New Downhill Ski Lodge Scenario Analysis for the General Plan Committee
*Prepared by Members of the Tahoe Donner Association Finance Committee – Revised April 19, 2019*

Financial Observations On The New Downhill Ski Lodge Sizing Exercise:

The General Plan Committee ("GPC") of the Tahoe Donner Association ("TDA") has asked for assistance in evaluating sizing options for the proposed replacement of the current 40+ year old downhill ski lodge facility. It is generally agreed that the current facility is near the end of its useful life, has multiple ADA compliance issues, and is no longer fit for purpose from both an operational and quality of member and guest experience standpoint.

- We prepared a simplified financial model to help identify issues and opportunities with sizing of the proposed new Downhill Ski Lodge ("DSL"). The model was based upon an initial financial model prepared by members of the GPC that included certain key assumptions. These key assumptions include (i) the level of public, i.e., non-member or members' guest visitation, (ii) three "strawman" sizing alternatives for the new DSL: 17.2K sf., 21.0K sf., and 24.5K sf., and (iii) the maximum number of skiers during a peak day. Mike Salmon, TDA's Director of Finance and Accounting, provided valuable input in terms of operating costs and revenue yield information. The revised model is contained in a separate attachment to this note.

- Our goal was to determine the "lifecycle" cost to each Tahoe Donner Association homeowner/member ("Owner") of each of the three sizing alternatives presented. Lifecycle cost is represented as the present value ("PV") cost to each TDA Owner of funding via the Annual Assessment the (1) annual operating losses, if any, of the new DSL (as measured by Net Operating Revenue ("NOR"), plus (2) contributions to the Replacement Reserve Fund via an assumed depreciation expense, plus (3) the upfront construction cost on a per Owner basis. This information is contained in the last row of the attached model and is labeled *"PV- Total Owners' Investment to build and operate)"*.

- In summary, given the three sizing options presented by the GPC (17.2k sf., 21.0k sf. and 24.5k sf.), and all else equal, the larger building option results in a lower lifecycle cost to TDA Owners. Please note that this analysis does not include any attempt to quantify the benefits of improved member/guest experience nor the impact on home values from a superior amenity, etc. We also have made no attempt to model the impact of global warming on the financial results of the downhill ski operation.

- A table that summarizes the financial model impact to each Owner for the three DSL sizing alternatives presented to us by the GPC, along with information on one other scenario (to be discussed below), is shown on the following page:

Summary of Financial Modeling Results

| | ***Small*** | ***Medium*** | ***Large*** | ***Scenario 4*** |
|---|---|---|---|---|
| **DSL Size** | **17,167 sf.** | **21,000 sf.** | **24,500 sf.** | **21,000 sf.** |
| Total Skier Visits | 27,950 | 37,000 | 43,000 | 43,000 |
| Maximum Skiers for "Peak" Day | 845 | 1,100 | 1,300 | 1,100 |
| Public Participation | 0% | 23% | 35% | 23% |
| Annual NOR (a) | -$815,000 | -$141,900 | 294,100 | $293,100 |
| Annual Depreciation Expense (b) | $343,340 | $420,000 | $490,000 | $420,000 |
| Annual Cash Flow (a+b) | -$1,158,340 | -$561,900 | -$195,900 | -$126,900 |
| PV to Operate (30 yrs.@ 5%) (c) | -$17,806,524 | -$8,637,780 | -$3,011,463 | -$1,950,764 |
| PV to Operate/Owner (d) | -$2,750 | -$1,334 | -$465 | -$301 |
| Build Cost (est.) (e) | $10,300,200 | $12,600,000 | $14,700,000 | $12,600,000 |
| Build Cost (est.)/Owner (f) | $1,591 | $1,946 | $2,270 | $1,946 |
| PV To Build and Operate (c+e) | -$34,746,086 | -$25,019,403 | -$17,819,070 | -$14,550,764 |
| PV To Build and Operate/Owner (d+f) | -$4,341 | -$3,281 | -$2,2736 | -$2,247 |

- The correct way to interpret the table above and the attached model is that the size option demonstrating the lowest present value cost to build and operate is the preferred option for Owners, all else being equal. There are many, many other scenarios that could have been considered, for example, by tweaking some of the variables including total visitation, revenue yield, build size, etc. Frankly, there are too many other modeling scenarios to cover in this short paper. However, to try to normalize the comparison between two of the most likely build alternatives, we developed one additional scenario. Information on this option is contained in the column labeled "Scenario 4". This alternative is a combination of increased total skiers, similar to the "Large" alternative, with the build characteristics and public participation of the "Medium" option. It is marginally superior in terms of lifecycle cost as compared to the Large alternative.

- In particular, members of the GPC are interested in the benefit to each Owner (in terms of a lower overall cost) of permitting non-members (the "public") to use the new DSL. The scenario described in the column above labeled "Small" represents *zero* public patronage. The Medium and Large scenarios contain increasingly larger proportions of public patronage. As the overall cost to each member declines with greater public participation, it is clear that permitting public patronage is a net positive to TDA. This dynamic can best be described as "operating leverage", or the beneficial impact to TDA Owners from the additional contribution margin (incremental revenue less direct and indirect variable costs) from serving additional skiers who are presumably "full pay" public visitors. Operating leverage exists due to the high degree of fixed costs involved in operating a ski area. Every additional skier up to the point of a diminished user experience reduces the cost to all Owners.

- During an earlier meeting, certain members of the GPC correctly pointed out that the largest facility under consideration (24.5K sf. sf.) would provide only a very small reduction in the number of days during which peak user demand exceeded the design capacity limits of the new DSL. As a result, their initial thoughts were to recommend building the medium sized facility (21.0K sf.) rather than the larger facility. Their rationale for building smaller is that the additional upfront cost to build larger (circa $2.1MM, or the difference between $14.7 MM

and $12.6 MM for the 24.5K sf. and 21.0K sf. buildings, respectively) provides a negligible decrease in the number of days during which the design capacity was exceeded. Their analysis is factually correct. However, it ignores (i) the lifecycle cost of constructing and maintaining the building, (ii) the contribution to a better overall experience for Owners, their guests and the public in a functionally superior building, (iii) the financial opportunity to capture revenue from increased public patronage over time, and (iv) greater optionality to develop off-season revenue generating activities.

- Another way to think about greater potential public participation as a reason to build larger is as follows. The current 2019 forecast for TDA's downhill ski operation of approximately 43,000 visitors is roughly equivalent to assumed patronage of the 24.5K sf. building alternative. Using the March estimate of the 2019 DSL forecast financial results as a "base, or "standard" year, the contribution to Net Operating Revenue Before Overhead Allocation ("NORBO") from the forecasted 35% public patronage is approximately $270,900 (assumes the expected 25% NORBO margin vs. Revenue). The present value of this annual contribution by the public over 30 years, discounted at 5%, is approximately $4.16MM. This is a valuable contribution by the public to the cash flow stream available to service all DSL overhead and depreciation and to reduce Owners' lifecycle cost. It is also nearly 200% of the extra cost to build a 24.5K sf. facility vs. a 21.0K sf. facility (approximately $2.1MM).

- Based on our high level modeling of the three options presented by the GPC, our considered opinion is that constructing a larger facility will deliver better value to TDA Owners over the 30 year life of the project. A larger facility, one better able to cater to increased "full pay" skier visitation, captures more of the operating leverage typically available to owners of principally fixed-cost facilities. The overall experience for Owners, their guests and the public in a more spacious facility will be superior to that of a smaller facility. A larger facility also presents increased optionality for alternative uses during the off season (please note that we made no attempt to quantify the benefit of off-season activities).

- We have no doubt that there are numerous qualitative aspects of the sizing decision that the GPC will want to consider. As was mentioned in a previous meeting, the next step in the overall evaluation of the project should be for the downhill ski area management team to develop a comprehensive "needs" analysis by function. This needs analysis then can be integrated with the financial modeling to determine the best alternative to present to the TDA Board.

- Finally, a cautionary note on the Scenario 4 option discussed previously (i.e., more skiers in a smaller facility). While constructing a smaller facility will always be less expensive up front, and might allow for an accelerated build program, or free up Development Fund or Replacement Reserve Fund monies for other projects *sooner*, the longer term benefits of a larger facility need be considered in making that decision. The PV difference to Owners of circa $500 between the largest facility under consideration (24.5K sf.) and the Scenario 4 alternative, especially considering that this is a 30 year project, is not so compelling as to clearly steer the recommendation in that direction.

We appreciate the opportunity to contribute to such an important initiative for all Tahoe Donner Association Owners. We welcome your thoughts and comments.