Prepared By:
SE GROUP

10' Contours Intervals

North

Ski industry guidelines indicate that resorts stage arriving guest and deliver those guest to up mountain terrain in a two hour period

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APPENDIX A

Additional Tables

APPENDIX A. ADDITIONAL TABLES

TABLE A-1. Terrain Specifications—Existing Conditions

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Lower Lehman	10,507	9,750	757	6,320	137	19.9	12%	24%	Novice
Silverthorne	10,525	9,634	891	7,678	191	33.6	12%	21%	Novice
C-Transfer	10,537	10,320	217	2,879	33	2.2	8%	12%	Novice
Wellington	10,399	10,315	84	872	60	1.2	10%	12%	Intermediate
El Dorado	10,375	9,867	508	3,174	182	13.3	16%	27%	Low Intermediate
A-2 Lift Line	10,359	10,063	296	2,051	122	5.8	15%	20%	Novice
Red Rover	10,267	10,016	251	2,592	157	9.3	10%	15%	Novice
Minnie	10,058	9,917	142	1,381	276	8.7	10%	12%	Novice
Frontier	10,209	9,901	308	3,055	145	10.2	10%	14%	Novice
Upper Lehman	11,506	10,530	976	4,755	221	24.1	21%	32%	Low Intermediate
Briar Rose	11,490	10,332	1,159	5,819	119	15.9	20%	35%	Low Intermediate
Sizzler	11,232	10,967	265	1,064	292	7.1	26%	41%	Intermediate
Cashier/Country Boy	11,505	10,343	1,162	6,130	226	31.8	19%	30%	Low Intermediate
Cashier Spur	10,680	10,415	265	1,272	273	8.0	21%	26%	Low Intermediate
Lower Cashier	10,383	10,068	316	1,837	258	10.9	17%	26%	Low Intermediate
Lower American	10,332	10,108	224	1,203	85	2.3	19%	26%	Intermediate
Volunteer	11,220	10,038	1,182	5,555	96	12.2	22%	37%	Intermediate
Shock	10,636	10,367	269	1,099	139	3.5	25%	44%	Intermediate
Gold King	11,213	10,601	612	2,631	172	10.4	24%	38%	Intermediate
Gold King Terrain Park	10,588	10,406	182	891	255	5.2	21%	40%	Intermediate
Peerless	11,074	9,995	1,079	5,029	194	22.4	22%	46%	Advanced Intermediate
Spur	10,506	10,420	86	398	78	0.7	22%	44%	Intermediate
Upper Columbia	11,295	10,358	937	4,535	230	23.9	21%	35%	Intermediate
Lower Columbia	10,381	10,051	330	3,097	137	9.8	11%	14%	Intermediate
Upper American	11,207	10,332	875	3,601	221	18.2	25%	42%	Intermediate

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Upper Sundown	10,945	10,339	606	2,451	222	12.5	26%	43%	Intermediate
Lower Sundown	10,306	9,709	597	4,721	150	16.2	13%	28%	Intermediate
Sundown Access I	10,186	10,011	175	1,141	147	3.8	16%	24%	Low Intermediate
Upper Bonanza	11,291	10,386	905	4,478	208	21.3	21%	28%	Low Intermediate
Lower Bonanza	10,369	10,020	349	1,856	227	9.7	19%	24%	Low Intermediate
Sundown Access II	10,124	9,960	163	1,073	173	4.2	15%	21%	Low Intermediate
Lower Union	10,928	10,356	572	6,249	8	1.2	9%	20%	Low Intermediate
Lower Tunnel	10,350	10,277	73	1,085	89	2.2	7%	9%	Low Intermediate
Sawmill	10,389	9,782	608	5,439	93	11.7	11%	26%	Low Intermediate
Little Burn	11,524	11,207	318	2,265	144	7.5	14%	25%	Intermediate
Tom's Baby	11,534	11,221	313	1,083	462	11.5	30%	35%	Advanced Intermediate
Sluice Box	11,484	11,204	280	1,014	63	1.5	29%	55%	Advanced Intermediate
Inferno	11,366	10,629	737	2,330	134	7.2	33%	64%	Expert
Satan's	11,042	10,585	457	1,603	74	2.7	30%	50%	Advanced Intermediate
Hades	11,363	10,693	670	1,923	53	2.3	37%	63%	Expert
Devil's Crotch	11,273	10,634	639	1,624	149	5.5	43%	65%	Expert
Mineshaft	11,260	10,579	680	2,075	187	8.9	35%	64%	Expert
E Lift Access	10,968	10,728	240	694	114	1.8	37%	42%	Intermediate
Lower Frosty's Freeway	10,983	10,629	355	1,181	228	6.2	31%	39%	Intermediate
Lower Psychopath and Alley	11,002	10,617	385	1,311	574	17.3	31%	43%	Advanced Intermediate
Crystal	11,601	10,199	1,402	5,829	169	22.7	25%	41%	Intermediate
Centennial	11,468	10,276	1,192	4,568	165	17.3	27%	39%	Intermediate
Doublejack	11,236	10,276	960	3,926	178	16.1	25%	44%	Intermediate
Bronc	10,649	10,351	298	705	116	1.9	47%	62%	Expert

APPENDIX A. ADDITIONAL TABLES

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Cimarron	11,675	10,367	1,308	4,524	153	15.9	30%	48%	Advanced Intermediate
Dark Rider	11,462	10,802	660	2,388	154	8.4	29%	69%	Expert
Black Hawk	11,380	10,952	428	1,220	206	5.8	37%	56%	Expert
Trinity	10,941	10,383	558	2,403	162	8.9	24%	48%	Expert
Elan	10,856	10,645	211	473	658	7.1	50%	57%	Expert
Quiver/Trinity Chutes	10,756	10,436	319	664	135	2.1	55%	64%	Expert
Mustang	11,372	10,714	658	2,262	223	11.6	30%	52%	Expert
Flapjack	10,692	10,212	480	4,912	45	5.1	10%	25%	Advanced Intermediate
Spitfire	11,504	10,965	539	1,512	191	6.6	38%	49%	Advanced Intermediate
Corsair	11,464	10,832	632	1,662	122	4.6	41%	52%	Advanced Intermediate
The Burn	11,204	10,729	475	1,031	733	17.4	52%	65%	Expert
Grits	10,711	10,509	202	495	87	1.0	45%	46%	Advanced Intermediate
Camelback Platter	9,715	9,680	35	407	43	0.4	9%	9%	Beginner
Ski and Ride Carpet D	9,660	9,645	15	153	459	1.6	10%	10%	Beginner
Ski and Ride Carpet A	9,647	9,634	13	61	73	0.1	22%	24%	Beginner
Ski and Ride Carpet B	9,656	9,634	22	102	44	0.1	22%	11%	Beginner
Ski and Ride Carpet C	10,295	10,262	33	187	95	0.4	18%	14%	Novice
Ski and Ride Carpet E	10,340	10,305	35	163	55	0.2	22%	28%	Low Intermediate
Four O'Clock	11,254	9,601	1,653	12,526	97	27.9	13%	30%	Low Intermediate
Springmeier	11,271	9,960	1,311	6,639	218	33.3	20%	28%	Low Intermediate
Callie's Alley	11,002	10,734	268	898	173	3.6	31%	55%	Advanced Intermediate
Crescendo	10,984	9,973	1,011	4,777	257	28.1	22%	35%	Low Intermediate
Swinger	10,735	10,436	300	1,158	97	2.6	27%	35%	Low Intermediate
Columbine	11,273	10,942	331	3,954	108	9.8	8%	22%	Low Intermediate

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT.)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Spruce	11,192	10,440	752	2,812	206	13.3	28%	45%	Intermediate
Pathfinder	11,175	10,854	321	2,020	90	4.2	16%	30%	Advanced Intermediate
Rounder's	11,124	10,379	746	2,742	111	7.0	28%	49%	Advanced Intermediate
High Anxiety	10,939	10,394	546	1,787	248	10.2	32%	47%	Advanced Intermediate
Boreas	10,917	10,381	536	1,709	75	2.9	33%	56%	Expert
Little Johnny	11,152	10,227	926	3,941	206	18.6	24%	40%	Intermediate
Duke's Run Access	11,149	11,074	75	266	170	1.0	29%	31%	Intermediate
Duke's Run	11,012	10,269	743	2,957	262	17.8	26%	39%	Intermediate
Northstar	10,958	9,960	998	4,871	193	21.6	21%	37%	Intermediate
Claimjumper Access	11,195	10,955	241	1,154	170	4.5	21%	26%	Low Intermediate
Claimjumper	10,938	9,972	965	4,956	203	23.0	20%	33%	Low Intermediate
Lower Peak 7 Road	10,898	10,569	329	3,331	37	2.8	10%	13%	Intermediate
Freeway Access I	10,332	10,206	127	768	92	1.6	17%	20%	Advanced Intermediate
Lower Crosscut	10,401	9,974	427	2,146	128	6.3	20%	33%	Intermediate
Midway Load Access	9,970	9,928	42	684	57	0.9	6%	9%	Low Intermediate
Snowflake	9,954	9,710	244	3,152	54	3.9	8%	20%	Low Intermediate
Tiger	11,248	10,465	782	2,413	195	10.8	34%	65%	Expert
Upper Rendezvous	10,897	10,730	167	563	54	0.7	31%	36%	Intermediate
Southern Cross	11,251	10,496	755	2,389	144	7.9	33%	53%	Advanced Intermediate
Frosty's Access	11,204	10,975	229	1,859	88	3.8	12%	22%	Intermediate
Lower Rendezvous	10,721	10,579	143	485	188	2.1	31%	38%	Intermediate
Goodbye Girl	10,814	10,416	398	863	210	4.2	52%	58%	Expert
Mach 1	10,769	10,365	403	947	315	6.9	47%	63%	Expert
Upper Crosscut	10,472	10,354	118	1,613	38	1.4	7%	12%	Low Intermediate
Tunnel	10,570	10,370	200	1,910	40	1.8	11%	13%	Intermediate

APPENDIX A. ADDITIONAL TABLES

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Park Lane	10,671	9,960	711	3,408	187	14.6	21%	30%	Low Intermediate
Swinger Access	10,667	10,622	45	308	200	1.4	15%	18%	Low Intermediate
Powerline	10,626	10,218	407	1,948	178	8.0	21%	27%	Low Intermediate
Freeway	10,547	9,958	589	2,700	233	14.4	22%	34%	Advanced Intermediate
Upper Four O'Clock	11,957	11,227	730	3,498	176	14.1	21%	37%	Intermediate
Psychopath	11,923	11,008	915	3,239	112	8.3	29%	64%	Expert
East Snowbird	11,638	10,981	657	2,052	150	7.1	34%	61%	Expert
Middle Snowbird	11,560	11,143	418	999	399	9.1	46%	59%	Expert
West Snowbird	11,791	10,985	806	2,627	178	10.7	32%	58%	Expert
No Name	11,797	11,048	749	2,411	152	8.4	33%	58%	Expert
Amen	11,737	11,625	112	429	631	6.2	27%	34%	Advanced Intermediate
Hombre	11,888	11,240	648	2,019	203	9.4	34%	53%	Advanced Intermediate
Lobo	11,950	11,266	684	2,163	138	6.9	33%	51%	Advanced Intermediate
Solitude	11,929	11,358	571	1,641	394	14.8	37%	57%	Expert
Too Much	11,918	11,383	534	1,444	110	3.7	40%	62%	Expert
Quandry	11,903	11,391	513	1,287	402	11.9	43%	61%	Lift Served Bowl - Expert
Way Out	11,890	11,404	486	1,291	896	26.6	41%	68%	Lift Served Bowl - Expert
Boneyard	11,394	10,976	418	2,440	43	2.4	17%	23%	Advanced Intermediate
Trygve's	10,270	9,974	297	2,159	244	12.1	14%	19%	Novice
Dyersville	10,275	9,985	290	1,706	232	9.1	17%	21%	Novice
Freeway Access II	10,264	10,243	20	264	109	0.7	8%	8%	Novice
Twister	10,195	9,979	217	1,176	124	3.4	19%	22%	Novice
Alpine Alley	12,168	11,902	266	2,889	133	8.8	9%	17%	Advanced Intermediate
Horseshoe Bowl	12,133	11,353	781	1,849	1,801	76.4	47%	64%	Lift Served Bowl - Expert
Lower Cucumber Bowl	11,368	10,988	380	2,398	429	23.6	16%	38%	Lift Served Bowl - Expert

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT.)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Four O'Clock Access	12,142	11,877	264	927	294	6.3	30%	35%	Intermediate
Contest Bowl	11,810	11,117	693	2,309	231	12.3	31%	61%	Lift Served Bowl - Expert
Steep	11,627	11,268	359	1,144	369	9.7	33%	67%	Expert
North Bowl Access	12,153	12,051	103	2,106	168	8.1	5%	15%	Intermediate
North Bowl Access	12,104	10,987	1,117	3,872	296	26.3	30%	44%	Intermediate
Cucumber Bowl	11,778	11,344	435	1,143	598	15.7	41%	64%	Lift Served Bowl - Expert
Ptarmigan	12,087	11,229	859	2,607	582	34.8	35%	45%	Lift Served Bowl - Adv Inter
White Crown	12,058	11,323	734	2,221	254	12.9	35%	46%	Lift Served Bowl - Adv Inter
Forget-Me-Not	12,043	11,416	627	1,804	954	39.5	37%	46%	Lift Served Bowl - Adv Inter
Boundary Chutes	12,024	11,400	625	1,654	179	6.8	41%	54%	Lift Served Bowl - Adv Inter
Debbie's Alley	12,039	11,431	608	1,534	118	4.1	43%	64%	Lift Served Bowl - Expert
Vertigo	12,037	11,452	585	1,458	124	4.1	44%	57%	Lift Served Bowl - Expert
Upper Peak 7 Road	11,476	11,182	294	2,523	115	6.6	12%	21%	Advanced Intermediate
Imperial Bowl	12,870	11,890	980	2,804	1,234	79.4	37%	55%	Lift Served Bowl - Adv Inter
Lake Chutes (hike to)	12,850	12,250	600	1,189	2,310	63.0	58%	86%	Hike To
Snow White (hike to)	12,580	11,650	930	2,497	2,519	144.4	40%	68%	Hike To
Trygve's Platter	10,232	10,150	82	638	96	1.4	13%	13%	Novice
Ski and Ride Carpet 3	9,980	9,970	10	62	107	0.2	8%	8%	Beginner
Ski and Ride Carpet 4	9,990	9,970	20	134	56	0.2	10%	10%	Beginner
Kinder Carpet	9,985	9,975	10	56	79	0.1	18%	9%	Beginner
Castle Carpet	9,992	9,977	15	101	44	0.1	15%	12%	Beginner

APPENDIX A. ADDITIONAL TABLES

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT.)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Pioneer	11,210	10,097	1,113	6,297	218	31.5	18%	30%	Low Intermediate
Upper Pioneer (1A)	11,385	11,125	260	1,358	305	9.5	20%	28%	Low Intermediate
Pioneer Spur (1B)	10,915	10,879	36	333	238	1.8	11%	15%	Low Intermediate
Claimjumper Spur (1C)	10,385	10,341	44	260	119	0.7	17%	18%	Low Intermediate
Swan City (2)	10,557	10,087	470	2,923	218	14.6	16%	38%	Intermediate
Lower Pioneer (2A)	10,435	10,207	228	1,149	210	5.5	20%	37%	Intermediate
Wirepatch (3)	11,370	10,334	1,036	6,031	167	23.1	18%	41%	Intermediate
Lincoln Meadows (4)	10,971	10,407	564	3,365	172	13.3	17%	24%	Intermediate
Angels Rest (5)	11,125	10,514	611	3,618	164	13.6	17%	29%	Low Intermediate
Monte Cristo (6)	11,384	10,083	1,301	8,516	146	28.6	15%	31%	Low Intermediate
Ore Bucket	11,350	10,870	480	2,300	647	34.2	21%	56%	Expert
North Bowl	12,840	12,150	690	1,711	1,032	40.5	44%	56%	Lift Served Bowl - Expert
Whales Tail	12,800	12,100	700	1,604	740	27.2	49%	65%	Lift Served Bowl - Expert
Peak 7 Bowl and Art's Bowle	12,550	11,600	950	1,799	2,429	100.3	62%	70%	Lift Served Bowl - Expert
Peak 7 Summit (hike to)	12,650	12,550	100	246	3,020	17.1	44%	46%	Hike To
Windows (hike to)	11,670	10,850	820	2,079	2,025	96.6	43%	56%	Hike To
Broadway and Twin Chutes (hike to)	11,850	11,350	500	1,109	2,759	70.2	51%	68%	Hike To
Six Senses (hike to)	12,307	11,440	867	2,858	1,259	82.6	32%	68%	Hike To
Serenity Bowl (hike to)	12,493	11,627	866	2,266	1,408	73.2	42%	85%	Hike To
Ex Beyond bowl (hike to)	12,418	11,879	539	1,491	2,441	83.5	39%	58%	Hike To
6-Barton Breezeway	11,292	10,857	435	4,230	106	10.3	10%	24%	Intermediate
6-Bliss	12,298	11,698	600	1,849	227	9.6	35%	46%	Advanced Intermediate
6-Daydream	11,599	11,212	388	1,251	173	5.0	33%	41%	Intermediate

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT.)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
6-Deja Vu	11,688	11,090	598	2,858	179	11.7	21%	39%	Intermediate
6-Delirium	11,431	10,773	658	3,586	179	14.8	19%	34%	Advanced Intermediate
6-Eurphoria	11,687	11,165	522	3,044	128	9.0	17%	33%	Advanced Intermediate
6-Intuition	12,271	11,300	971	4,574	228	23.9	22%	58%	Expert
6-Nirvana	11,558	11,314	244	848	175	3.4	30%	39%	Intermediate
6-Reverie	12,274	11,149	1,125	3,583	361	29.7	33%	45%	Intermediate
6-Lost Horizon	10,860	10,525	335	2,814	146	9.4	12%	24%	Low Intermediate
Total with without hike-to terrain:				393,796		1,957.5			
Total with hike-to terrain:				407,531		2,588.1			

APPENDIX A. ADDITIONAL TABLES

TABLE A-2. Terrain Specifications—Upgrade Plan

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Lower Lehman - Lower	10,265	9,768	497	4,371	117	11.7	11%	23%	Novice
Silverthorne - Lower	10,305	9,627	679	6,265	210	30.2	11%	20%	Novice
C-Transfer - Lower	10,400	10,321	79	1,203	94	2.6	7%	11%	Novice
Lower Lehman - Upper	10,507	10,267	240	1,720	140	5.5	14%	19%	Low Intermediate
Silverthorne - Upper	10,526	10,309	217	1,356	104	3.2	16%	23%	Low Intermediate
C-Transfer - Upper	10,535	10,402	133	1,663	79	3.0	8%	14%	Low Intermediate
Wellington	10,399	10,315	84	872	60	1.2	10%	12%	Intermediate
El Dorado	10,375	9,867	508	3,174	182	13.3	16%	27%	Low Intermediate
A-2 Lift Line	10,359	10,063	296	2,051	122	5.8	15%	20%	Novice
Red Rover	10,267	10,016	251	2,592	157	9.3	10%	15%	Novice
Minnie	10,058	9,917	142	1,381	276	8.7	10%	12%	Novice
Frontier	10,209	9,901	308	3,055	217	15.2	10%	14%	Novice
Upper Lehman	11,506	10,530	976	4,755	221	24.1	21%	32%	Low Intermediate
Briar Rose	11,490	10,332	1,159	5,819	119	15.9	20%	35%	Low Intermediate
Sizzler	11,232	10,967	265	1,064	292	7.1	26%	41%	Intermediate
Cashier/ Country Boy	11,505	10,343	1,162	6,130	226	31.8	19%	30%	Low Intermediate
Cashier Spur	10,680	10,415	265	1,272	273	8.0	21%	26%	Low Intermediate
Lower Cashier	10,383	10,068	316	1,837	258	10.9	17%	26%	Low Intermediate
Lower American	10,332	10,108	224	1,203	85	2.3	19%	26%	Intermediate
Volunteer	11,220	10,038	1,182	5,555	96	12.2	22%	37%	Intermediate
Shock	10,636	10,367	269	1,099	139	3.5	25%	44%	Intermediate
Gold King	11,213	10,601	612	2,631	172	10.4	24%	38%	Intermediate
Gold King Terrain Park	10,588	10,406	182	891	255	5.2	21%	40%	Intermediate

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Peerless	11,074	9,995	1,079	5,029	194	22.4	22%	46%	Advanced Intermediate
Spur	10,506	10,420	86	398	78	0.7	22%	44%	Intermediate
Upper Columbia	11,295	10,358	937	4,535	230	23.9	21%	35%	Intermediate
Lower Columbia	10,381	10,051	330	3,097	137	9.8	11%	14%	Intermediate
Upper American	11,207	10,332	875	3,601	221	18.2	25%	42%	Intermediate
Upper Sundown	10,945	10,339	606	2,451	222	12.5	26%	43%	Intermediate
Lower Sundown	10,306	9,709	597	4,721	150	16.2	13%	28%	Intermediate
Sundown Access I	10,186	10,011	175	1,141	147	3.8	16%	24%	Low Intermediate
Upper Bonanza	11,291	10,386	905	4,478	208	21.3	21%	28%	Low Intermediate
Lower Bonanza	10,369	10,020	349	1,856	227	9.7	19%	24%	Low Intermediate
Sundown Access II	10,124	9,960	163	1,073	173	4.2	15%	21%	Low Intermediate
Lower Union	10,928	10,356	572	6,249	8	1.2	9%	20%	Low Intermediate
Lower Tunnel	10,350	10,277	73	1,085	89	2.2	7%	9%	Low Intermediate
Sawmill	10,389	9,782	608	5,439	93	11.7	11%	26%	Low Intermediate
Little Burn	11,524	11,207	318	2,265	144	7.5	14%	25%	Intermediate
Tom's Baby	11,534	11,221	313	1,083	462	11.5	30%	35%	Advanced Intermediate
Sluice Box	11,484	11,204	280	1,014	63	1.5	29%	55%	Advanced Intermediate
Inferno	11,366	10,629	737	2,330	134	7.2	33%	64%	Expert
Satan's	11,042	10,585	457	1,603	74	2.7	30%	50%	Advanced Intermediate
Hades	11,363	10,693	670	1,923	53	2.3	37%	63%	Expert
Devil's Crotch	11,273	10,634	639	1,624	149	5.5	43%	65%	Expert
Mineshaft	11,260	10,579	680	2,075	187	8.9	35%	64%	Expert
E Lift Access	10,968	10,728	240	694	114	1.8	37%	42%	Intermediate

APPENDIX A. ADDITIONAL TABLES

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT.)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Lower Frosty's Freeway	10,983	10,629	355	1,181	228	6.2	31%	39%	Intermediate
Lower Psychopath and Alley	11,002	10,617	385	1,311	574	17.3	31%	43%	Advanced Intermediate
Crystal	11,601	10,199	1,402	5,829	169	22.7	25%	41%	Intermediate
Centennial	11,468	10,276	1,192	4,568	165	17.3	27%	39%	Intermediate
Doublejack	11,236	10,276	960	3,926	178	16.1	25%	44%	Intermediate
Bronc	10,649	10,351	298	705	116	1.9	47%	62%	Expert
Cimarron	11,675	10,367	1,308	4,524	153	15.9	30%	48%	Advanced Intermediate
Dark Rider	11,462	10,802	660	2,388	154	8.4	29%	69%	Expert
Black Hawk	11,380	10,952	428	1,220	206	5.8	37%	56%	Expert
Trinity	10,941	10,383	558	2,403	162	8.9	24%	48%	Expert
Elan	10,856	10,645	211	473	658	7.1	50%	57%	Expert
Quiver/Trinity Chutes	10,756	10,436	319	664	135	2.1	55%	64%	Expert
Mustang	11,372	10,714	658	2,262	223	11.6	30%	52%	Expert
Flapjack	10,692	10,212	480	4,912	45	5.1	10%	25%	Advanced Intermediate
Spitfire	11,504	10,965	539	1,512	191	6.6	38%	49%	Advanced Intermediate
Corsair	11,464	10,832	632	1,662	122	4.6	41%	52%	Advanced Intermediate
The Burn	11,204	10,729	475	1,031	733	17.4	52%	65%	Expert
Grits	10,711	10,509	202	495	87	1.0	45%	46%	Advanced Intermediate
Camelback Platter	9,715	9,680	35	407	43	0.4	9%	9%	Beginner
Ski and Ride Carpet D	9,660	9,645	15	153	459	1.6	10%	10%	Beginner
Ski and Ride Carpet A	9,647	9,634	13	61	73	0.1	22%	24%	Beginner
Ski and Ride Carpet B	9,656	9,634	22	102	44	0.1	22%	11%	Beginner
Ski and Ride Carpet C	10,295	10,262	33	187	95	0.4	18%	14%	Novice
Ski and Ride Carpet E	10,340	10,305	35	163	55	0.2	22%	28%	Low Intermediate

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Four O'Clock	11,254	9,601	1,653	12,526	97	27.9	13%	30%	Low Intermediate
Springmeier	11,271	9,960	1,311	6,639	218	33.3	20%	28%	Low Intermediate
Callie's Alley	11,002	10,734	268	898	173	3.6	31%	55%	Advanced Intermediate
Crescendo	10,984	9,973	1,011	4,777	257	28.1	22%	35%	Low Intermediate
Swinger	10,735	10,436	300	1,158	97	2.6	27%	35%	Low Intermediate
Columbine	11,273	10,942	331	3,954	108	9.8	8%	22%	Low Intermediate
Spruce	11,192	10,440	752	2,812	206	13.3	28%	45%	Intermediate
Pathfinder	11,175	10,854	321	2,020	90	4.2	16%	30%	Advanced Intermediate
Rounder's	11,124	10,379	746	2,742	111	7.0	28%	49%	Advanced Intermediate
High Anxiety	10,939	10,394	546	1,787	248	10.2	32%	47%	Advanced Intermediate
Boreas	10,917	10,381	536	1,709	75	2.9	33%	56%	Expert
Little Johnny	11,152	10,227	926	3,941	206	18.6	24%	40%	Intermediate
Duke's Run Access	11,149	11,074	75	266	170	1.0	29%	31%	Intermediate
Duke's Run	11,012	10,269	743	2,957	262	17.8	26%	39%	Intermediate
Northstar	10,958	9,960	998	4,871	193	21.6	21%	37%	Intermediate
Claimjumper Access	11,195	10,955	241	1,154	170	4.5	21%	26%	Low Intermediate
Claimjumper	10,938	9,972	965	4,956	203	23.0	20%	33%	Low Intermediate
Lower Peak 7 Road	10,898	10,569	329	3,331	37	2.8	10%	13%	Intermediate
Freeway Access I	10,332	10,206	127	768	92	1.6	17%	20%	Advanced Intermediate
Lower Crosscut	10,401	9,974	427	2,146	128	6.3	20%	33%	Intermediate
Midway Load Access	9,970	9,928	42	684	57	0.9	6%	9%	Low Intermediate
Snowflake	9,954	9,710	244	3,152	54	3.9	8%	20%	Low Intermediate
Tiger	11,248	10,465	782	2,413	195	10.8	34%	65%	Expert

APPENDIX A. ADDITIONAL TABLES

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT.)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Upper Rendezvous	10,897	10,730	167	563	54	0.7	31%	36%	Intermediate
Southern Cross	11,251	10,496	755	2,389	144	7.9	33%	53%	Advanced Intermediate
Frosty's Access	11,204	10,975	229	1,859	88	3.8	12%	22%	Intermediate
Lower Rendezvous	10,721	10,579	143	485	188	2.1	31%	38%	Intermediate
Goodbye Girl	10,814	10,416	398	863	210	4.2	52%	58%	Expert
Mach 1	10,769	10,365	403	947	315	6.9	47%	63%	Expert
Upper Crosscut	10,472	10,354	118	1,613	38	1.4	7%	12%	Low Intermediate
Tunnel	10,570	10,370	200	1,910	40	1.8	11%	13%	Intermediate
Park Lane	10,671	9,960	711	3,408	187	14.6	21%	30%	Low Intermediate
Swinger Access	10,667	10,622	45	308	200	1.4	15%	18%	Low Intermediate
Powerline	10,626	10,218	407	1,948	178	8.0	21%	27%	Low Intermediate
Freeway	10,547	9,958	589	2,700	233	14.4	22%	34%	Advanced Intermediate
Upper Four O'Clock	11,957	11,227	730	3,498	176	14.1	21%	37%	Intermediate
Psychopath	11,923	11,008	915	3,239	112	8.3	29%	64%	Expert
East Snowbird	11,638	10,981	657	2,052	150	7.1	34%	61%	Expert
Middle Snowbird	11,560	11,143	418	999	399	9.1	46%	59%	Expert
West Snowbird	11,791	10,985	806	2,627	178	10.7	32%	58%	Expert
No Name	11,797	11,048	749	2,411	152	8.4	33%	58%	Expert
Amen	11,737	11,625	112	429	631	6.2	27%	34%	Advanced Intermediate
Hombre	11,888	11,240	648	2,019	203	9.4	34%	53%	Advanced Intermediate
Lobo	11,950	11,266	684	2,163	138	6.9	33%	51%	Advanced Intermediate
Solitude	11,929	11,358	571	1,641	394	14.8	37%	57%	Expert
Too Much	11,918	11,383	534	1,444	110	3.7	40%	62%	Expert
Quandry	11,903	11,391	513	1,287	402	11.9	43%	61%	Lift Served Bowl - Expert

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Way Out	11,890	11,404	486	1,291	896	26.6	41%	68%	Lift Served Bowl – Expert
Boneyard	11,394	10,976	418	2,440	43	2.4	17%	23%	Advanced Intermediate
Trygve's	10,270	9,974	297	2,159	244	12.1	14%	19%	Novice
Dyersville	10,275	9,985	290	1,706	232	9.1	17%	21%	Novice
Freeway Access II	10,264	10,243	20	264	109	0.7	8%	8%	Novice
Twister	10,195	9,979	217	1,176	124	3.4	19%	22%	Novice
Alpine Alley	12,168	11,902	266	2,889	133	8.8	9%	17%	Advanced Intermediate
Horseshoe Bowl	12,133	11,353	781	1,849	1,801	76.4	47%	64%	Lift Served Bowl – Expert
Lower Cucumber Bowl	11,368	10,988	380	2,398	429	23.6	16%	38%	Lift Served Bowl – Expert
Four O'Clock Access	12,142	11,877	264	927	294	6.3	30%	35%	Intermediate
Contest Bowl	11,810	11,117	693	2,309	231	12.3	31%	61%	Lift Served Bowl – Expert
Steep	11,627	11,268	359	1,144	369	9.7	33%	67%	Expert
North Bowl Access	12,153	12,051	103	2,106	168	8.1	5%	15%	Intermediate
North Bowl Access	12,104	10,987	1,117	3,872	296	26.3	30%	44%	Intermediate
Cucumber Bowl	11,778	11,344	435	1,143	598	15.7	41%	64%	Lift Served Bowl – Expert
Ptarmigan	12,087	11,229	859	2,607	582	34.8	35%	45%	Lift Served Bowl – Adv Inter
White Crown	12,058	11,323	734	2,221	254	12.9	35%	46%	Lift Served Bowl – Adv Inter
Forget-Me-Not	12,043	11,416	627	1,804	954	39.5	37%	46%	Lift Served Bowl – Adv Inter
Boundary Chutes	12,024	11,400	625	1,654	179	6.8	41%	54%	Lift Served Bowl – Adv Inter
Debbie's Alley	12,039	11,431	608	1,534	118	4.1	43%	64%	Lift Served Bowl – Expert
Vertigo	12,037	11,452	585	1,458	124	4.1	44%	57%	Lift Served Bowl – Expert

APPENDIX A. ADDITIONAL TABLES

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT.)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Upper Peak 7 Road	11,476	11,182	294	2,523	115	6.6	12%	21%	Advanced Intermediate
Imperial Bowl	12,870	11,890	980	2,804	1,234	79.4	37%	55%	Lift Served Bowl - Adv Inter
Lake Chutes (hike to)	12,850	12,250	600	1,189	2,310	63.0	58%	86%	Hike To
Snow White (hike to)	12,580	11,650	930	2,497	2,519	144.4	40%	68%	Hike To
Trygve's Platter	10,232	10,150	82	638	96	1.4	13%	13%	Novice
Ski and Ride Carpet 3	9,980	9,970	10	62	107	0.2	8%	8%	Beginner
Ski and Ride Carpet 4	9,990	9,970	20	134	56	0.2	10%	10%	Beginner
Kinder Carpet	9,985	9,975	10	56	79	0.1	18%	9%	Beginner
Castle Carpet	9,992	9,977	15	101	44	0.1	15%	12%	Beginner
Pioneer	11,210	10,097	1,113	6,297	218	31.5	18%	30%	Low Intermediate
Upper Pioneer (1A)	11,385	11,125	260	1,358	305	9.5	20%	28%	Low Intermediate
Pioneer Spur (1B)	10,915	10,879	36	333	238	1.8	11%	15%	Low Intermediate
Claimjumper Spur (1C)	10,385	10,341	44	260	119	0.7	17%	18%	Low Intermediate
Swan City (2)	10,557	10,087	470	2,923	218	14.6	16%	38%	Intermediate
Lower Pioneer (2A)	10,435	10,207	228	1,149	210	5.5	20%	37%	Intermediate
Wirepatch (3)	11,370	10,334	1,036	6,031	167	23.1	18%	41%	Intermediate
Lincoln Meadows (4)	10,971	10,407	564	3,365	172	13.3	17%	24%	Intermediate
Angels Rest (5)	11,125	10,514	611	3,618	164	13.6	17%	29%	Low Intermediate
Monte Cristo (6)	11,384	10,083	1,301	8,516	146	28.6	15%	31%	Low Intermediate
Ore Bucket	11,350	10,870	480	2,300	647	34.2	21%	56%	Expert
North Bowl	12,840	12,150	690	1,711	1,032	40.5	44%	56%	Lift Served Bowl - Expert
Whales Tail	12,800	12,100	700	1,604	740	27.2	49%	65%	Lift Served Bowl - Expert
Peak 7 Bowl and Art's Bowle	12,550	11,600	950	1,799	2,429	100.3	62%	70%	Lift Served Bowl - Expert

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT.)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
Peak 7 Summit (hike to)	12,650	12,550	100	246	3,020	17.1	44%	46%	Hike To
Windows (hike to)	11,670	10,850	820	2,079	2,025	96.6	43%	56%	Hike To
Broadway and Twin Chutes (hike to)	11,850	11,350	500	1,109	2,759	70.2	51%	68%	Hike To
Six Senses (hike to)	12,307	11,440	867	2,858	1,259	82.6	32%	68%	Hike To
Serenity Bowl (hike to)	12,493	11,627	866	2,266	1,408	73.2	42%	85%	Hike To
Ex Beyond bowl (hike to)	12,418	11,879	539	1,491	2,441	83.5	39%	58%	Hike To
6-Barton Breezeway	11,292	10,857	435	4,230	106	10.3	10%	24%	Intermediate
6-Bliss	12,298	11,698	600	1,849	227	9.6	35%	46%	Advanced Intermediate
6-Daydream	11,599	11,212	388	1,251	173	5.0	33%	41%	Intermediate
6-Deja Vu	11,688	11,090	598	2,858	179	11.7	21%	39%	Intermediate
6-Delirium	11,431	10,773	658	3,586	179	14.8	19%	34%	Advanced Intermediate
6-Eurphoria	11,687	11,165	522	3,044	128	9.0	17%	33%	Advanced Intermediate
6-Intuition	12,271	11,300	971	4,574	228	23.9	22%	58%	Expert
6-Nirvana	11,558	11,314	244	848	175	3.4	30%	39%	Intermediate
6-Reverie	12,274	11,149	1,125	3,583	361	29.7	33%	45%	Intermediate
6-Lost Horizon	10,860	10,525	335	2,814	146	9.4	12%	24%	Low Intermediate
1L	11,246	11,087	159	440	107	1.1	39%	42%	Intermediate
1M	11,071	10,651	420	1,198	122	3.3	37%	41%	Intermediate
1N	11,137	10,766	372	947	130	2.8	43%	46%	Advanced Intermediate
2G	10,712	10,472	240	665	110	1.7	39%	42%	Intermediate
2H	10,861	10,492	369	1,251	124	3.5	31%	36%	Intermediate
2I	11,009	10,834	175	552	148	1.9	33%	37%	Intermediate
6O	10,980	10,730	251	2,177	20	1.0	12%	24%	Low Intermediate
7E	10,270	10,261	10	151	34	0.1	6%	6%	Beginner

APPENDIX A. ADDITIONAL TABLES

TRAIL/AREA NAME	TOP ELEVATION (FT.)	BOTTOM ELEVATION (FT.)	VERTICAL RISE (FT.)	SLOPE LENGTH (FT.)	AVG. WIDTH (FT.)	SLOPE AREA (ACRES)	AVG. GRADE (%)	MAX. GRADE (%)	SKIER/RIDER ABILITY LEVEL
9L	10,825	10,478	346	1,215	155	4.3	30%	38%	Intermediate
9M	10,579	10,255	324	1,822	157	6.6	18%	26%	Low Intermediate
9N	10,816	10,675	141	693	85	1.3	21%	26%	Low Intermediate
Mid-9 Beginner Terrain						1.1	10%	12%	Beginner
Peak 7 Base Area	1,013	1,016	3			2.0	10%	11%	Beginner
F18	11,583	11,012	571	1,510	104	3.6	41%	52%	Advanced Intermediate
F19	11,257	10,767	491	1,136	188	4.9	48%	57%	Expert
F20	11,041	10,666	375	857	141	2.8	49%	56%	Expert
F21	10,870	10,661	210	514	119	1.4	45%	51%	Advanced Intermediate
F22	10,761	10,550	212	574	137	1.8	40%	41%	Intermediate
F23	10,460	10,326	134	351	122	1.0	41%	42%	Intermediate
F24	11,495	10,903	592	1,713	151	5.9	37%	48%	Advanced Intermediate
H1	11,153	10,999	154	625	80	1.1	26%	32%	Low Intermediate
I1	10,828	10,568	260	1,926	55	2.5	14%	24%	Novice
J1	10,610	10,546	64	659	64	1.0	10%	11%	Intermediate
J2	10,610	10,203	407	2,675	70	4.3	15%	27%	Intermediate
K1	10,225	10,176	49	322	208	1.5	15%	18%	Novice
K2	10,171	10,100	71	545	105	1.3	13%	16%	Novice
K3	10,149	10,084	66	421	167	1.6	16%	16%	Novice
Total without hike-to terrain:				418,434		2,027.3			
Total with hike-to terrain:				432,169		2,657.9			

TABLE A-3. Space Use Recommendations—Existing Conditions—Peak 7 Base

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	460	560
Public Lockers	1,210	1,480
Rentals/Repair	1,390	1,560
Retail Sales	440	530
Bar/lounge	110	130
Adult Ski School	0	0
Kid’s Ski School	0	0
Restaurant Seating	5,160	6,310
Kitchen/Scramble	1,550	1,890
Rest rooms	1,160	1,420
Ski Patrol	900	1,100
Administration	0	0
Employee Lockers/Lounge	0	0
Storage	619	749
TOTAL SQUARE FEET	12,999	15,729

Source: SE Group

TABLE A-4. Space Use Recommendations—Existing Conditions—Peak 8 Base

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	1,550	1,890
Public Lockers	4,090	4,990
Rentals/Repair	5,260	7,010
Retail Sales	1,480	1,810
Bar/lounge	370	450
Adult Ski School	3,200	3,910
Kid’s Ski School	20,490	25,050
Restaurant Seating	8,280	10,130
Kitchen/Scramble	2,490	3,040
Rest rooms	1,860	2,280
Ski Patrol	1,450	1,770
Administration	7,400	9,040
Employee Lockers/Lounge	4,590	5,610
Storage	3,126	3,849
TOTAL SQUARE FEET	65,636	80,829

Source: SE Group

APPENDIX A. ADDITIONAL TABLES

TABLE A-5. Space Use Recommendations—Existing Conditions—Peak 9 Base

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	1,510	1,850
Public Lockers	3,990	4,880
Rentals/Repair	13,010	17,350
Retail Sales	1,450	1,770
Bar/lounge	360	440
Adult Ski School	8,010	9,780
Kid's Ski School	25,620	31,310
Restaurant Seating	9,630	11,760
Kitchen/Scramble	2,890	3,530
Rest rooms	2,170	2,650
Ski Patrol	1,680	2,060
Administration	9,410	11,510
Employee Lockers/Lounge	5,840	7,130
Storage	4,279	5,301
TOTAL SQUARE FEET	89,849	111,321

Source: SE Group

TABLE A-6. Space Use Recommendations—Existing Conditions—Peak 6 On Mountain

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	0	0
Public Lockers	0	0
Rentals/Repair	0	0
Retail Sales	0	0
Bar/lounge	0	0
Adult Ski School	0	0
Kid's Ski School	0	0
Restaurant Seating	1,430	1,750
Kitchen/Scramble	430	520
Rest rooms	272	333
Ski Patrol	25	31
Administration	0	0
Employee Lockers/Lounge	0	0
Storage	108	132
TOTAL SQUARE FEET	2,265	2,766

Source: SE Group

TABLE A-7. Space Use Recommendations—Existing Conditions—Peak 7 On Mountain

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	0	0
Public Lockers	0	0
Rentals/Repair	0	0
Retail Sales	0	0
Bar/lounge	0	0
Adult Ski School	0	0
Kid’s Ski School	0	0
Restaurant Seating	10,420	12,730
Kitchen/Scramble	3,130	3,820
Rest rooms	272	333
Ski Patrol	182	259
Administration	0	0
Employee Lockers/Lounge	0	0
Storage	700	857
TOTAL SQUARE FEET	14,704	17,999

Source: SE Group

TABLE A-8. Space Use Recommendations—Existing Conditions—Peak 8 On Mountain

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	0	0
Public Lockers	0	0
Rentals/Repair	0	0
Retail Sales	0	0
Bar/lounge	0	0
Adult Ski School	0	0
Kid’s Ski School	0	0
Restaurant Seating	12,100	14,790
Kitchen/Scramble	3,630	4,440
Rest rooms	2,448	2,997
Ski Patrol	1,908	2,331
Administration	0	0
Employee Lockers/Lounge	0	0
Storage	1,004	1,228
TOTAL SQUARE FEET	21,090	25,786

Source: SE Group

APPENDIX A. ADDITIONAL TABLES

TABLE A-9. Space Use Recommendations—Existing Conditions—Peak 9 On Mountain

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	0	0
Public Lockers	0	0
Rentals/Repair	0	0
Retail Sales	0	0
Bar/lounge	0	0
Adult Ski School	0	0
Kid’s Ski School	0	0
Restaurant Seating	6,990	8,550
Kitchen/Scramble	2,100	2,560
Rest rooms	1,570	1,920
Ski Patrol	1,220	1,500
Administration	0	0
Employee Lockers/Lounge	0	0
Storage	594	727
TOTAL SQUARE FEET	12,474	15,257

Source: SE Group

TABLE A-10. Space Use Recommendations—Existing Conditions—Peak 10 On Mountain

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	0	0
Public Lockers	0	0
Rentals/Repair	0	0
Retail Sales	0	0
Bar/lounge	0	0
Adult Ski School	0	0
Kid’s Ski School	0	0
Restaurant Seating	13,230	16,170
Kitchen/Scramble	3,970	4,850
Rest rooms	2,980	3,640
Ski Patrol	2,320	2,830
Administration	0	0
Employee Lockers/Lounge	0	0
Storage	1,125	1,375
TOTAL SQUARE FEET	23,625	28,865

Source: SE Group

**TABLE A-11. Space Use Recommendations—
Upgrade —Peak 7 Base**

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	520	640
Public Lockers	1,370	1,680
Rentals/Repair	1,580	1,780
Retail Sales	500	610
Bar/lounge	120	150
Adult Ski School	0	0
Kid’s Ski School	0	0
Restaurant Seating	5,470	6,680
Kitchen/Scramble	1,640	2,000
Rest rooms	1,230	1,500
Ski Patrol	960	1,170
Administration	8,790	10,750
Employee Lockers/Lounge	5,450	6,660
Storage	1,380	1,679
TOTAL SQUARE FEET	28,980	35,249

Source: SE Group

**TABLE A-12. Space Use Recommendations—
Upgrade —Peak 8 Base**

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	1,760	2,150
Public Lockers	4,640	5,670
Rentals/Repair	5,260	7,010
Retail Sales	1,680	2,050
Bar/lounge	420	510
Adult Ski School	3,630	4,440
Kid’s Ski School	23,260	28,430
Restaurant Seating	11,820	14,450
Kitchen/Scramble	3,550	4,330
Rest rooms	2,660	3,250
Ski Patrol	2,070	2,530
Administration	8,400	10,260
Employee Lockers/Lounge	5,200	6,360
Storage	3,718	4,572
TOTAL SQUARE FEET	78,068	96,012

Source: SE Group

APPENDIX A. ADDITIONAL TABLES

**TABLE A-13. Space Use Recommendations—
Upgrade —Peak 9 Base**

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	1,720	2,100
Public Lockers	4,530	5,540
Rentals/Repair	13,010	17,350
Retail Sales	1,640	2,010
Bar/lounge	410	500
Adult Ski School	9,090	11,100
Kid's Ski School	29,070	35,530
Restaurant Seating	10,700	13,080
Kitchen/Scramble	3,210	3,920
Rest rooms	2,410	2,940
Ski Patrol	1,870	2,290
Administration	10,680	13,060
Employee Lockers/Lounge	6,620	8,100
Storage	4,748	5,876
TOTAL SQUARE FEET	99,708	123,396

Source: SE Group

**TABLE A-14. Space Use Recommendations—
Upgrade —Peak 6 On Mountain**

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	0	0
Public Lockers	0	0
Rentals/Repair	0	0
Retail Sales	0	0
Bar/lounge	0	0
Adult Ski School	0	0
Kid's Ski School	0	0
Restaurant Seating	1,430	1,750
Kitchen/Scramble	430	520
Rest rooms	32	39
Ski Patrol	25	31
Administration	0	0
Employee Lockers/Lounge	0	0
Storage	96	117
TOTAL SQUARE FEET	2,013	2,457

Source: SE Group

**TABLE A-15. Space Use Recommendations—
Upgrade —Peak 7 On Mountain**

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	0	0
Public Lockers	0	0
Rentals/Repair	0	0
Retail Sales	0	0
Bar/lounge	0	0
Adult Ski School	0	0
Kid’s Ski School	0	0
Restaurant Seating	10,420	12,730
Kitchen/Scramble	3,130	3,820
Rest rooms	317	388
Ski Patrol	247	302
Administration	0	0
Employee Lockers/Lounge	0	0
Storage	706	862
TOTAL SQUARE FEET	14,820	18,102

Source: SE Group

**TABLE A-16. Space Use Recommendations—
Upgrade —Peak 8 On Mountain**

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	0	0
Public Lockers	0	0
Rentals/Repair	0	0
Retail Sales	0	0
Bar/lounge	0	0
Adult Ski School	1,360	1,670
Kid’s Ski School	5,810	7,110
Restaurant Seating	14,100	17,240
Kitchen/Scramble	4,230	5,170
Rest rooms	2,853	3,492
Ski Patrol	2,223	2,718
Administration	380	470
Employee Lockers/Lounge	240	290
Storage	1,560	1,908
TOTAL SQUARE FEET	32,756	40,068

Source: SE Group

APPENDIX A. ADDITIONAL TABLES

**TABLE A-17. Space Use Recommendations—
Upgrade—Peak 9 On Mountain**

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	0	0
Public Lockers	0	0
Rentals/Repair	0	0
Retail Sales	0	0
Bar/lounge	0	0
Adult Ski School	0	0
Kid’s Ski School	5,810	7,110
Restaurant Seating	8,180	10,000
Kitchen/Scramble	2,450	3,000
Rest rooms	1,840	2,250
Ski Patrol	1,430	1,750
Administration	950	1,170
Employee Lockers/Lounge	590	720
Storage	1,063	1,300
TOTAL SQUARE FEET	22,313	27,300

Source: SE Group

**TABLE A-18. Space Use Recommendations—
Upgrade—Peak 10 On Mountain**

SERVICE FUNCTION	RECOMMENDED RANGE	
	LOW	HIGH
Ticket Sales/Guest Services	0	0
Public Lockers	0	0
Rentals/Repair	0	0
Retail Sales	0	0
Bar/lounge	0	0
Adult Ski School	0	0
Kid’s Ski School	0	0
Restaurant Seating	14,190	17,350
Kitchen/Scramble	4,260	5,200
Rest rooms	3,190	3,900
Ski Patrol	2,480	3,040
Administration	950	1,170
Employee Lockers/Lounge	590	720
Storage	1,283	1,569
TOTAL SQUARE FEET	26,943	32,949

Source: SE Group