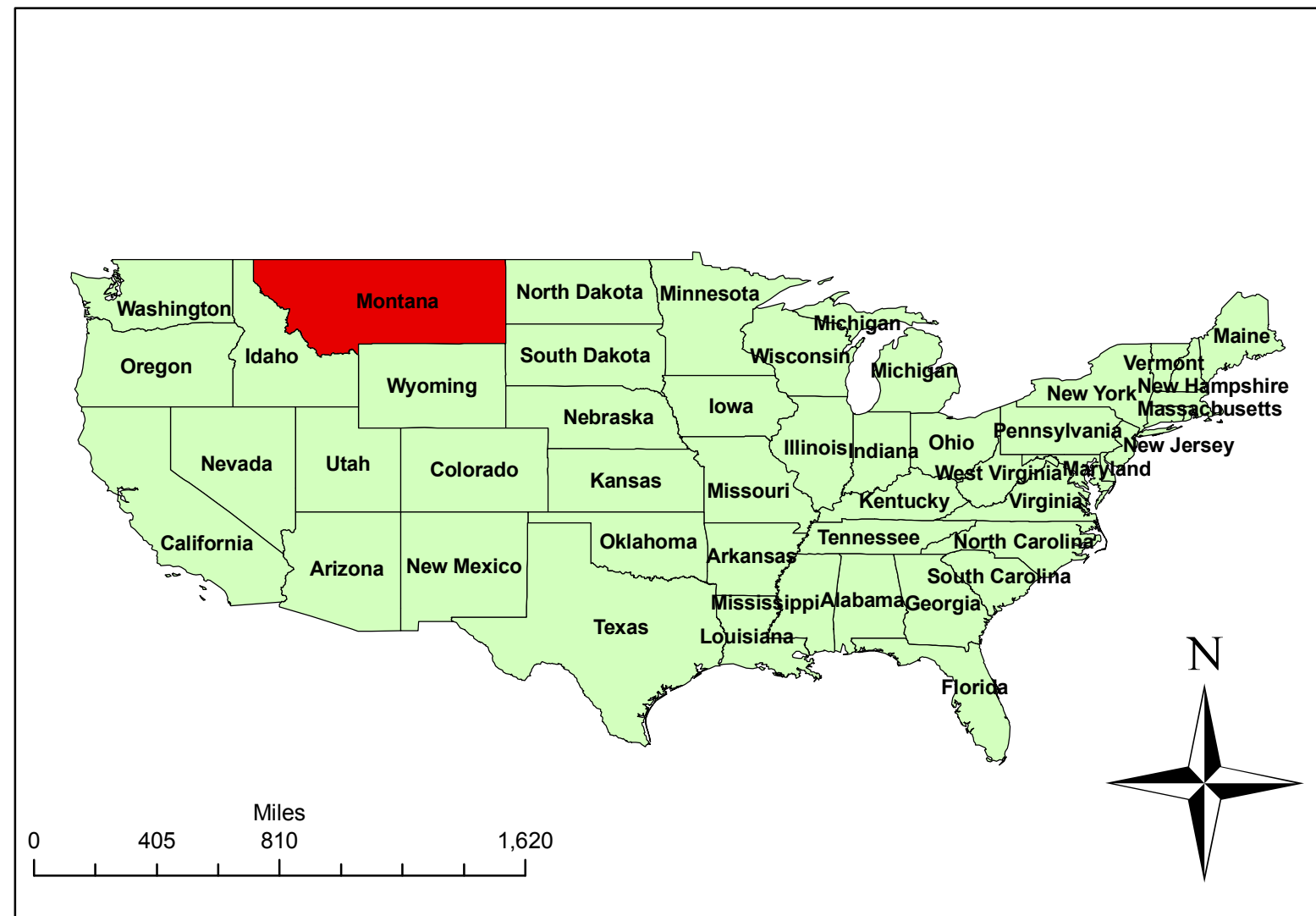
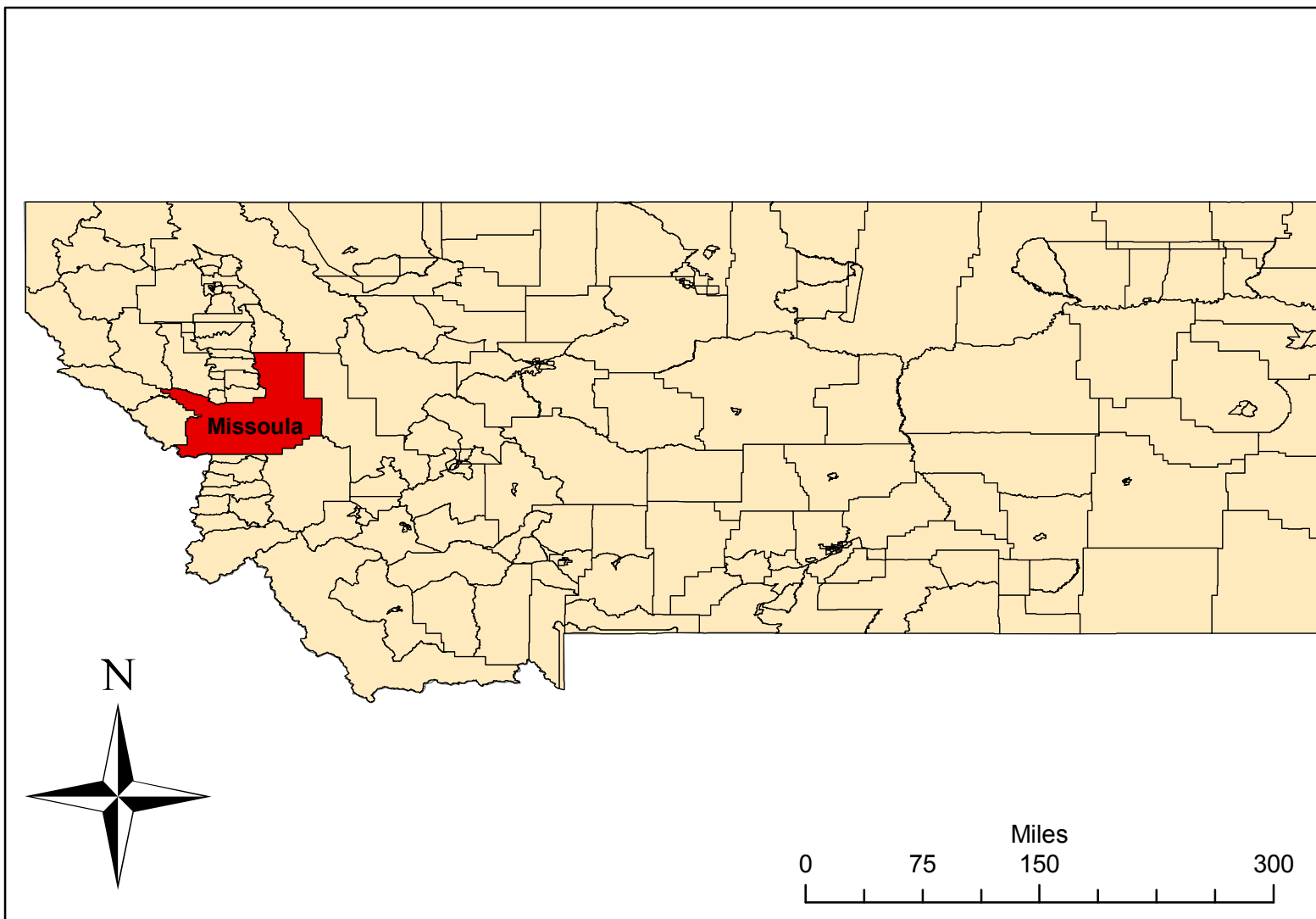


BEST AREAS TO ADVERTISE A COMPUTER REPAIR BUSINESS IN MISSOULA MONTANA

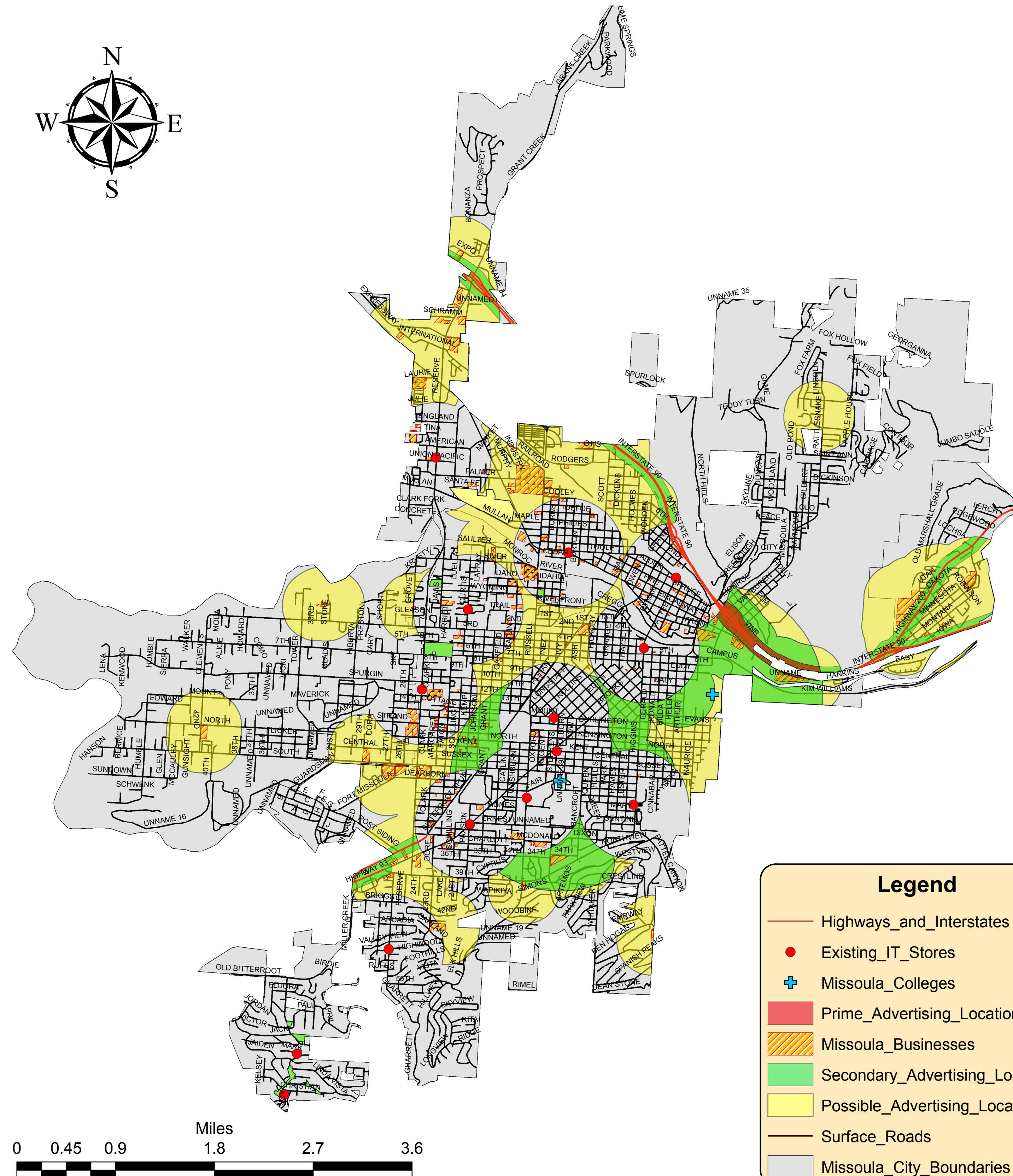
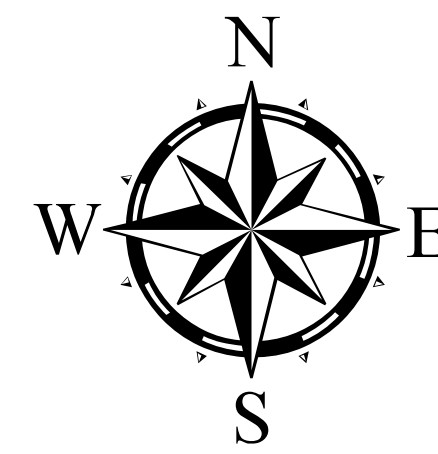
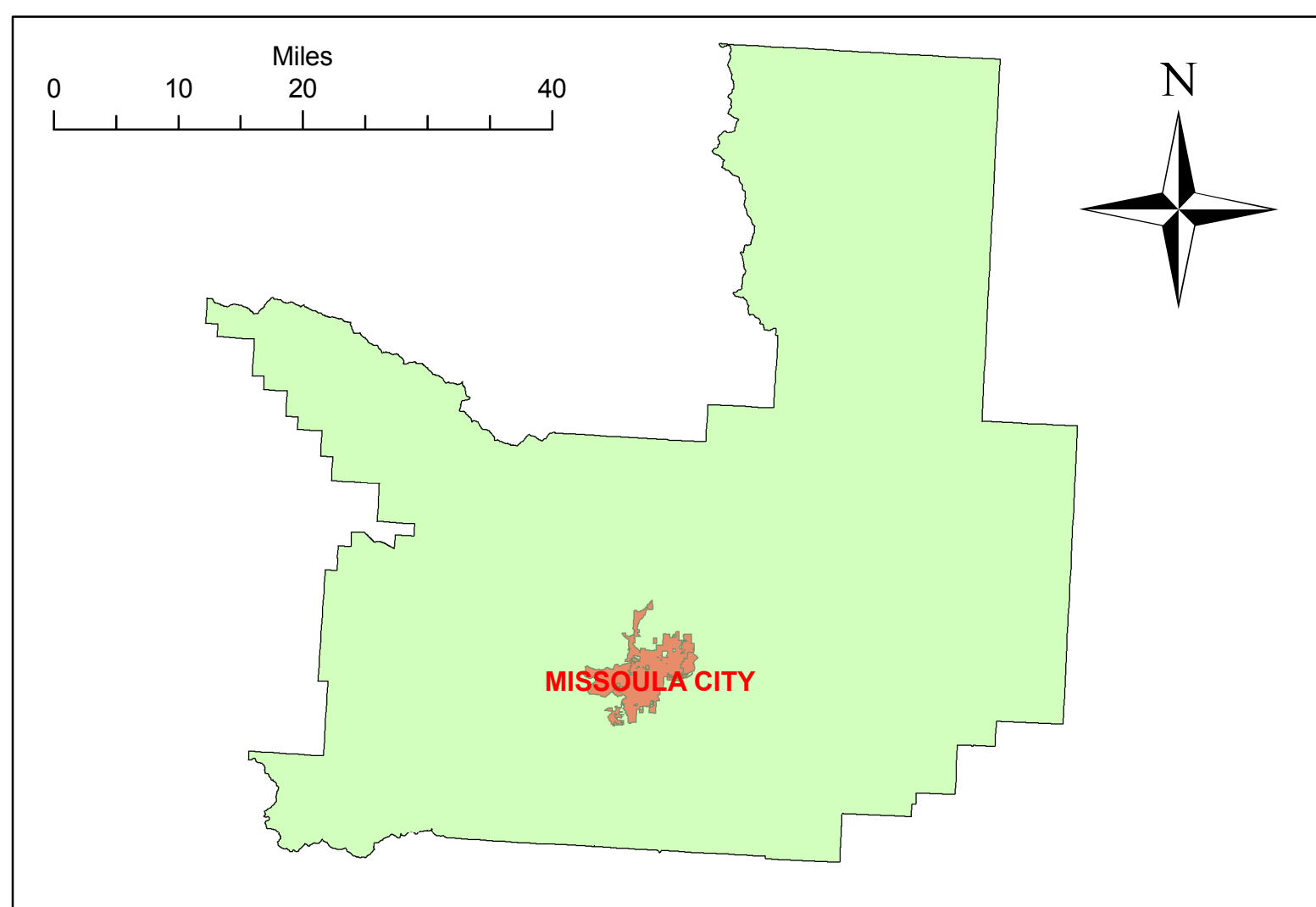
LOCATION OF MONTANA WITHIN THE CONTINENTAL UNITED STATES



LOCATION OF MISSOULA COUNTY WITHIN THE STATE OF MONTANA



LOCATION OF MISSOULA CITY WITHIN MISSOULA COUNTY



Legend

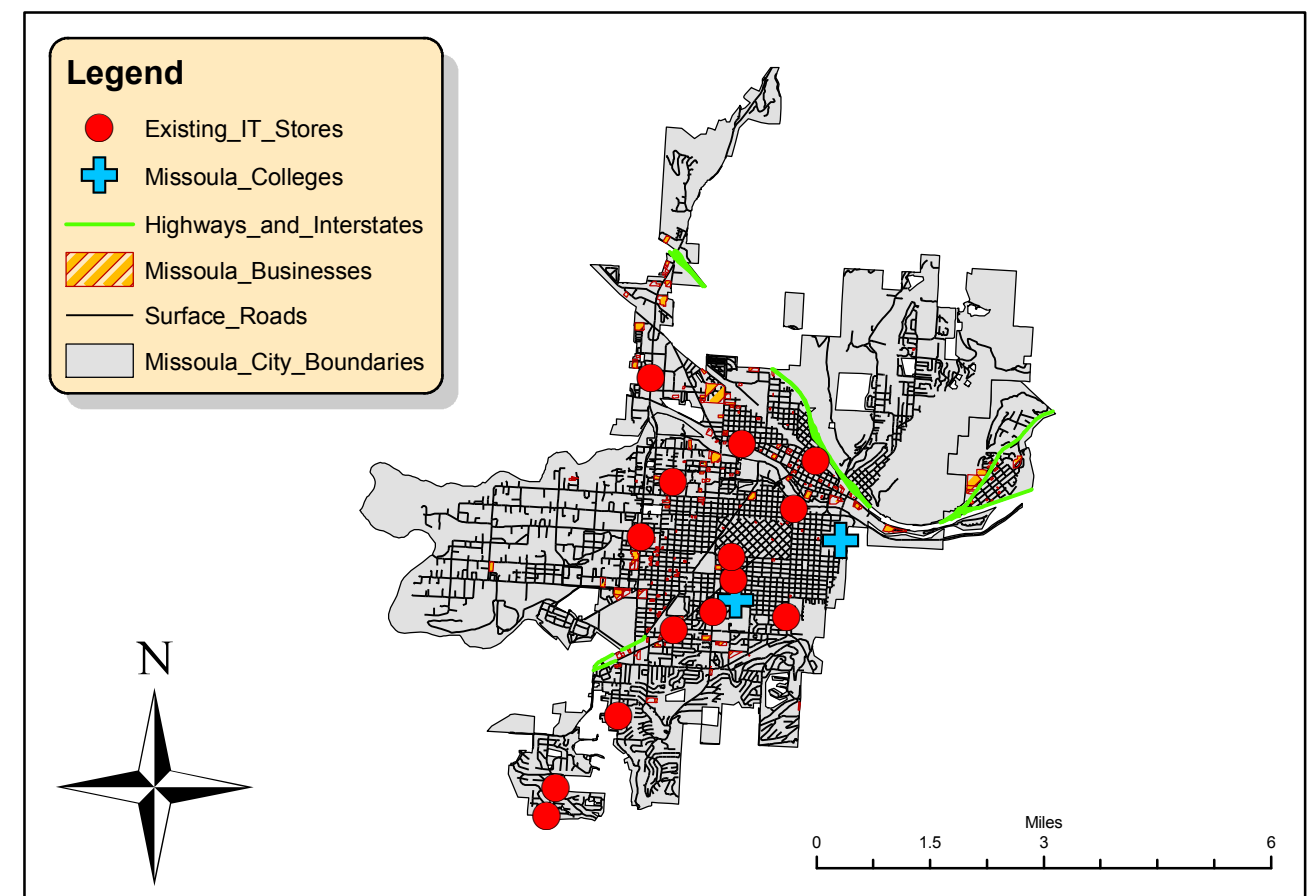
- Highways_and_Interstates
- Existing_IT_Stores
- + Missoula_Colleges
- Prime_Advertising_Locations
- ▨ Missoula_Businesses
- Secondary_Advertising_Locations
- Possible_Advertising_Locations
- Surface_Roads
- Missoula_City_Boundaries

RESEARCH QUESTION: My friend and coworker, Brett has started formulating plans to move to Missoula, MT, where he intends to start up a I.T./computer repair business. This business will be Brett's primary source of income. However Brett is still somewhat unfamiliar with the city. In order to help him hit the ground running I have formulated the following research question:
Where are the best locations in Missoula, MT, for Brett to start advertising his new company in order to maximize its exposure to Brett's intended market, businesses.

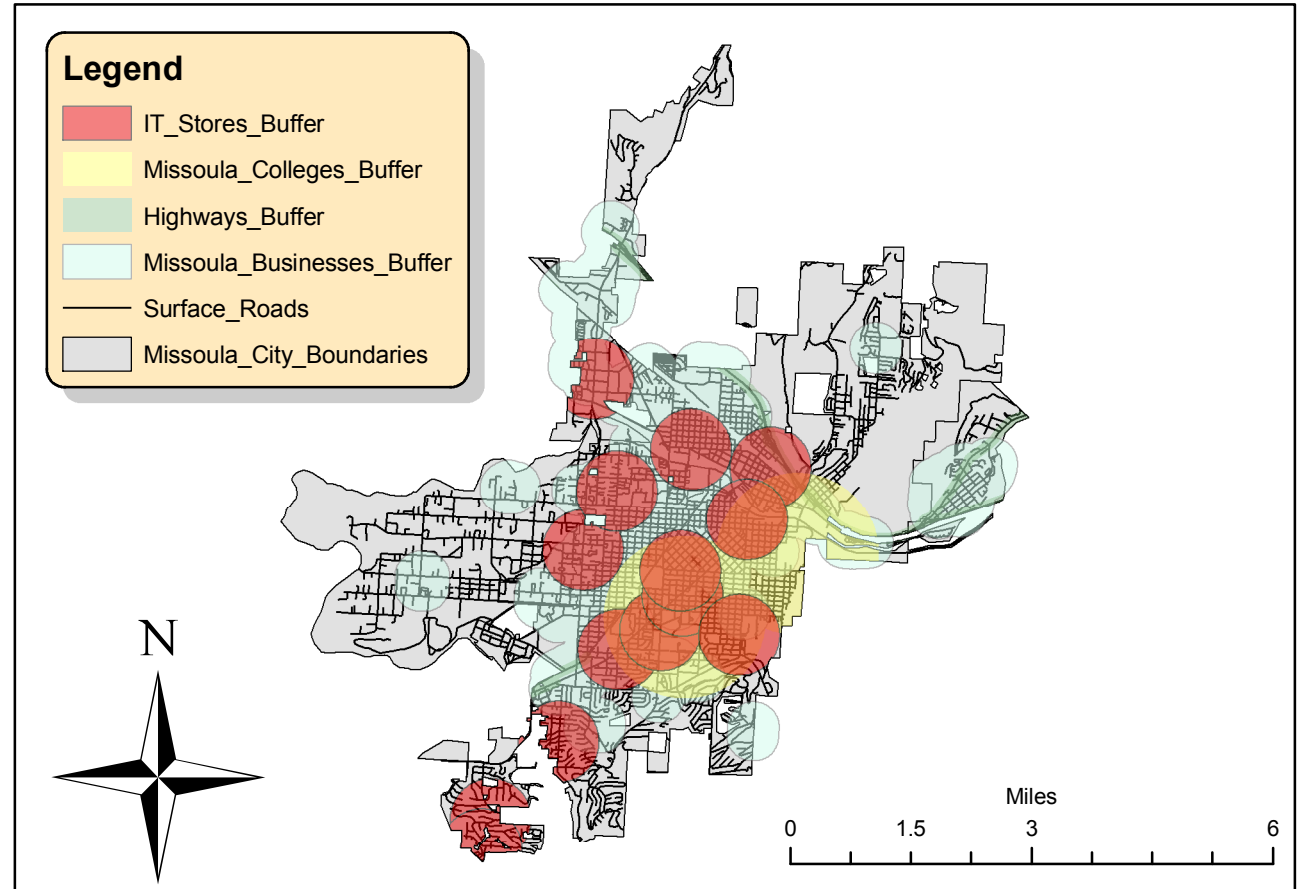
To identify ideal locations for advertising a new I.T. business I have developed the following criteria:
 -The area should be within 500 meters radius of an existing business.
 -The area should be within 1 mile radius of the local colleges.
 -The area should be within 100 meters radius of major highways or interstate.

With these criteria in mind I established a rating system in which locations that satisfied all three of these points would represent an ideal location where Brett should focus on marketing his business. While locations that satisfied only two of these criteria would represent secondary areas for Brett to concentrate on and locations that met only one criteria represented possible marketing areas after Brett had exhausted his other two options.

Further refining my criteria I also decided that Brett should avoid advertising within 1/2 mile of an existing I.T. business in order to try and avoid markets that were already saturated. With this additional criteria in mind I chose to exclude all points within a 1/2 mile radius of existing I.T. businesses even if they satisfied one or more of the desirable criteria.



STEP 1: I first located and downloaded shape files for the Missoula city boundary, Missoula County roads, Montana State schools, and Missoula County land parcel use. I then went through each of the shapefiles I had downloaded using the Missoula City boundary shapefile and the clip tool so I could exclude all data that existed outside of the city boundary. Using the attribute table of the Montana state schools shape file, I went through and selected only those files that related to the colleges in the city excluding the elementary, middle, and highschools. I then exported my selections creating a new shape file only displaying the colleges inside of Missoula City. I utilized a similar process while working with Missoula County Land shape file in order to highlight and then export only those parcels owned and operated by businesses. This allowed me to exclude the government and privately owned parcels. I then utilized this process once again using the roads shapefile in order to create a new shape file consisting only of the highways and interstates located within Missoula City. Finally since I was unable to find any shape file depicting the existing locations of the existing I.T. businesses I was forced to create one myself. I did this by first geocoding my roads shapefile and creating a address locator. Next I used yellowpages.com to identify all of the names and addresses of the I.T. businesses currently in Missoula. I took this data, entered it into an excel sheet, and then processed it through my address locator to create a new shape file that depicted the precise locations of the businesses on my map.



STEP 2: After the first step my next step was relatively strait forward. I created buffers out of the shape files I had generated utilizing the distances I had outlined in my criteria. (I.E. 500 meters from local businesses, 100 meters from highways/interstates, 1 mile from local colleges, and 1/2 mile from existing I.T. Businesses). Then I again used my Missoula City boundary and the clip tool to exclude all buffered areas that extended outside of the city's boundaries.

FINAL STEP: Next excluding the I.T. store buffer I used the merge tool to combine the various buffers. (I.E. Missoula College buffer, highway buffer, Missoula businesses buffer). Using the original individual buffers I also looked for areas of overlap where more than one criteria was met within the same location and created new shape files of these locations using the intersect tool. Finally I downloaded the erase tool from the internet and utilized this tool to exclude all locations in my newly created buffers that were within a 1/2 mile radius of the existing I.T. stores as defined by my I.T. store buffer. In my mind the final results speak for themselves and display visually in what I hope is a clear manner the optimum locations for Brett to advertise his new I.T. business.