Chapter 9

Financial Analysis

The forecasted operating revenues and operating costs in Chapter 8 are based on a new, start-up operation and have a high degree of uncertainty relating to actual costs, timing, and skier use.

This report section provides two types of financial analysis to help resolve some of this uncertainty; breakeven and sensitivity analyses are presented.

The first technique, breakeven analysis, is used to determine when total revenues equal total costs (within a given year) and what income might be expected after the breakeven point is reached.

The second technique, sensitivity analysis, is used to estimate how projections will change with different assumptions about revenues and costs such as greater (or smaller) dollar sales, less costs, more fixed costs, etc.

Breakeven Analysis

Break-even analysis is a financial technique used for studying and evaluating the relationships among fixed costs, variable costs, pricing and skier visits. Until the break-even point is reached, where total cost equals total revenue, the ski area operates at a loss. Above the break-even point, each additional skier visit adds to operating income.

For this analysis, the break-even is defined on a cash basis, since decisions about capital costs and financing are pending. The break-even is defined as the number of skier visits required to meet annual cash operating expenses, given fixed costs (e.g., lift equipment, management, general and administrative costs, property maintenance, etc.) for the proposed operation and variable costs (direct labor, a portion of materials, lift electricity, etc.) for actual skiing.

The following variables are part of breakeven calculations.

Sales Revenues

For Hatcher Pass, the weighted average ski lift ticket priced is used as the key revenue factor. The technique to generate a revenue yield per ticket is drawn from the National Ski Areas Association *"2006/07 Economic Analysis"* and other ski areas that provided information. Essentially, all revenues for a season are divided by the number of adult tickets sold to generate an average revenue yield per ticket. The revenue will be less than the average price per ticket, as not all tickets are used.

Fixed Costs

Fixed costs are those that remain constant over a full period, usually a year. Typical fixed costs are insurance, rent, debt service, general and administrative staff costs, and others. Fixed expenses include those which are committed regardless of the number of days the area operates, or the number of skier visits recorded.

Variable Costs

Variable expenses are tied directly to sales (i.e., skier revenue). Variable expenses include liability insurance, sales taxes, and fees, certain types of direct labor (i.e., lift employees), direct materials (i.e. grease for lift cables) and overhead (i.e., time spent directly on skier-related activities.

Break-Even

The formula used to calculate breakeven is shown below.

$$Breakeven = \frac{FixedCosts}{SellingValue - VariableCosts}$$

Cash Operating Break- Even

Results from this formula are shown in the table below; source data were based on the numbers previously discussed in Chapter 8. No depreciation or debt service estimates were included in this table.

Cash Operation Break-Even Data

Category	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Fixed Costs	$1,775,400	$1,838,087	$1,902,936	$1,970,023	$2,039,422	$2,100,605	$2,163,623	$2,228,531	$2,295,387
Rev per skier day	$31.84	$32.21	$32.60	$33.56	$33.97	$34.89	$35.35	$35.81	$36.76
Variable Costs	$1,284,200	$1,367,995	$1,455,661	$1,547,356	$1,643,243	$1,692,540	$1,743,316	$1,795,616	$1,849,484
VC/skier day	$12.59	$12.62	$12.69	$12.77	$12.89	$13.27	$13.67	$14.08	$14.51
B/E: skier days	92,251	93,821	95,534	94,802	96,743	97,202	99,794	102,588	103,133
B/E: Revenue	$2,936,862	$3,022,365	$3,114,832	$3,181,112	$3,286,257	$3,390,949	$3,528,109	$3,673,307	$3,791,416

Source: Northern Economics Inc., RWS Consulting

As shown, the number of breakeven skier days is approximately 92,300 to 103,100 days per season for Year 1 to Year 9. For the same period, breakeven revenue ranges from $2.9 million to $3.8 million. Results appear obtainable, given market projections for skiers in the Hatcher Pass use area.

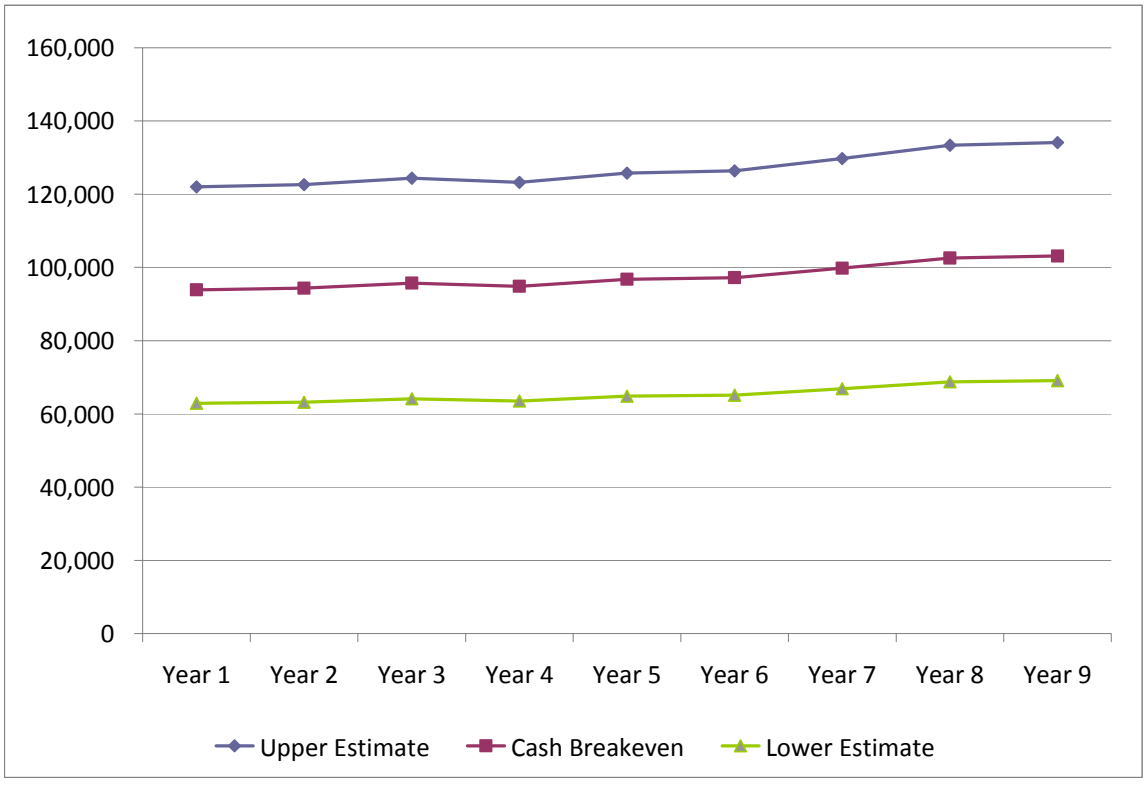
Sensitivity Analysis

The key variable for Hatcher Pass development is the number of skiers within the current market area. Will they drive to the proposed ski area for day use? The following graph illustrates a likely upper bound of skiers who would use the area over a season.

The middle line shows the number of skiers needed to reach Cash Operating Breakeven over the time from Year 1 to Year 9. The projected number appears achievable and well within the upper and lower bounds shown, based on a plus or minus 30 percent variation in actual skiers. The lower bound is an estimate of how many skiers might use the area under less than optimal conditions; it is subjective, and not likely but illustrates what might happen if snow conditions are poor (even with snow making equipment), if less than the full development is constructed, or a competitor appears in an adjacent area.

The area's strong demographics (i.e., age structure, younger families, education, and high disposable income), coupled with the state's highest population growth, and a greater-than-average snow season could easily result in a very high demand by skiers (and boarders). The revised concept presented in this analysis was designed to emphasize the area's strengths while reducing both capital and operating costs.

Sensitivity Analysis, Number of Skier Days, Cash Break-Even Analysis



Source: Northern Economics, Inc.