Economic Property Investment Calculator (EPIC) Findings

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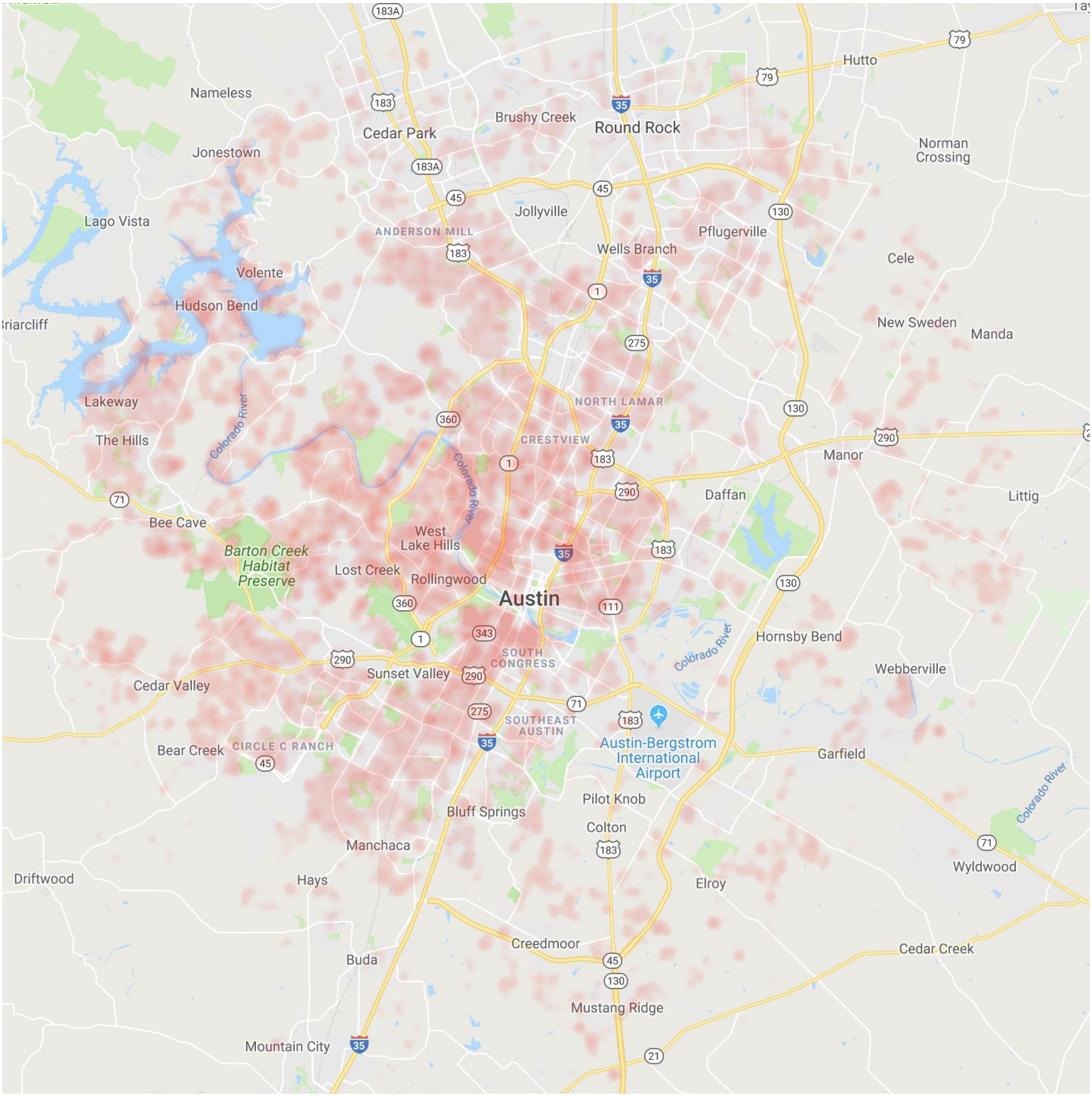
We set out with the goal to set a foundation for future work developing a calculator that could evaluate various factors of a given region and make reasonable predictions on the potential value of properties in that area.

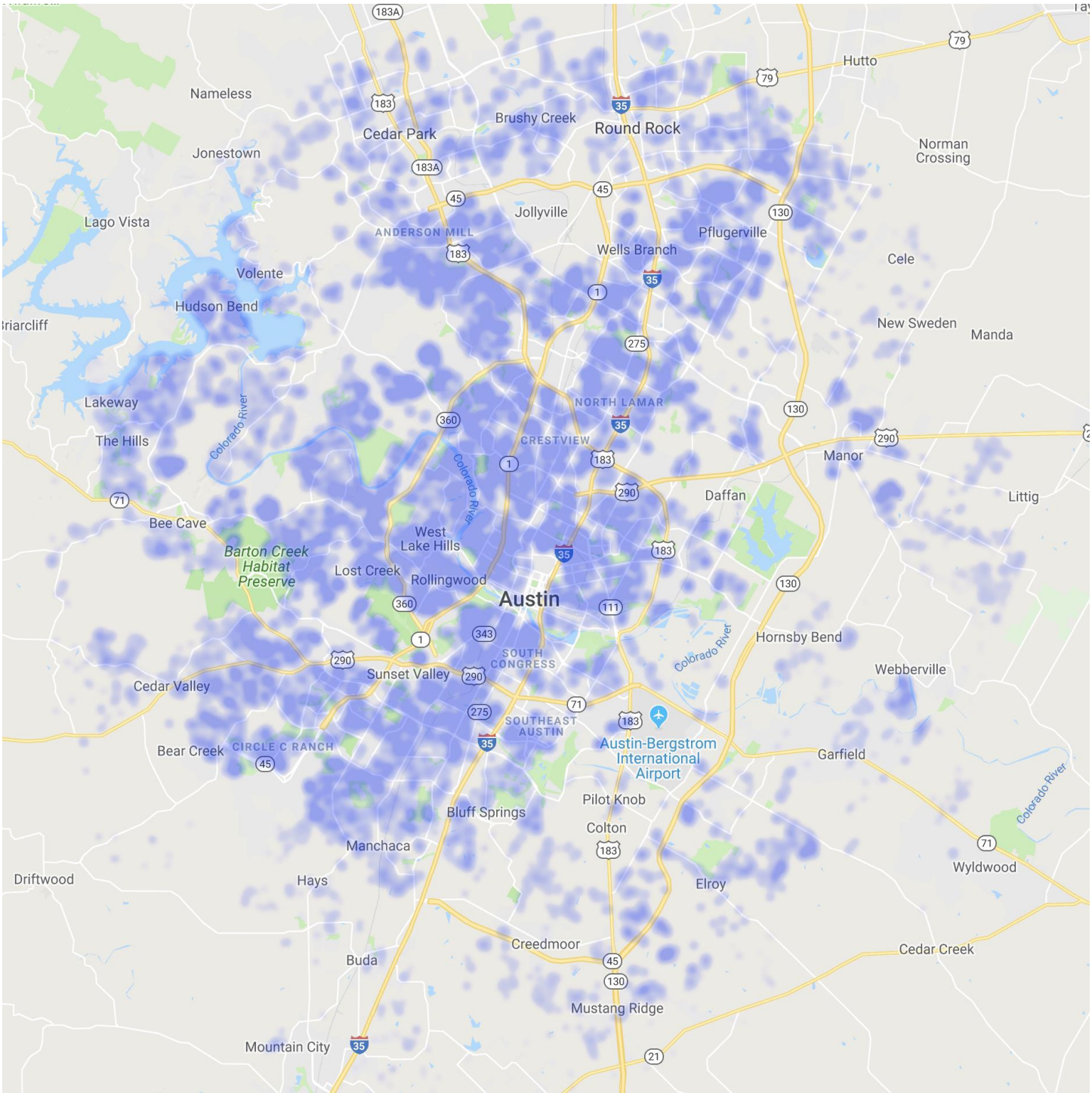
How does Value Per Square Foot vary based on location?

The concentration of property value is as would be expected: highest near the center of town where demand is high due in part to proximity with jobs and services, with a general decline as you move further from town. There are also concentrations of high value near desirable features such as around lakes or other waterfront.



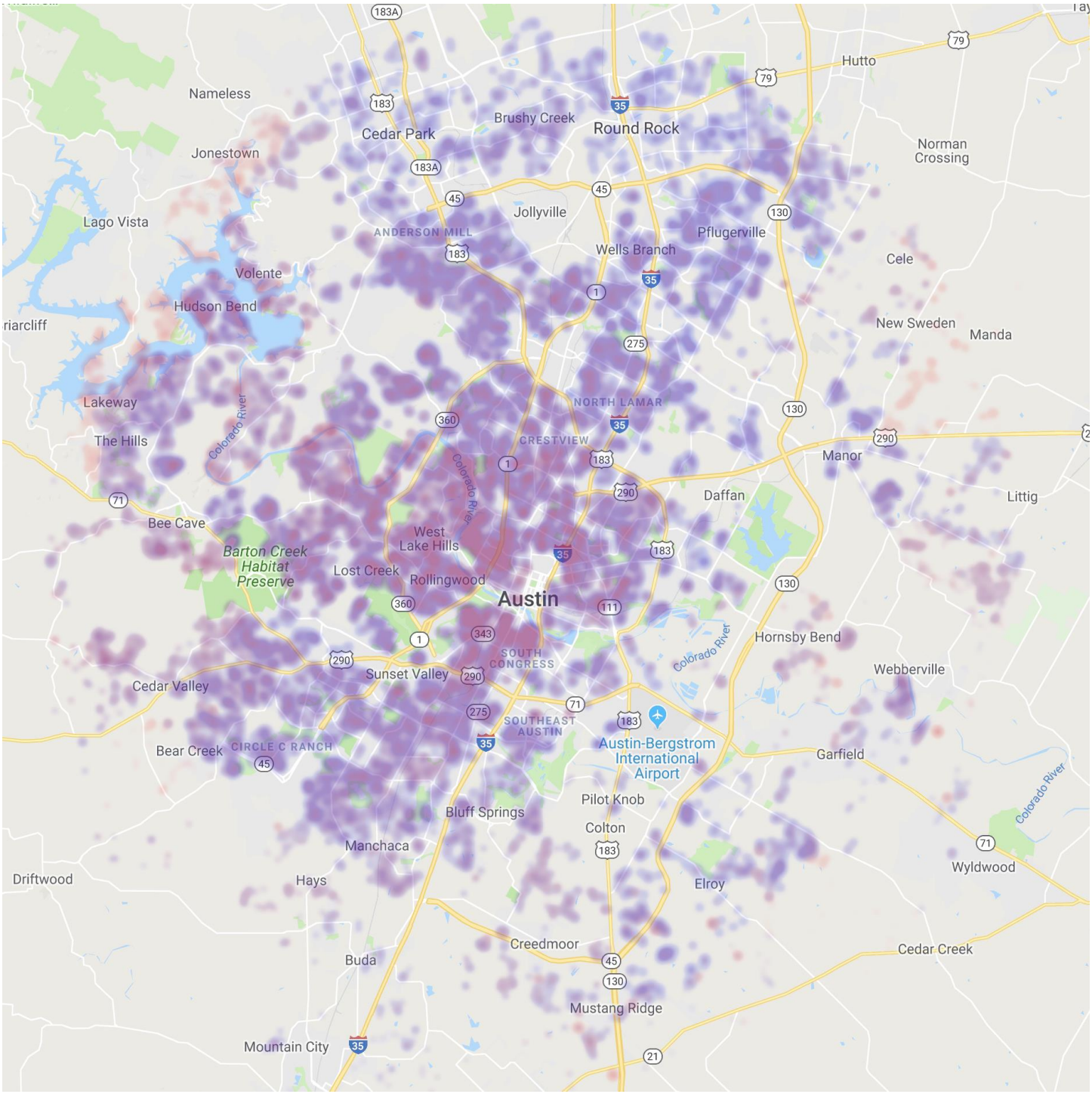
How does Commute Time vary based on location?

The commute times generally follow the expected trend with shorter commute times (in darker blue) being found at the center of town and longer commute times (in lighter blue) being found as you move away from town. There are significant exceptions. Several areas like southwest Austin and Round Rock have grown in terms of nearby jobs with large companies setting up offices due to greater availability of space and lower operational costs. People who work for those companies may be relocating to these areas to reduce their commute time.



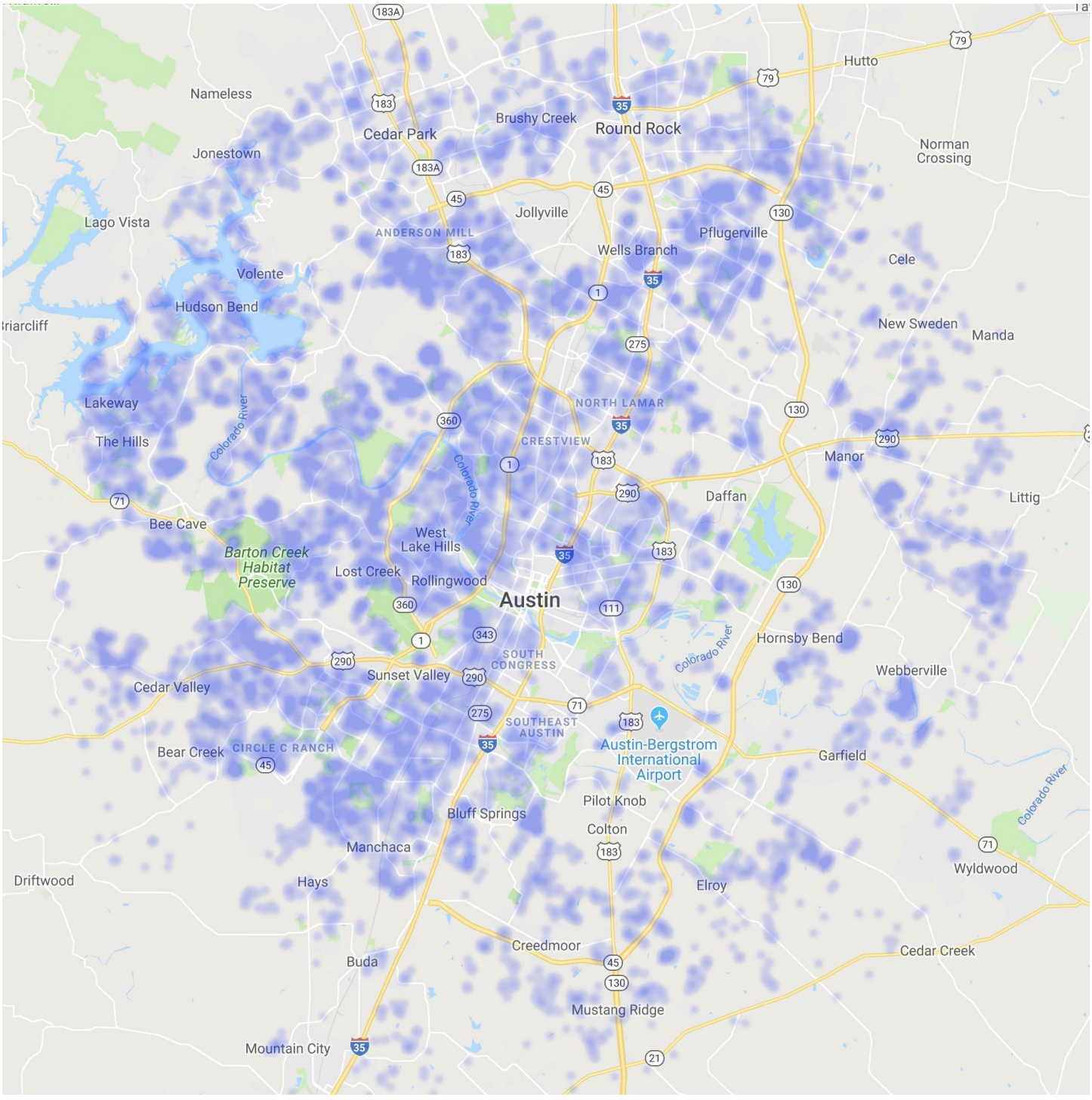
What effect does Commute Time have on Value Per Square Foot?

The visual shows that properties generally have higher value where there are shorter commute times. These areas show up as purple on our heatmap where the value represented in red overlaps with the commutes represented in blue. There are a few notable exceptions. On the northwest side of Lake Travis, there are higher property values although commute times from there are quite long. This shows up as a red region on the map because there are high property values represented in red, without corresponding low commute times which would be represented in blue. These properties are desirable because of the waterfront location and may be held as second, recreational homes, or by people who are retired or work from home. In Round Rock, commute times are generally reported as low, however property values are not particularly high. This may be due to distance from other amenities such as those offered in downtown Austin.



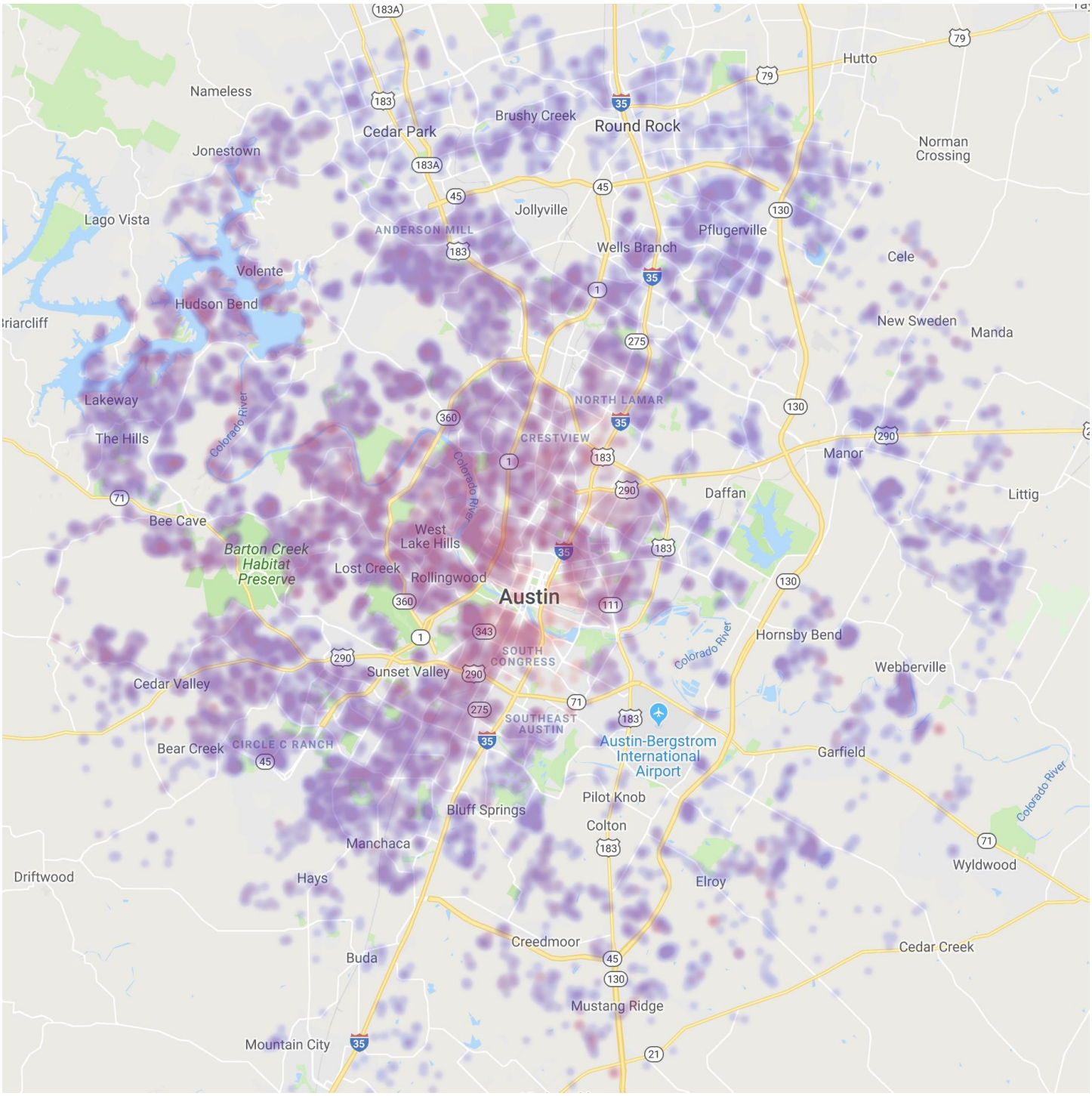
How does Safety Score vary based on location?

Safety (the inverse of crime intensity data) is generally high across all data points measured, with the notable exception of downtown Austin and areas immediately east of downtown. Those familiar with Austin will not be surprised with these results.



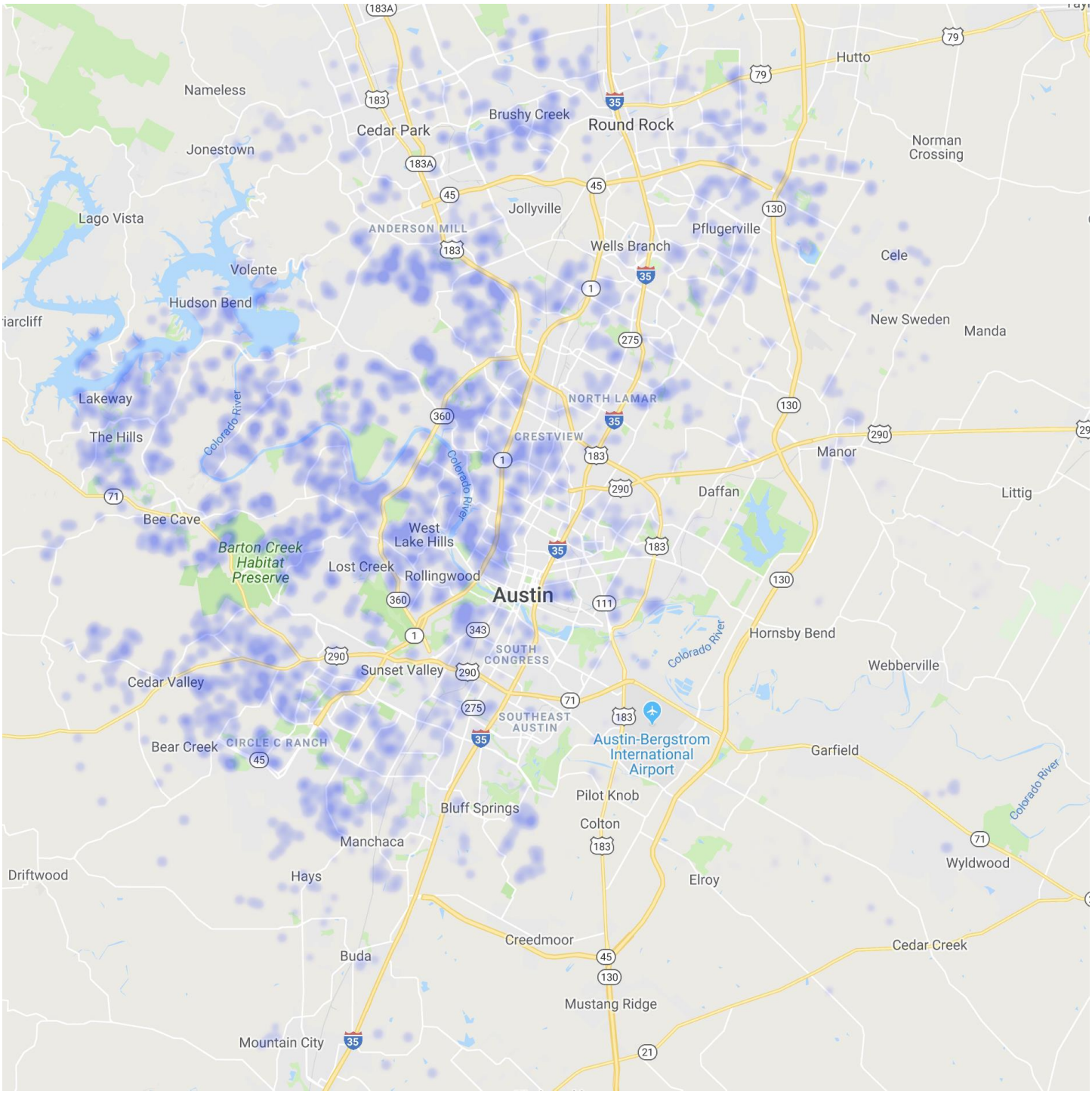
What effect does Safety Score have on Value Per Square Foot?

The predominance of purple (where safety and property values correlate) confirms that generally people will pay more to live in safer areas. Again, we see a notable exception: downtown Austin has higher values – shown in red – although there is an absence of safety – shown in blue, leaving the area red on the visual. This may be due to people being willing to overlook a reduction in safety to obtain proximity to work and other amenities.



How does School Score vary based on location?

This visual stands out from the others as it has the strongest bias east versus west along the I-35 corridor that we have not seen in other factors we have analyzed. Historically, the population of Austin has been concentrated on the west side of town and that is where we find the school scores higher. On east side of our analysis area, the school scores are much lower. This area has historically been more rural and as it has developed it has been largely racially segregated.



What effect does School Score have on Value Per Square Foot?

Interestingly, there is less of a correlation between property value with school scores. On the west side of Lake Travis, there are high property values with low school scores. This effect would fit with our earlier theory that this area includes a high number of second recreational homes and retirees, but may also be due to children being sent to private schools of which we did not have school rating data. On the east side of town, we also see higher property values although the schools do not score well. It could be that because population and price pressures are driving development in the east, those neighborhoods are newer and the influx of more affluent residents and resulting property taxes has not yet had time to improve the quality of schools.