

## **Attachment #1**

### **City of Steamboat Springs Howelsen Hill Tubing Project Feasibility Study and Pro forma Financial Model**

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#### **Executive Summary**

The City of Steamboat Springs is considering the installation of a new snow tubing facility at Howelsen Hill as a way to generate significant potential revenue to help offset budget deficits. Because of the City's existing operational capacity at Howelsen Hill, the added workload from a new tubing operation should be easily absorbed and the maintenance required is nothing out of the ordinary for well-practiced employees.

Three alternative financial scenarios were developed to help City decision makers understand the range of outcomes from the project. The net operating income expected under Low, Medium and High Scenarios would be \$91,595, \$227,231 and \$403,069, respectively. While the scenario projections fall short of offering reliable predictions about the future, there are reasons to be optimistic about the project's potential because of the growing popularity of snow tubing, the project's convenient location to downtown and because tubing would appeal strongly to the type of visitors that come to Steamboat Springs.

Overall, the tubing project suggested by City staff appears to be a sound strategy for significantly reducing Howelsen Hill's operational budget deficit. This project may present one of the best opportunities to generate significant new revenue at Howelsen Hill, which could help support the City's vision of continuing to improve and operate Howelsen Hill as a public resource that contributes importantly to Steamboat Springs' unique identity.

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## **1. Project Background**

The City of Steamboat Springs, through the Parks and Recreation Department, is interested in the possibility of bringing snow tubing back to Howelsen Hill as a way to help offset the facility's operational budget deficit. Tubing operations have demonstrated strong revenue generation potential at locations around Colorado and the country.

A tubing operation was previously active at Howelsen Hill during the winter seasons from 2012-2015, though it was run by a concessionaire, so the City did not retain any income. The operation was shut down when it was determined that the space on the hill was needed for other higher-priority activities.

Since that time, community interest in Howelsen Hill has grown and Ski Free Sundays have increased Howelsen's user numbers and community profile. These developments have helped to demonstrate Howelsen's high community value and have galvanized the City's goal of running Howelsen Hill as a low-cost or free community resource. Accordingly, the City is interested in reducing the current deficit in whatever way possible and a new tubing operation presents an attractive option to cut a significant portion of that deficit with a single project.

## **2. Project Approach**

The consultant was hired to develop a business plan and conceptual designs for a Howelsen Hill tubing operation in order to better understand the financial opportunity, management requirements and physical footprint of such a project. To research the tubing industry and assess local opportunities in snow tubing, the consultant:

1. Participated in a site visit with City Staff to view potential tubing lane alignments on Mile Run.
2. Conducted interviews with other tubing hill operators. Calls were made to The Frisco Adventure Park, McCall Idaho/Brundage, Winter Park Coca-Cola Tubing, Fraser Colorado Adventure Park Tubing, Snomass Tubing, and Copper Mountain Tubing. Consultant only had discussions with operators at Fraser and Copper Mountain because of difficulties getting in touch with others, however both operators provided information about other tubing hills as well.
3. Conducted interviews with equipment vendors. Discussed the project and the snow tubing business with representatives from Magic Carpet Lifts, TubePro and Tube Shaper.
4. Attended site visit at Saddleback Ranch YeeHaw Tubing Hill with City Staff.
5. Studied financial results from previous Howelsen Hill Tubing operation.
6. Conducted supporting research online.

Findings from this research were combined with City data and staff judgment to create the assumptions used in the financial plan, as detailed below. The plan was developed to help City decision makers understand the opportunity in a new tubing operation through a scenario-based analysis.

### **3. Findings on the Tubing Industry**

#### **Business and Demand:**

Overall, tubing operations seem to be doing very well. Copper Mountain tubing just recorded its most profitable holiday season ever, while Fraser Colorado Adventure Park Tubing has seen their business grow at 15% year over year for the last decade. The growth Fraser has seen is especially encouraging because there are 3 competing tubing operations in Grand County and all are running profitably. The tubing business parallels the amount of visitors to a given resort, as would be expected. The type of guest also seems to matter a lot: vacation-oriented travelers patronize tubing hills more than “destination skiers.”

Multiple tubing operations said they expect half of their total revenue to come during the two weeks of the holiday season. The business has two high periods, during the Christmas-New Year’s holiday and again during spring break, with a slower period in-between punctuated by busy holiday weekends on Valentine’s Day, MLK and President’s Day. Hill capacity is the main limitation and determines potential revenue during these busy periods.

During the staff site visit to Saddleback Ranch, we counted approximately 40 tubers late in the morning on Monday February 10<sup>th</sup>. The owner told us that he expected a bus with 40 additional guests to arrive mid-afternoon, so we estimated that they probably had at least 100 total tubers for the day, at a time that falls during “low season.” There were 4 lanes, which easily supported the number of tubers with no backups at the top. The carrot lift was running at full capacity and small lines did form near the base. The lift operator told us that they have 135 tubes and have times during the high season when all of them are in use.

#### **Logistics and Management:**

Depending on the design of the hill, total tuber capacity is between 20-30 tubers/hour/lane. These limits are instituted primarily to limit line length and ensure a positive customer experience. Hills with long run-outs are better for supporting higher capacity, because the time it takes tubers to walk back to the bottom of the lift works to spread everyone out. During busy periods, additional staff helping check tubes out at the bottom and getting guests oriented properly at the top can help move larger crowds more efficiently. Copper Mountain books up to 30 guests per lane per hour (for a total of 120 across their four lanes) and due to the lines that form during the busy periods, the total number of rides guests can take fluctuates from 6 on a slow day down to 3 on

the busiest days. At Frisco, they have 7 lanes but only take up to 100 people per hour. Fraser can accommodate up to 300 tubers per hour because they don't use lanes, but rather have a large open slope. All of these areas are served by a single Magic Carpet lift.

The busiest hours are from around 11am till dark, or 4-5pm. Google's data for popular times by hour at both Fraser and Frisco suggest that worthwhile volume starts by 10am, and then tapers off considerably after 7pm.

Most tubing hills sell tickets for 1-hour tubing sessions, though some will offer options for two hours as well. At Copper Mountain, the hill is emptied from the previous session before the next session opens. At the end of the hour, a fence is raised at the entrance to the lift so that people have to exit. Another strategy used at Fraser and Frisco is to issue different-colored or conspicuously-time-stamped tickets so that lift operators can see when guests' sessions started and know to dismiss tubers whose time is up. These strategies avoid having downtime in between sessions for group turnover.

Ryan Spiess, the supervisor for Copper Mountain's tubing hill, suggested that convenient parking is important for a successful operation: if people have to walk too far, they will miss the start of their tubing session and leave dissatisfied. As with any modern business, happy customers and the resulting positive online reviews are critical for building the business over time.

Benji, the manager of the Fraser tubing hill, suggested including a mix of terrain in order to attract different demographics. He sees families that come looking for easy/safe rides and teens/ young adults etc. who want steeps, turns, rollers etc. He also noted the importance of advertising and said that they budget "quite a bit" for getting the word out.

### **Maintenance:**

Most tubing operators build their lanes at the beginning of the season with man-made snow and then maintain them almost daily. The biggest maintenance issue is that the lanes get continually faster as more people tube on them- the tubes polish the snow into ice and people can reach speeds over 40mph. Some people say that it's worth grooming every day to keep the speed slower, while others say it's not worth it- that after the first 5 rides the speed will be right back up where it was. The manufacturer of the TubeShaper drag, who is in charge of maintenance at a Midwestern tubing operation, said that they don't groom daily and only rebuild their lanes once every two weeks or so. He said it takes 2 hours to rebuild 14 lanes that are 900' long. (There are other speed-control options to explore if speed turns out to be an issue including textured tubes and friction mats.)

**Tubes:**

According to Benji at Fraser, “everyone uses Tubepro.” That is certainly true of the tubing operations interviewed for this study and at Saddleback Ranch as well. Tubepro recommends hard bottom tubes for greater durability and speed control, and estimated that at an average operation they should last 6-10 seasons before they need replacing. Some tubing hills use dirt or hay to slow tubes down at the bottom of the run, which increases wear and shortens their useful lifetimes. The tubes are also modular in design so that the shell, cover or inner tube can be replaced independently as necessary.

**Lift:**

Magic Carpet lifts are more expensive than carrot lifts, but have several advantages. They have a higher uphill capacity and are safer to use. Carrot lifts also need an extra employee looping the tube rope over the carrot, and a track must be maintained at the right height for the tubes to ride in. Dave Kelly from Magic Carpet lifts said that the additional capacity would really become useful at 6 or more tubing lanes. He also mentioned that while the polycarbonate shells cost more than the lifts themselves, everyone who gets them loves them. On a 400’ lift, it could save up to eight hours of shoveling on heavy snow days and increases guest comfort.

Magic Carpet lifts need a concrete foundation at the top, but the rest of the lift can sit on pressure-treated timbers. Dave estimated that an average lift installation would take 3 days, and that ski hill staff should be able to do most of the work themselves with a rented mini-excavator. He said that he’s seen that hiring outside companies to complete the installation costs approximately \$6k/day.

**4. Tubing Concept for Howelsen Hill**

City staff has identified a possible tubing site on the last pitch of Mile Run at Howelsen Hill. The concept would be to route skiers off of Mile Run to skier’s right just past the Soda Spring so that the run would finish through where the terrain park used to be. A new Magic Carpet lift would be installed on the North edge of Mile run to take tubers up approximately 80 vertical feet to the flat section just downhill from the Soda Spring.

Mile Run is approximately 45 feet wide through its last pitch. The Magic Carpet lift is 6 feet wide, leaving 39 feet for tubing lanes. The TubeShaper creates lanes that are 6.5’ wide center-of-berm to center-of-berm, which would allow 4 or 5 lanes to fit comfortably with a buffer of either 13 or 6.5 feet, respectively, between the edge of the closest lane and the lift. After a ride approximately 400’ long, another 200’ run-out could be routed either straight East across the end of the jump outrun or turned slightly North to follow World Cup Road toward the gazebo and parking lot. Either option would require consideration for how other users, especially Nordic skiers, would be able to comfortably pass the new tubing lanes.

For the Phase 1 of the project, no new guest service facilities are proposed. It would be highly desirable to direct tubing guests to park near the skate park and use World Cup Road to directly access the tubing facilities and the bottom of the Magic Carpet. Guests who either prepaid online or by credit card could be handled by a mobile employee with an iPad and a credit card reader. On slow days, that same employee could check tubes out from a shipping container where they would be stored. For concessions, bathrooms and other needs, guests would be directed to the lodge.

Future phases of the project might include additional tubing lanes and more amenities to serve guests. Two 'expert level' tubing runs could be routed North from the top of the lift, making banked turns to the right following existing dirt roads back toward the bottom of the lift. There is also a possibility for two additional straight tubing lanes running down the northern edge of the former terrain park.

If the tubing operation is successful and large new crowds are to come to Howelsen Hill for tubing alone, it may make sense to formalize a dedicated tubing entrance where World Cup Road meets the parking lot. Other improvements would include repurposing the 10<sup>th</sup> Inning concession stand to sell tickets, food and souvenirs, rent winter clothes, helmets and other gear and provide additional bathrooms. At the Fraser tubing hill, Benji noted that revenue generated from these offerings was significant and recommended that any new operation should explore adding them.

The consultant developed two alternate cost projections for the project. The main cost for the project is the purchase and installation of a new Magic Carpet lift. Other important costs are the tubes themselves and the TubeShaper drag for creating lanes. The lower-cost alternate is \$294,707.60, while the higher cost alternate is \$435,440.10. The main difference between these numbers comes from the inclusion of a polycarbonate shell in the higher price. The shell costs \$162,900, which is more than the price of the lift itself. The high price may be justified by increased guest comfort and less lift maintenance and labor to clear snow during the season. The City could also choose the lower cost alternate and wait for operational cost data to come in to decide whether the additional investment was worth it.

## **5. Financial Projections:**

### **Scenario Development:**

Financial projections were prepared for the Phase 1 concept discussed above under three scenarios: low, medium and high revenue. To develop these scenarios, the consultant considered other tubing operations' comments and results and Howelsen Hill Tubing's historic experience. These insights were then discussed with City staff to develop three plausible scenarios for use in understanding the potential range of outcomes from a new tubing operation.

The first major assumption made was how many days would constitute peak vs. off-peak tubing days. After adding together holidays and long-weekends, 30 days were classified as peak and 90 days as off-peak, for total season length of 120 days, from approximately December 20<sup>th</sup> to March 20<sup>th</sup>. (Please see Assumptions section below for a more detailed discussion of how these assumptions were made.)

The scenarios vary by how busy the tubing operation would be during these two periods:

% Capacity Utilization

	Low Scenario	Middle Scenario	High Scenario
Peak Tubing Days	20%	30%	40%
Off-Peak Tubing Days	7%	10%	15%

These percentages correspond to the percent of total capacity being used on a given day. For example: Assuming that each tubing lane could handle 25 tubers/hour, a 4-lane operation would have a total capacity of 100 guests per hour. 20% utilization would mean that on average, only 20 tubers per hour visited the hill during that period.

While other tubing operations have reported operating near 100% capacity during peak periods, the consultant and staff felt that it would be better to focus on more conservative scenarios, given the risks associated with a new and untested operation and the poorer historical results from the Howelsen Hill tubing operation, Tubing Steamboat. For the three years Tubing Steamboat was in operation, 2012-2015, revenues were: \$70,664, \$129,568 and \$99,510 respectively. The consultant did not find these results indicative of the future potential of tubing at Howelsen Hill for several reasons: The operation did not open until 4:30pm every day, thereby missing the most important revenue-generating business hours. Tubing Steamboat only had two lanes, which limited hourly capacity. The design of the hill was such that there was no run-out and corresponding walk back to the lift, which also worked to limit capacity. Finally, from looking at archives of the Tubing Steamboat website, it appears that branding, marketing and business operations may have lacked sophistication that would have helped to drive better financial results.

After considering all available information, the scenarios chosen represent an effort to present a balanced range of potential outcomes for the project. It is also important to note that these scenarios focus largely on first-year results from a Phase 1 tubing project. By continually adjusting management and marketing for the project year over year, strong growth in financial results should be achievable. Also, adding new tubing lanes and additional amenities in later phases would broaden the appeal of the activity and help capture business from different demographic groups.

### **Scenario Projections:**

The gross revenue projections for the three scenarios are as follows:

- Low: \$299,997
- Medium: \$439,020
- High: \$621,945

Because many of the costs associated with running the operation would be fixed, projected costs only vary from \$206,403 to \$218,876 from the low to high scenarios. Because of the higher operational efficiencies achieved under higher-revenue scenarios, the jump in net income is significant. Project net income under the three scenarios is:

- Low: \$91,595
- Medium: \$227,231
- High: \$403,069

Depending on the cost alternate chosen and the scenario outcome, there is potential for the project to more than pay for itself in the first year. Combining the high cost alternate with a low scenario projection would result in an expected 24.6% return on cost.

### **6. Recommendations:**

While sound planning, management and operation would certainly be necessary for success in this project, a new tubing operation at Howelsen Hill presents an opportunity for significant potential revenue generation. Because of the City's existing operational capacity at Howelsen Hill, the added workload from a new tubing operation should be easily absorbed and the maintenance required is nothing out of the ordinary for well-practiced employees.

The project would provide additional benefits to the City beyond the income listed under the scenarios above. Notably, the project would pay for 75% of the yearly, fully-allocated salary of a full-time crew leader. Even after accounting for temporary crew leader costs for days when the primary crew leader was off, there would still be over \$15,000 extra contributed toward the position's salary. The financial model also budgets for a concession worker at 50% time that the City does not fund currently, and who may help increase concession-related revenue back to the City. The tubing operation would also contribute toward other operational costs at Howelsen Hill such as grooming, snowmaking, electricity etc. in a way that would help spread the fixed cost of those services over a larger use base.

While the scenario projections fall short of offering reliable predictions about the future, there are reasons to be optimistic about the potential of the project. Steamboat Springs attracts the right type of tourist for an activity like tubing- people come to stay for extended periods and seek out diverse activities to fill their time. Tubing would also serve the family demographic that dominates our visitor numbers, while the addition of additional terrain in the future could appeal to the clientele who visit Steamboat for concerts and spring break. Howelsen Hill's convenient location to downtown Steamboat Springs would also work in the project's favor, because guests could simply walk over for a ride between shopping and eating, while other competitor operations must bus people out of town.

Overall, the tubing project suggested by City staff appears to be a sound strategy for significantly reducing Howelsen Hill's operational budget deficit. The consultant suggests the City consider carefully before letting an outside concessionaire come in to cooperate a new tubing hill. This project may present one of the best and only opportunities to generate significant new revenue at Howelsen Hill, which could help support the City's vision of continuing to improve and operate Howelsen Hill as a public resource that contributes importantly to Steamboat Springs' unique identity.

## **7. Financial Model Assumptions:**

Assumptions made in the attached financial model are highlighted in **BLUE** and can be changed/updated as necessary. Please note there are a few cases where the blue cells include a formula, such as when multiplying base salaries by the full-allocation multiplier.

### **Revenue Assumptions:**

#### **Hill Capacity:**

- Assumed 4 tubing lanes for phase 1. Based on 45 feet of width on Mile Run, 4 lanes would fit using a TubeShaper while still leaving room for a buffer between tubers and the lift. The lanes would be approximately 400 feet long on the pitch with a 200-300 foot long run-out at the end. The run-out is an important inclusion because it introduces a time lag while tubers walk back to the base of the lift and increases overall capacity.
- Tubers per lane per hour assumed at 25, to split the difference between the 20 and 30 numbers heard from other operations.
- Operating days in Season assumed at 120, from approximately December 20<sup>th</sup> to March 20<sup>th</sup>.
- Operating hours assumed at 9, from 10am to 7pm.

#### **Pricing:**

- Average ticket price assumed at \$25. Other hills charge different prices for different days or for different ages. This figure is meant to be an average over the course of the season.
- Yearly revenue growth is estimated somewhat conservatively at 5%, which is a combination of price inflation and growing user numbers.

**Peak/ Off Peak Periods:**

- Peak Days were estimated by adding 14 days during the Christmas/ New Year's holiday, two 3-day weekends, and 10 days at Spring Break for 30 total peak days. Considering a 120 day season, this results in 90 Off-Peak days.

**Use Scenarios**

- Three revenue scenarios were developed by adjusting the forecasted utilization of total hill capacity during Peak and Off-Peak Periods, as discussed in more detail above.

**Concessions:**

- Because phase 1 of the proposed project anticipates using the existing concession stand in the Howelsen Lodge for all concession sales, the financial results from the tubing concessionaire from 2012-2015 were used as a guide. Dividing the total concession sales during the period by the total revenue generated from all ticket sales at Howelsen Hill showed that concession sales represented 8.4% of revenue. For the purposes of general estimation for this financial model, projected tubing ticket sales were multiplied by the same percentage to arrive at an estimate for increased concession sales.

**Expense Assumptions:**

**Equipment:**

- Assumes purchasing 110 TubePro tubes to have 10 extras in reserve. Alternate pricing includes silk-screening service for Howelsen Hill Logo.
- Magic Carpet lift pricing included as per quote to City on April 21st, 2020.
- Staff requested that pricing for siding for the shipping container storage room be included. Fiber cement lap siding costs approximately \$1.20/ft. Shipping costs were quoted on www.lowes.com to Steamboat Springs at \$250. At 8' wide, 8.5' tall and 40' long, the exterior surface area of a shipping container is 816 sq feet. The total materials cost to side the container would be  $1.2 * 816 + 250 = \$1,229.20$ . Finally, an allowance of 2x this material cost was assumed for additional installation hardware, finishing details at roofline and ground and labor, bringing the total cost to \$3,687.60. Doubling the shipping containers does not double siding costs as they will be placed together.

**Construction Costs:**

- Construction cost estimates were informed by a conversation with Dave Kelly of Magic Carpet Lifts. Dave said that the only concrete necessary is for a small foundation at the top of the lift and that the rest of the carpet can be floated on pressure-treated beams that are anchored to the slope. He sent a series of

photographs of a similar lift being installed in this way at Monarch, which are included with the electronic documentation for this project.

- The concrete cost for the upper foundation is an allowance.
- The \$6k/ day cost for professional installation is the number that Dave Kelly suggested should be carried.
- The pro-forma also assumes that modest additional work would be necessary to transport the lift components up the hill and to prepare the site for construction. No major grading or topographic changes are considered.

**Soft Costs:**

- Assumed that some modest amount of engineering will be necessary to ensure proper installation of lift and extension of electrical lines.
- The allowances for permits and fees and contingency are meant to cover minor unforeseen associated costs.

**Employees:**

- Assumed City overhead rate for full cost allocation on all employees at 15%.
- Crew Leader expense allocated to tubing at 75% of \$76,546 annual rate, for \$57,408 total. The actual crew leader time spent will be much less because tubing operation is only open 120 days, plus maybe two weeks for setup/teardown/planning. The over-allocation was left to more-than-cover the expense of having a secondary seasonal crew leader on staff for days that primary crew leader is off.
- All other staff (lift operators, guest services, concession etc.) were expensed at an average 2<sup>nd</sup>-year rate for Lift Operators from the City's 2020 pay plan. All employees were expensed for 10 hours per day, to allow for one hour per day outside of open hours for open/close operations.
- The concession worker expense was allocated at 50% to tubing project.

**Howelsen Hill Services:**

- Assumed 9 days of snowmaking for 9 hours each, based on 2014/2015 City invoice to tubing concessionaire.
- Used electricity and lighting cost/hr from 2014/2015 invoice. Assumed flat cost for all open hours, even though lighting will only be necessary for last few hours each day. This over-estimate should bring numbers in line with inflation to current rates and account for any extra lift/lighting needs outside of open hours.
- Assumed 1 hour average grooming need per day through tubing season. With new TubeShaper tool, actual usage could be significantly less.

**Maintenance:**

- Lift maintenance is an allowance.
- Tube replacement assumes a 5-year lifespan for tubes. Manufacturer said they should last significantly longer than that.
- Other- extra small budget for unforeseen expenses.

**General:**

- Insurance: Assumes current HH insurance would increase by 20%, from \$40k currently to \$48k total.

- Advertising: Assumes City would want to spend generously for advertising to improve user numbers and increase chances of experiencing higher scenario outcome. According to the Steamboat Pilot's 2020 Advertising rate sheet, ¼ page ads placed twice per week with premium placement throughout the operational season would cost approximately \$10,400. The remaining budget would cover locally distributed flyers, online ads, social media targeting, local advertising partnerships etc.
- Administrative Overhead: Assumes tubing would add 5% to existing overhead of \$168,000.
- Season Open/Close- Small number for a couple days of cleaning, testing, etc.
- Concessions cost of goods- estimated in simple terms at 50%.

**Expense Increase:**

- Estimated at 3% per year from a combination of inflation and wage growth.