**Sample Only**

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##### **Location and meaning of input parameters and input streams**

The worksheet containing all of the inputs and input parameters for this model allows users to input data for actual and/or projected transactions. To start, any single cell that is that has been highlighted in yellow, are parameters or streams of input that the user can change. Any of the streams of input or single cells representing an input parameter that is left in white, are to be left untouched. These cells have formulas producing a result that is useful downstream in the model. Because TheSurf is a Bed & Breakfast, there are a number of input parameters stated to inform the user of vital information under the section titled “Rooms and Room Rates.” These include parameters such as total number of rooms, guests per room, number of luxury rooms versus standard rooms, room rates, discount rates, and a few others.

The following section titled, “Projected Number of Rooms Occupied per Night” is essentially what is going to drive most numbers in the model. Each number represents what your projection is of the number of rooms that will be occupied on a nightly basis. It is important to have a good understanding of the Bed & Breakfast business in order to create projections that will produce revenues and incomes accurately reflecting the success of the business. The scale factors below, are there to help create mini scenarios where you are able to see what an X-percentage increase (or decrease) in your room rate, will do to revenues. This feeds into the RoomSales worksheet later.

The next section titled, “Capital” gives the user a look at mortgage terms, monthly cost of insurance, taxable income rate, and several input parameters for utilities. $4,800,000 of the $6M purchase price was leveraged with a fixed rate of 5.1% over the course of 30 months. Should the economy dip into another recession and interest decrease further, and the mortgage is refinanced, these numbers are able to changed. Based on ordinary business-as-usual historical figures, we have assigned a monthly average utility expense of $10,000. This, as it is in yellow, can be changed should market energy prices, etc. continue to rise. In order to project a more accurate expense of what the utility expense will be month-to-month three scale factors are used and applied according to the season. These Scales against the average monthly utilities can be found in the “RevenuesEarnings” worksheet in the expenses table.

The “Personnel” section simply provides a schedule of the number of paid staff on site. This is broken down by month to show the differences in the number of hires and cutbacks that are constantly made to accommodate for the highly cyclical nature of this particular Bed & Breakfast. The seasonal turnover rate helps determine the number of extra hires must be made when employees come and go. This is shown in the Personnel worksheet which will in turn give us the total number of employees each month.

The “Wages” section breaks down the hourly wage of each type of employee into four input parameters alongside the average number of hours each will work over the course of a month. These wages will help to determine the total average monthly and annual payroll which can be found in the personnel worksheet. It is also broken down by employee type per month in this tab.

The “Marketing” section breaks down the annual and monthly budget which is based on a percentage of revenues each month. Each month there is a percentage applied to the monthly budget for each of the five advertising mediums. These percentages, as highlighted in yellow, can be changed according to preference. A total percentage has been shown to help the user to use 100% of the allotted budget each month. This monthly marketing budget can be found under expenses in the “RevenuesEarnings” tab. This number ultimately drives the SG&A expense in the income statement.

The “Furniture and Equipment per Room” section details the items, the number of them, the cost, and its useful life in each of the bedrooms. These numbers drive the depreciation expense applied to each of the bedrooms. In the “Depreciation” worksheet, the depreciation base is derived from the cost and useful life input parameters which drives the total depreciation expense that is applied to the income statement.

The “Food” section encompasses several input parameters and two input streams in order to calculate the monthly food needs, minimal inventory, food cost when bought in bulk, price at what will be charged inside the room rates, possible revenue from food sales expense as well as possible revenue for TheSurf, based on occupancy. Each of these input parameters and input streams are used in the “FoodSales” worksheet. This helps to break down the cost per serving versus the price per serving that is charged in the cost of the rooms. This worksheet is especially helpful for the user if used in real time. It will help to determine when it is time to reorder new breakfast items when they are running low, how much the order will cost, and how much is being consumed against the number of guests being served.

The “Leases” section provides the items leased, cost of these items, and terms of the leases. Should the terms of the lease change, these numbers, as highlighted in yellow, can be changed accordingly.

1. **Location and meaning of outputs**

Our outputs begin in the “MortgageLeases” worksheet. The mortgage payment is broken down into two parts; the interest payment and the principal payment. There are two pieces of equipment that is leased by TheSurf, solar batteries and laptops. Two LCA’s are included here in this worksheet to show each and every characteristic of the lease should they need to be referenced for any reason by management.

In the “personnel” worksheet there a few outputs to show the total number of employees on site per month and the average wages by month. These are conveniently broken down by employee type and totaled to receive the monthly wage expense alongside an annual wage expense.

In the “RoomSales” worksheet the user will find room monthly revenues as well as the occupancy rate per month. The room revenues are broken down a couple different ways: monthly, annual, discounted rates, scaled rates, and room types. Should demand be high for whatever reason creating a busy couple of months or even year, there are scales that can be altered in the “parametersinput” tab to create revenues that more accurately reflect sales that particular year. The opposite can be done for discounted room sales.

The “FoodSales” worksheet provides multiple output streams including average monthly food needs, scaled average monthly food needs, and food inventories by each item of food served. An array is provided for each item of food to track how much food is being consumed and when to reorder more due to low inventories. Monthly food revenues, costs, and profits are also provided as a part of room revenues.

The “Depreciation” worksheet ultimately provides a net depreciation expense for all rooms. This is provided to the user by first breaking down each item in the rooms, applying the rate at which it depreciates to the cost of that particular item producing a dollar depreciation amount to each item for each month. At the top of the worksheet the user can find the depreciation base for the solar batteries and laptops. This is helpful in the calculation of the lease characteristic arrays in the “MortgageLeases” worksheet.

The “RevenuesEarnings” worksheet includes tables including multiple outputs for expenses, revenues, and net earnings. The monthly expenses include payroll, mortgage principal payments, lease payments, utilities, insurance, marketing, and food costs. Depreciation and interest expense have been separated to show how they are whole another line item in the income statement. This helps to gross profit and EBIT. Finally, net earnings are shown at the bottom both monthly and annually.

1. **Guide to visual cues and naming conventions**

In the “ParametersInputs” worksheet there are two color schemes used. Yellow cells represent any and all input parameters and input streams. These are values that can be changed by the user as they wish. Each and every white cell with values should NOT be altered by the user. These cells contain formulas that ripple throughout the model in many specific arrays in each of the worksheets.

There are many abbreviations used to name specific cells and ranges of cells whether they are input streams, input parameters, and/or outputs. Abbreviations and their meanings can be found in table 1 of appendix A.

In the “RevenuesEarnings” worksheet there are two outputs that represent the findings of projected figures of the overall model. Both of the monthly and total year revenues and profits are highlighted in orange.

1. **Step-by-step use of the model**

In the “MortgageLeases” worksheet the mortgage can be modified by simply changing any one of the inputs parameters involved. These include the notional amount or amount borrowed, the mortgage interest rate, and the mortgage term in number of years. Changing the monthly payments for each of the two leases are very similar. These payments can be corrected by altering the equipment cost, the lease interest rate, and the number of periods in which apply to the terms of the lease. To correct the liabilities in the LCAs, the user will need to correct the cost of the equipment, and the elements of the principal payment of the leases. The equipment cost and/or depreciation term in number of years will need to be corrected to change the total monthly assets in each array.

In the “Personnel” worksheet the personnel schedule array can be changed by altering the number of employees input parameters that are expected to be hired for each month in the inputs tab. This will drive the total wages paid for each month as well as annually. If the expected number of employees to be hired each month is correct, the monthly wages can also be corrected by altering the hourly wage each type of employee earns.

In the “RoomSales” worksheet there are several input parameters that can be altered to correct room revenues. The room rates for both standard and luxury, the number of expected rooms to be booked each night per month, and/or the rate at which rooms are discounted and scaled. These numbers are what will ultimately drive revenues in the end to cover all types of expenses incurred and even further down the line, profits.

In the “FoodSales” worksheet the cost per unit of each type of food, price input into the room rate for the food, as well as the expected number of servings each month are what will drive food revenues and profits as a part of room sales. Should an unexpected drop or even increase in traffic to the hotel should occur, the scales can be altered accordingly to get an idea of what total monthly and annual food costs would be as well as food revenues and profits as a part of room revenues.

In the “Depreciation” worksheet there are a few simple input parameters that can be altered to correct this expense as the user wishes. Cost per item and the number of them in each room will help to determine the cost of the items per room. The useful life and the number of periods drive the depreciation rate which drives the depreciation base per item as shown.

In the “RevenuesEarnings” worksheet, each of the expenses is taken directly from its respective worksheet or from an input parameter. These will feed into the income statement the same way as the room revenues do from the “RoomSales worksheet. Finally, the net income is the final result of each array put together from each of the mentioned input parameters and input streams.

**Appendix A**

Table 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Amt | Amount |  | HK | Housekeeping |
| Ann | Annual |  | Maint | Maintenance |
| Avg | Average |  | Man | Manager |
| Bal | Balance |  | Mktg | Marketing |
| Beg | Beginning |  | Mon | Month, Months, Monthly |
| Consum | Consumption |  | P | Per |
| Cum | Cumulative |  | PM | Per Month |
| Dep | Depreciation |  | Pmt | Payment |
| Disc | Discount |  | Rev | Revenue |
| End | Ending |  | Seas | Seasonal |
| Eqpt | Equipment |  | Serv | Serving |
| Exp | Expense, Expensed, Expenses |  | Util | Utilities |
| Expt | Expected |  |  |  |