

New York census tracts and bookstores overlaid with 5,000 m buffers

Location: NY

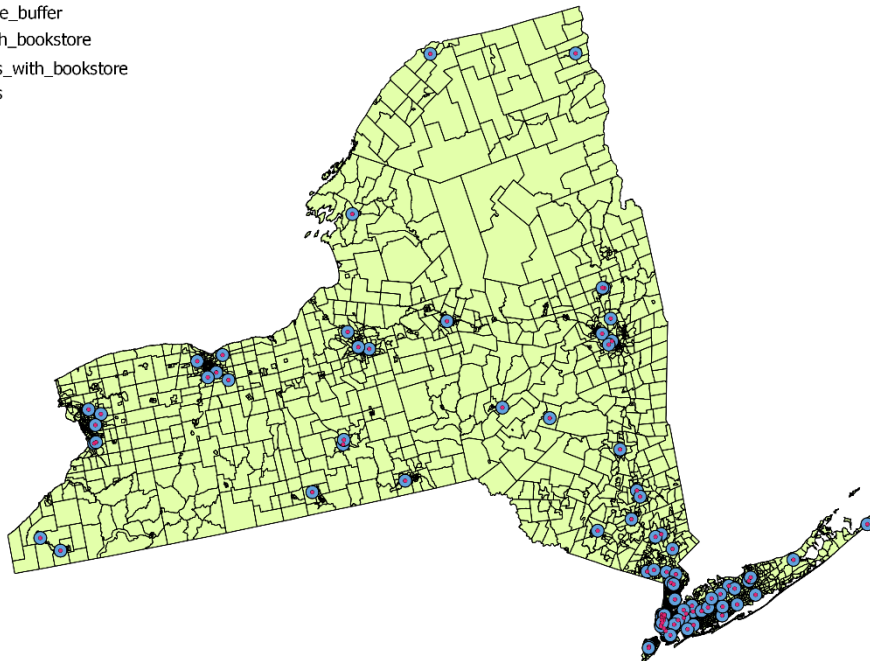
Level of detail: Census Tracts

Coordinate Reference System (CRS): USA Contiguous Equidistant Conic

Census tracts in New York state overlaid with bookstores and a 5,000 m buffer around them

Legend

- bookstore_eqidist selected
- bookstore_buffer
- ny_tracts_with_bookstore
- ny_tracts_with_bookstore
- ny_tracts



The top map shows the location of each of the 93 book stores in New York state. The map is segmented per census tract. We also created buffers of 5,000 meters around each bookstore and intersected these buffers with the census tracts that are within reach. The buffers are represented as blue circles while the bookstores show as red dots inside the buffers.

As expected, we observe that there is a larger concentration of book stores near metropolitan areas such as Manhattan or Albany. We may thus argue that the average density of inhabitants inside census tracts covered by a bookstore is larger than the average inside census tracts that are not covered. After exporting our results to Excel, we find that in 2009, the average density inside census tracts near bookstores is 31,772 people per square-kilometer versus 13,364 people for census tracts that are outside of bookstore buffers. Therefore, our assumption that bookstore are near densely populated areas is correct.

We may also argue that bookstores are in areas where young people live. It would make sense to think that students who need to buy textbooks are customer targets for bookstores. However, the median age in census tracts near bookstores is only slightly lower than the others, respectively with 35.4 and 36.2 years. Thus, we conclude that age must not be a very significant factor for bookstore owner.

Based on our analysis, we would like to primarily target census tracts that are very densely populated and where there is currently no bookstore. Our best candidate is the census tract n°40302 as there is no bookstore in reach and the density is high with 23,015 inhabitant / kilometer-square. As a side note, we observe that the median age in this census is relatively young with 25.7 years .Note that this census tract is not visible on the map plotted earlier.