

BEST LOCATIONS FOR A PROPOSED GOLF RESORT



Instructions: Scan the ESRI Storymap of the Spatial Analysis Case Study using your smart device. As you scroll through the story, see how the team of market analysts use the help of geographic information systems to help choose the location of a potential golf resort.

What is the goal of the case study
For the team of market analysts?

- To identify seven potential sites for the proposed golf course and provide options for development team.

List the six required site factors that the development team had to keep in mind while researching the location of a future golf resort.

- Gentle slopes
- Certain land cover types
- Near (but not too near) airport
- Near river
- View mtn peaks
- Variety landscapes

What kind of data layer is used to help visually illustrate slope?

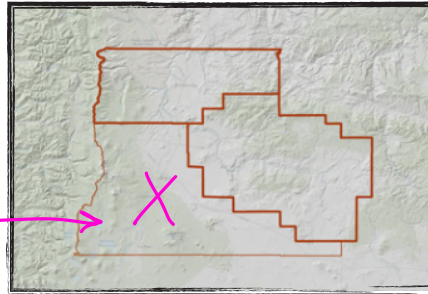
An elevation layer

Name the map type used to portray the assigned suitability scores. (Circle one)

- Isoline Cartogram Heat Map Dot Density Graduated Symbol **Choropleth**

In terms of gentle slopes, choose the county that you feel is best suited to host a new golf resort. Mark it with an "X" on the map at right.

Green; flattest; "most suitable"



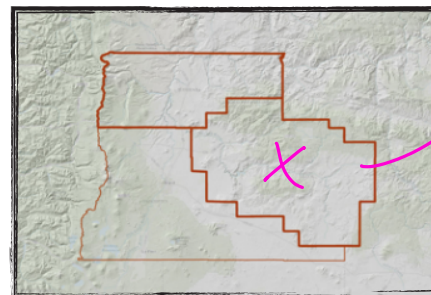
The "Certain Land Cover Type" overlay is an example of: (Circle one)

- Reference Map **Thematic Map**

Scroll back and forth between the "Land Cover Map" and the one corresponding with its assigned suitability scores. According to the key, what type of predominant land cover is preferred?

- Deciduous Forest
- Evergreen Forest
- Mixed Forest

In terms of land cover, choose the county that you feel is best suited to host a new golf resort. Mark it with an "X" on the map below.



Least gray area

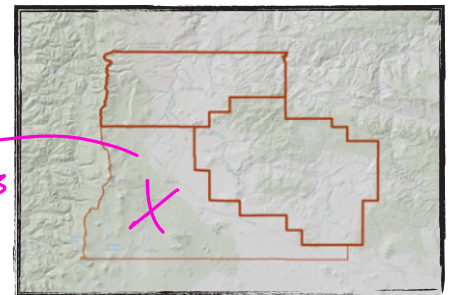
Describe how the research team created a suitability score to determine the location of a golf course in relation to a county's airports.

- Selected public use airports w/ 50 miles of the county borders and created drive time rings in 5-minute increments.

Hypothesize why you think the research team chose to display the drive-time choropleth map with two colors instead of one.

To make it easier to see the contrast and quickly eliminate areas not desired

In terms of airport proximity, choose the county that you feel is best suited to host a new golf resort. Mark it with an "X" on the map below.



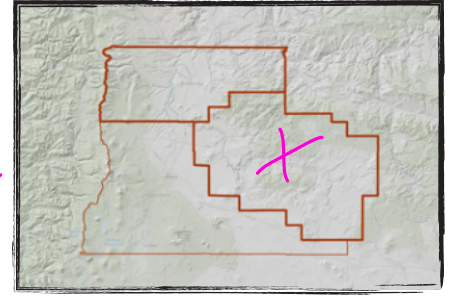
4 airports

Analyze the "Near a River" map layer. This type of map is an example of a Heat Map. Describe the difference between a Heat Map and a Choropleth Map.

- Heat maps illustrate gradual change.
- Heat maps illustrate the statistical significance from the standard deviation. (Not on website).
- Choropleth maps have clearly defined areas of study that are assigned a specific color.

After looking at the "Near a River" suitability score map, choose the county that you feel is best suited to host a new golf resort. Mark it with an "X" on the map below.

- Most rivers running through.

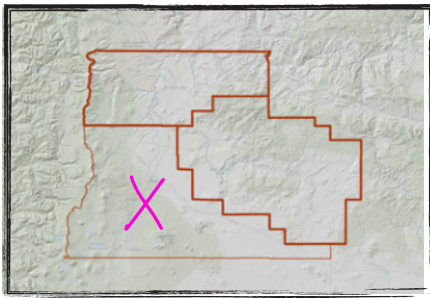
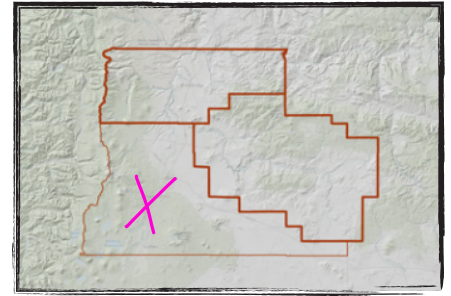


Look at the "View of Mountain Peaks" map. You will notice that there are areas with a "view" designation even beyond areas with "no-view" access. Scroll back and use a previously viewed GIS layer to conclude why this might be.

Because the mountains are still viewable outside the potential golf zones.

After looking at the "View of Mountain Peaks" suitability value map, choose the county that you feel is best suited to host a new golf resort. Mark it with an "X" on the map below.

Almost all green with "views"



After looking at the "Surrounded by a Variety of Landscapes" map, choose the county that you feel is best suited to host a new golf resort. Mark it with an "X" on the map at left.

Why are "weights" applied to some of the GIS layers?

- Because some variables for the golf course are more "valuable" and important than others.

What variable narrowed down the map to just two counties?

Private or publically owned land

The Future golf course requires a contiguous (connected) land area of 1500 acres. Once these contiguous zones are identified on the Combined Scores layer, how many potential sites exist?

Seven

Once a site is chosen, what final research must the market analyst team conduct?

Consideration for:

- agricultural lands
- near highways
- total acreage of flat slopes
- amount of each land cover type.
- distance from airport

Pretend that you are on the market analyst team. Brainstorm THREE new GIS layers that may be useful in deciding the location of a new golf resort. Then briefly discuss the new layer's potential usefulness.

- Median income: Golf is an expensive sport and can be exclusive to those who can't afford the recreation fees.
- Golf pro shops: Proximity of golf pro shops within the vicinity of a new golf course.
- Water drainage: Freestanding water and flooded areas will increase the cost needed to fix the land w/ drainage.



Read more!