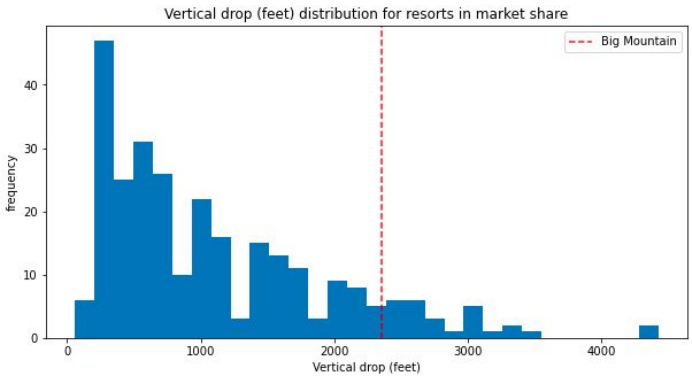
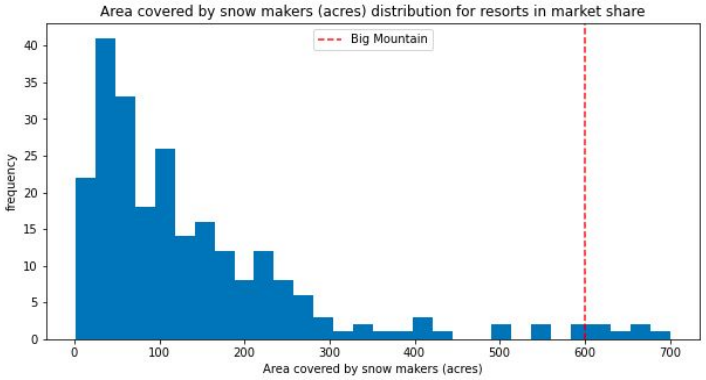
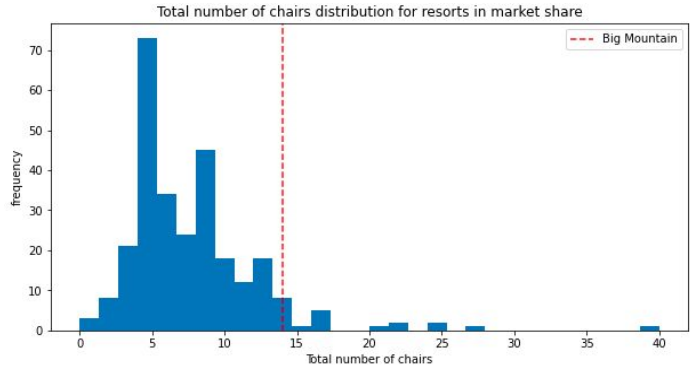
Big Mountain Price Recommendations

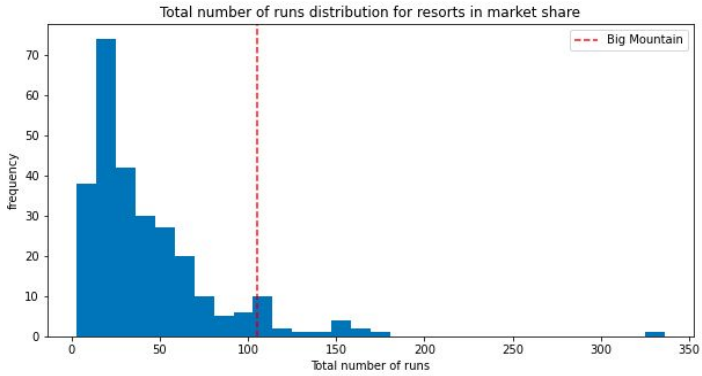
Model Results and Basic Price Adjustments:

A Random Forest model was trained and optimized using the provided resort data. The resulting algorithm is able to account for ticket price with a mean average error of $10.40, with a standard deviation of $1.47. The model also identified the features that seem to be most influential in determining ticket price. A selection of those features along with their distributions and Big Mountain's comparative value are plotted below. As you can see Big Mountain compares favorably with its competitors in terms of the features that are most predictive of adult weekend ticket price. This supports the model's recommendation that a calibrated price for Big Mountain based on its current features would be approximately $95, compared to the current price of only $81. Even if we assume the maximum error of approximately $10 this market calibration suggests that at a *minimum* Big Mountain increase its ticket price to $85, or less conservatively into the $90 - $95 range.



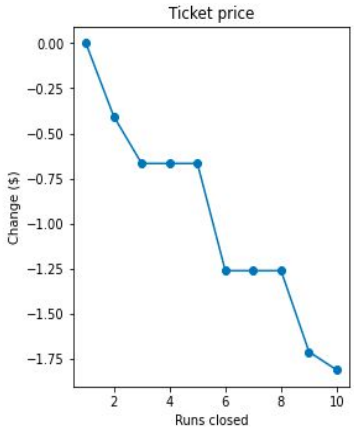


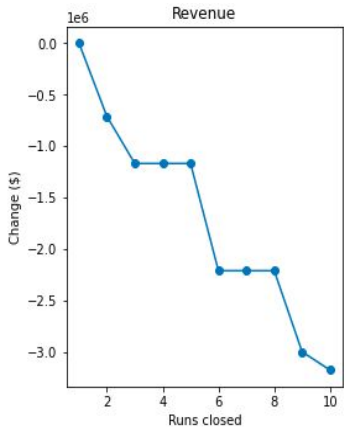




Resort Modification Scenarios and Price Impact:

The impact of various feature modifications on price was investigated using the model. It was determined that closing runs reduces the suggested price as shown below. If we assume that each run requires a chair lift, and each chair lift has an operating cost of approximately $1.5 million, then the model would suggest that profits could be increased by closing up to 5 of the least popular runs. In practice, however, this does not account for how closing these runs may impact crowds throughout the rest of the park, and assumes there will be no impact on visitor attendance. Depending on Big Mountain's current business strategy a more modest approach would be to close one or two



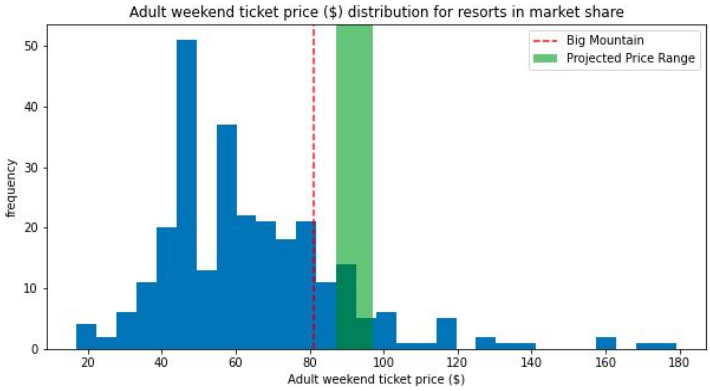


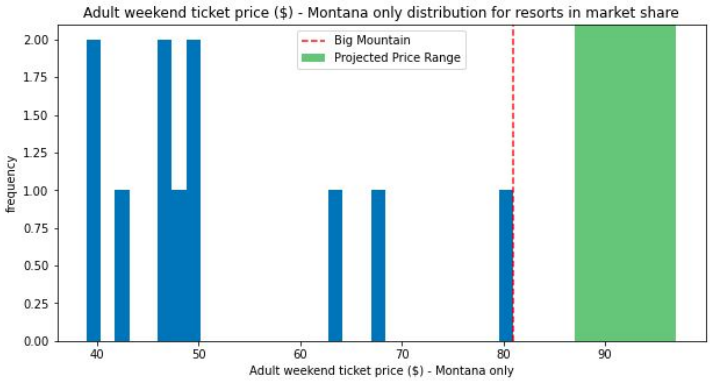
of the park's least popular runs while collecting data on how this affects customer volume and strain on the other runs in the park.

One promising avenue for increasing ticket price is to increase the maximum vertical drop by 150 feet, which would require the installation of additional chair lift. This would increase the modeled ticket price by an additional $1.99, leading to a total seasonal revenue increase of $3,474,638. This increase is more than enough to cover the additional operating cost of $1.5 million for the chair lift. This would bring the total recommended price to $97 according to the model. Increasing snow coverage and extending the longest run by 0.2 miles showed no impact on the modeled price.

Overall Considerations and Recommendations:

If we combine the basic price recommendations with the suggested modifications to extend the vertical drop then the suggested new ticket price would range from $87 - $97. As you can see from the price distributions below this would put Big Mountain in a somewhat higher price range nationally, and would significantly increase Big Mountain's cost compared to its in-state competitors. This decision should take into consideration whether Big Mountain's customer base is likely to be affected by this price increase. This model assumes national competition with no customer preference for location, and no geographical influence on price, as there was no indication that state label was a significant factor. However, it is possible that resorts within this data set are using very different pricing strategies and targeting different customer bases. In that case Big Mountain may wish to gather more information about its current and desired customer base before settling on a new ticket price.





In summary the table below shows expected changes in revenue and costs based on ticket price and closed runs. These values assume one additional lift is installed to extend the vertical drop, and assuming there are no changes in number of tickets sold.

Ticket Price	Closed Runs	Change in Revenue	Change in Operating Cost	Net Profit Change
87	0	10500000	1540000	8960000
	1	10500000	0	10500000
	2	10500000	-1540000	12040000
92	0	19250000	1540000	17710000
	1	19250000	0	19250000
	2	19250000	-1540000	20790000
97	0	28000000	1540000	26460000
	1	28000000	0	28000000
	2	28000000	-1540000	29540000