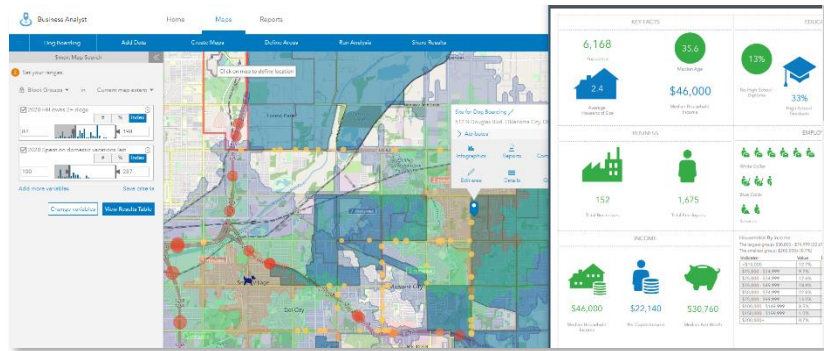


Locating the Optimal Site for a Dog Boarding Service

Summary. Locate the optimal site for a dog boarding service using consumer behavior, demographics, and competition data. Level: University learners; could be used in upper secondary. 13 steps. Time required: 1-2 hours. Uses Business Analyst Web; license required; your university may already have license; trial available on www.esri.com.

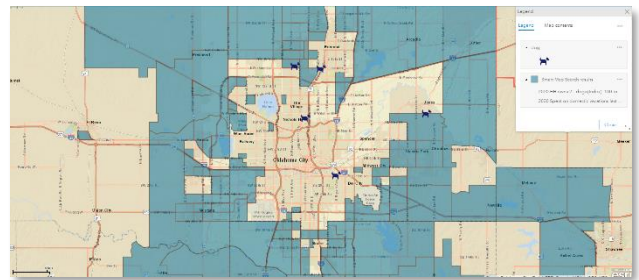


Map and infographic that you will create as a part of this activity.

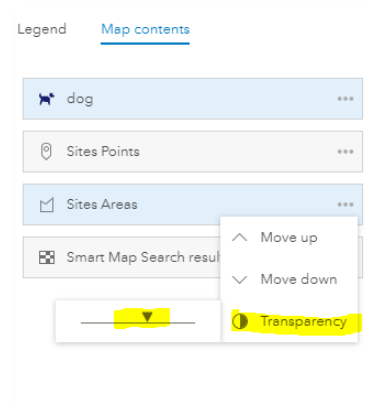
Problem Statement. You seek to locate a dog boarding service in Oklahoma City. How can you select an ideal location using GIS tools, business, demographic, and behavioral data, and the spatial perspective?

Analysis

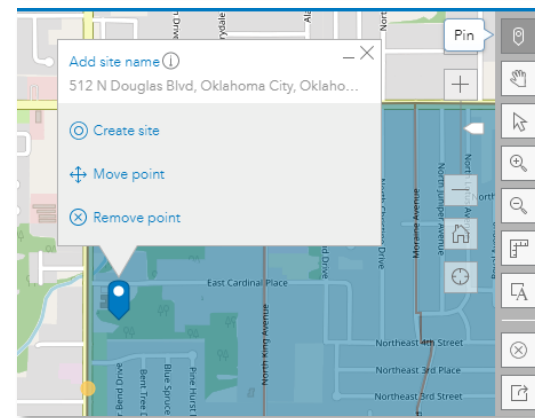
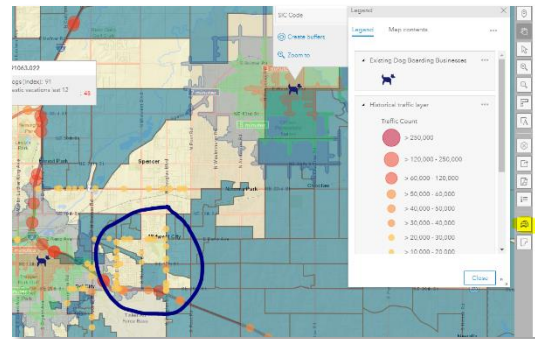
- (1) Access [Business Analyst Web](http://BusinessAnalystWeb.com). Start a new project named Dog Boarding. Select USA as country. Zoom to Oklahoma City and adjust the scale so you can see the entire metro area at the block group (neighborhood) level of census geography.
- (2) You decide to focus on households that own 2 or more dogs and those that might go out of town and need your service: Those that spent a modest amount on domestic vacations in the last 12 months. Create Maps > Smart Map Search > search for and add: 2020 HH owns 2+ dogs, and 2020 Spent on domestic vacations last 12 months: \$1-\$999. Use Index in both cases so you can focus on neighborhoods above the national average for these variables. You should have 2 selected variables. Where do you think this data comes from? _____
- (3) To the left of the map, slide the filter bar for each variable to 100 to view block groups that exceed the national average for both variables.
- (4) Map potential competitors: Create Maps > Business and Facilities Search > Dog > under “industry description”, click on “pet boarding sitting and kennels *only*”. Select a dog symbol. Your map will look similar to the one shown.
- (5) You observe from the map that the east side of Oklahoma City contains suitable neighborhoods and few competitors. Click on the business southeast of Moore. You notice that is American Dog Obedience Center and thus not a competitor.
- (6) Threshold distances, or the distance that people are willing to travel, vary for different types of businesses. Threshold distances may be in hours (by car) for an Ikea, Cabela’s, or other large business, 30-45 minutes for a Home Depot, and 10 minutes or less for a business such as a dog boarding service. Considering this, you decide to create drive-time buffers at 3, 5, and 7



minutes around each potential competitor. Click on Dogs Beautiful in central Oklahoma City > Create Buffers > Drive Time 3-5-7 minutes. Save buffers to a layer. Create same drive time layer for Heavenly Dog Daz Pet Sitting in Jones Oklahoma to the northeast of Oklahoma City. By making the buffers semi-transparent, you observe that there is an area of suitable neighborhoods that is over 7 minutes' drive from the two potential competitors in central and northeast Oklahoma City. You therefore decide to focus on this area for a potential site, but you need one more piece of information.



- (7) Change the basemap to Imagery with Labels. Zoom to each of the 2 competitors. Do you think these businesses are (A) storefront or (B) operating out of people's homes? _____
- (8) You decide to make your business a storefront, to offer a more visible and unique service. One key to success will be to locate on a busy street. Change basemap to OpenStreetMap. To the right of the map > Add historical traffic layer (as shown). The highest traffic volumes are on the freeways, but you cannot locate a business there. But note the neighborhoods with a fairly high traffic (circled) that are **also** over the national average on multiple dog ownership and spending a modest amount on vacations.
- (9) Indicate the top 3 block groups you are considering for your dog boarding business, and why.
- (10) Inside one of your 3 top block groups > Pin > Create Site > create 3,5,7 minute drive time around it > create infographic, noting on the infographic, the demographic, income, and other variables surrounding your ideal site.
- (11) Name 1 additional variable or method that you think would be important in site selection for this type of business.
- (12) Summarize in 2 sentences what you have learned about site selection, and how mapping tools helped you to make decisions.
- (13) Give a 5-minute oral or written presentation to your class and/or instructor with your sales pitch for the site that you have chosen, using your maps and infographic as an integral part of your presentation. For this presentation, you can use Business Analyst Web > Share Results: You can export your map(s) as PDFs or create a story map. Or you can show your results during your presentation directly from within Business Analyst Web. Or, you can use Prezi, Sway, PowerPoint, or a video for the presentation.



Congratulations on thinking spatially and for your good work! •