

# A Comparative Profile of Education in Grays Harbor County

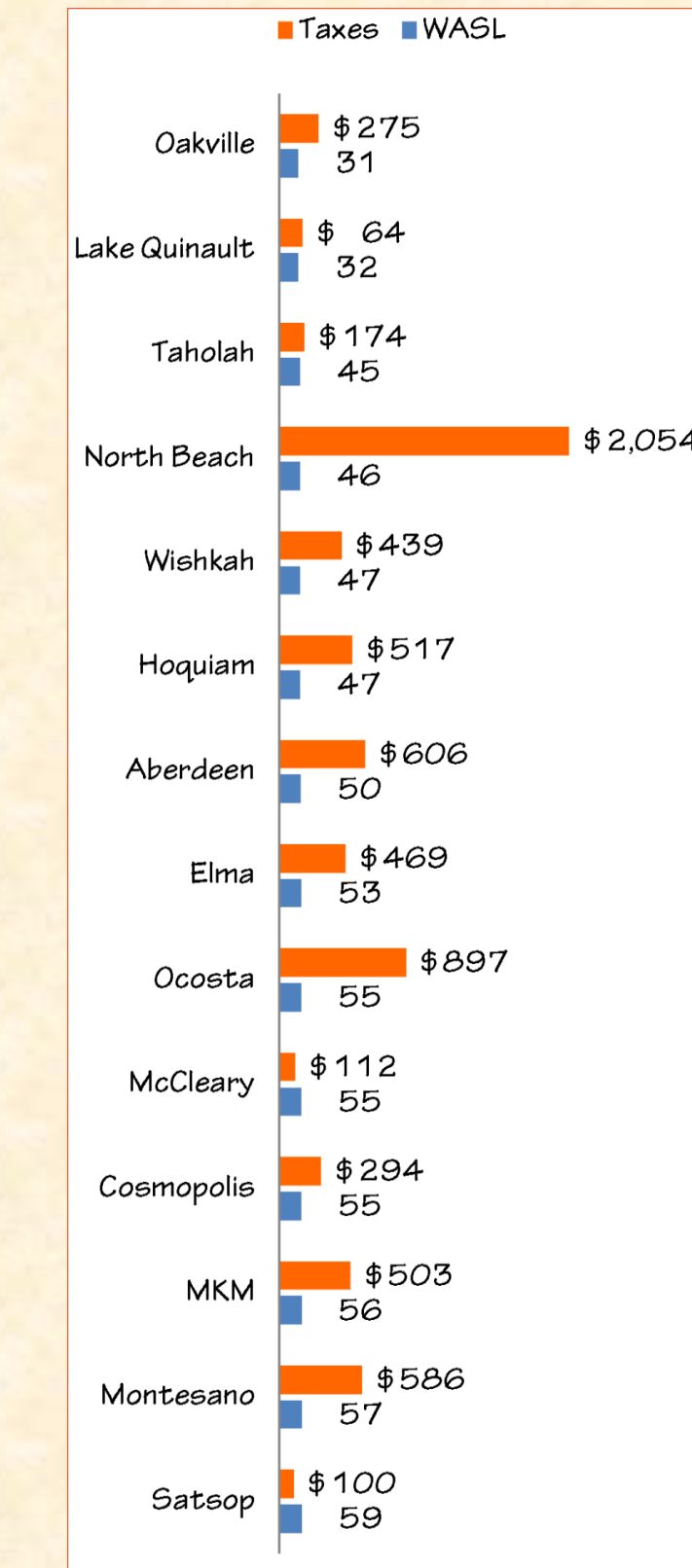
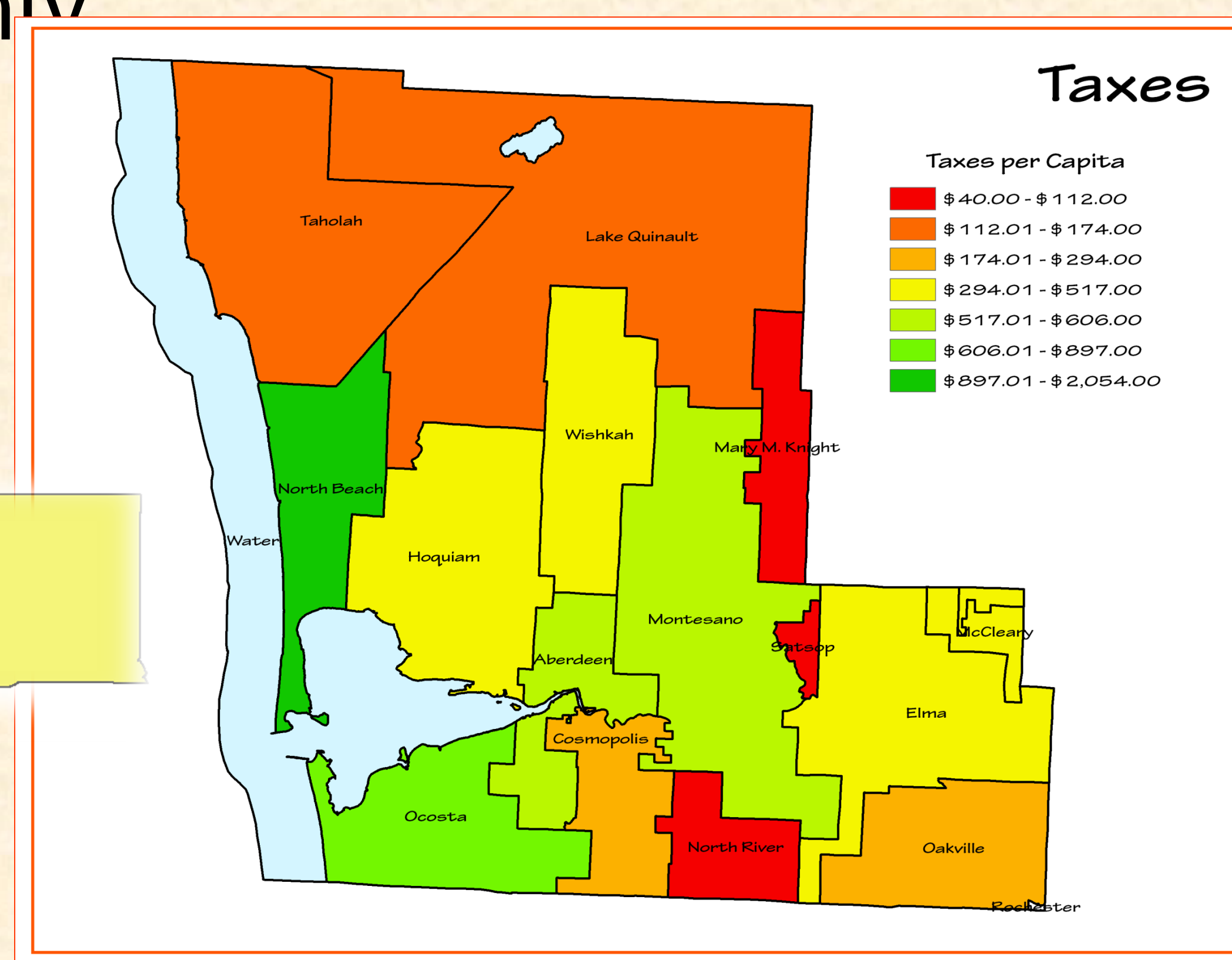
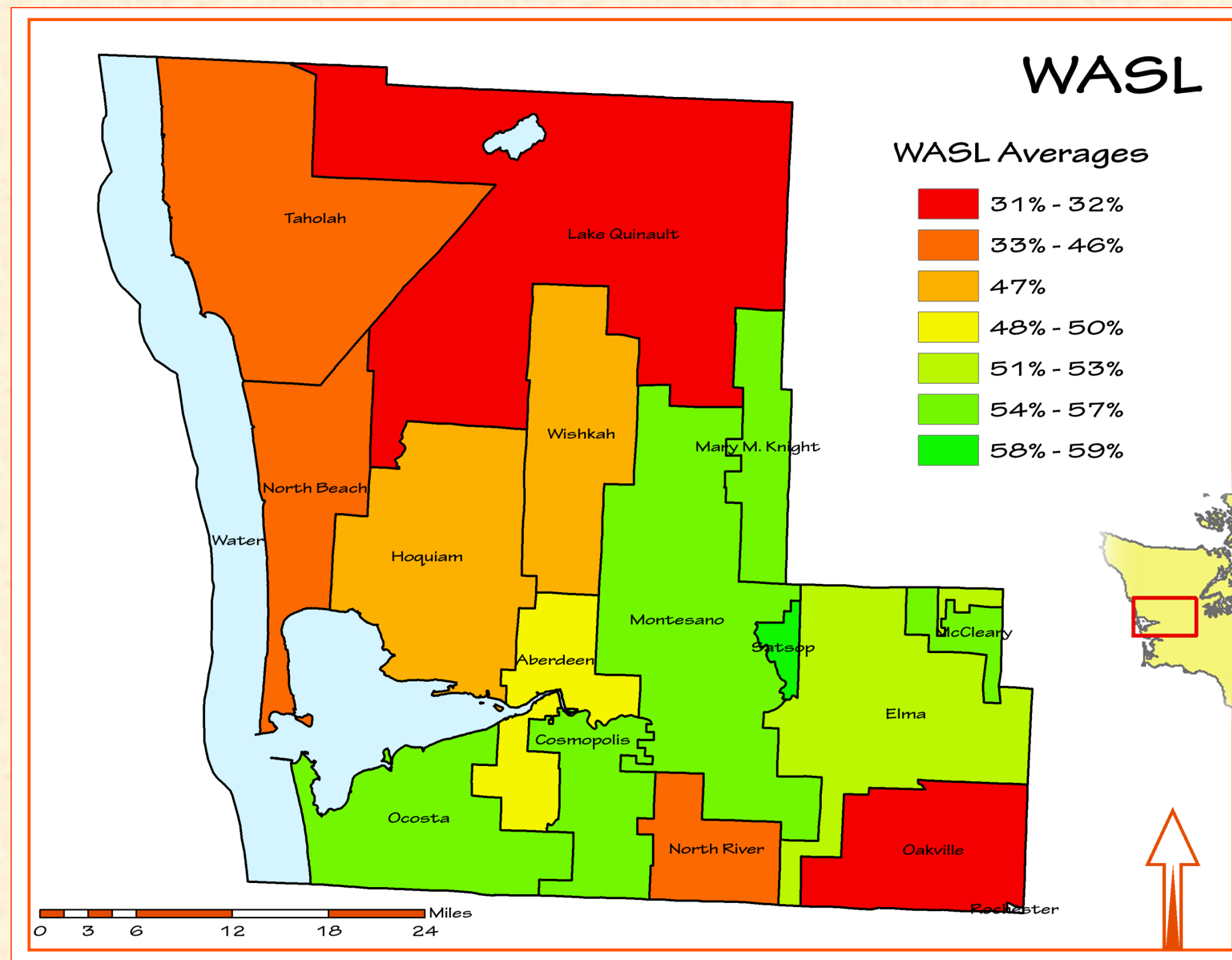
## MOTIVATION:

I have always had a sense of the importance of education. This year, our educational system faces huge budgetary challenges. I wanted to take a look at the correlation between the amount of property tax money that is paid to the school districts of Grays Harbor County. Do the wealthier communities provide their children with a better education?

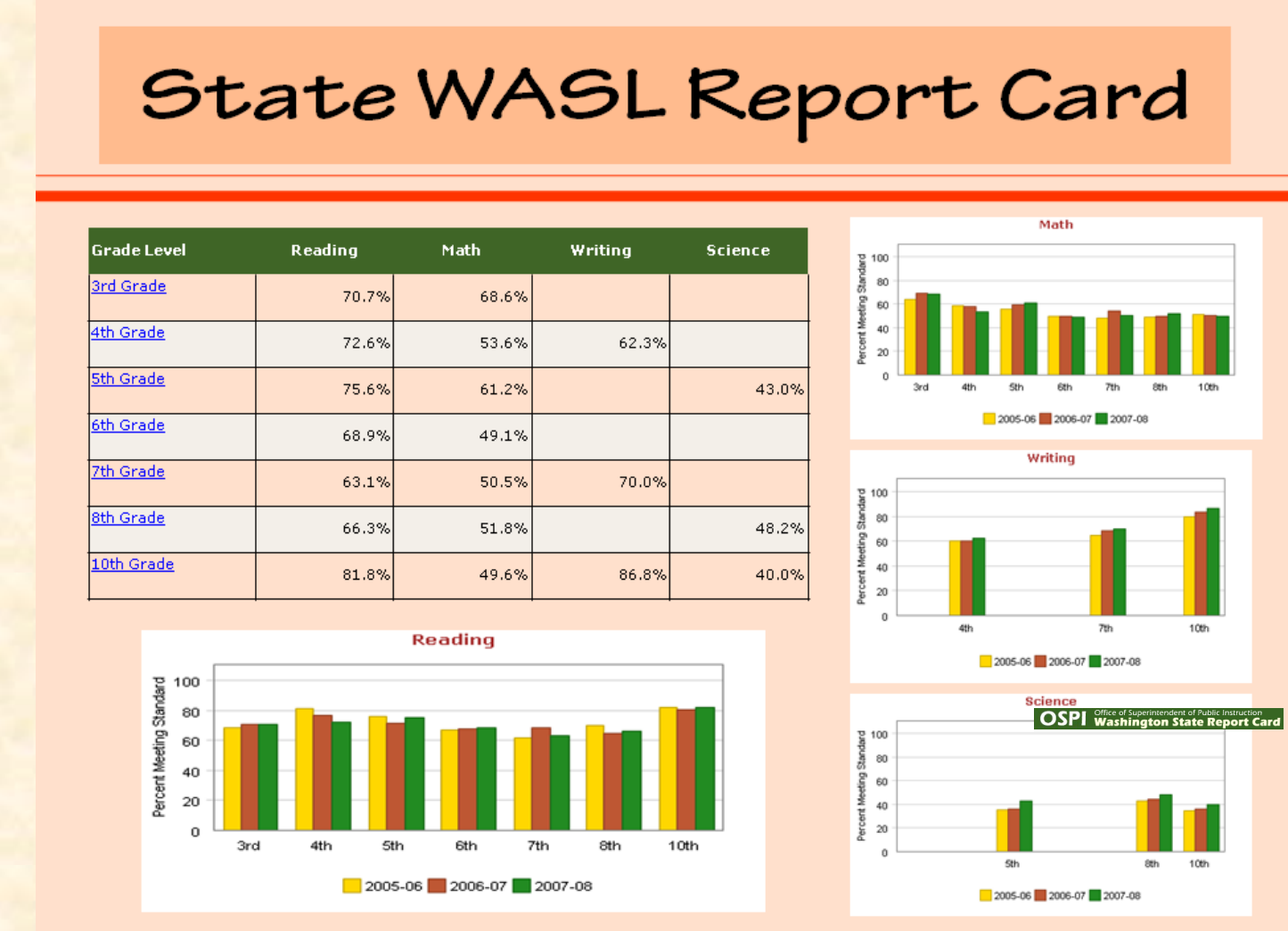
## EDUCATION:

How to judge education? It could be quantified by the number of kids that graduate high school. The number of people to go on and succeed in higher education, or the number of people to use the public library might also serve as an indication of the quality of education in the area.

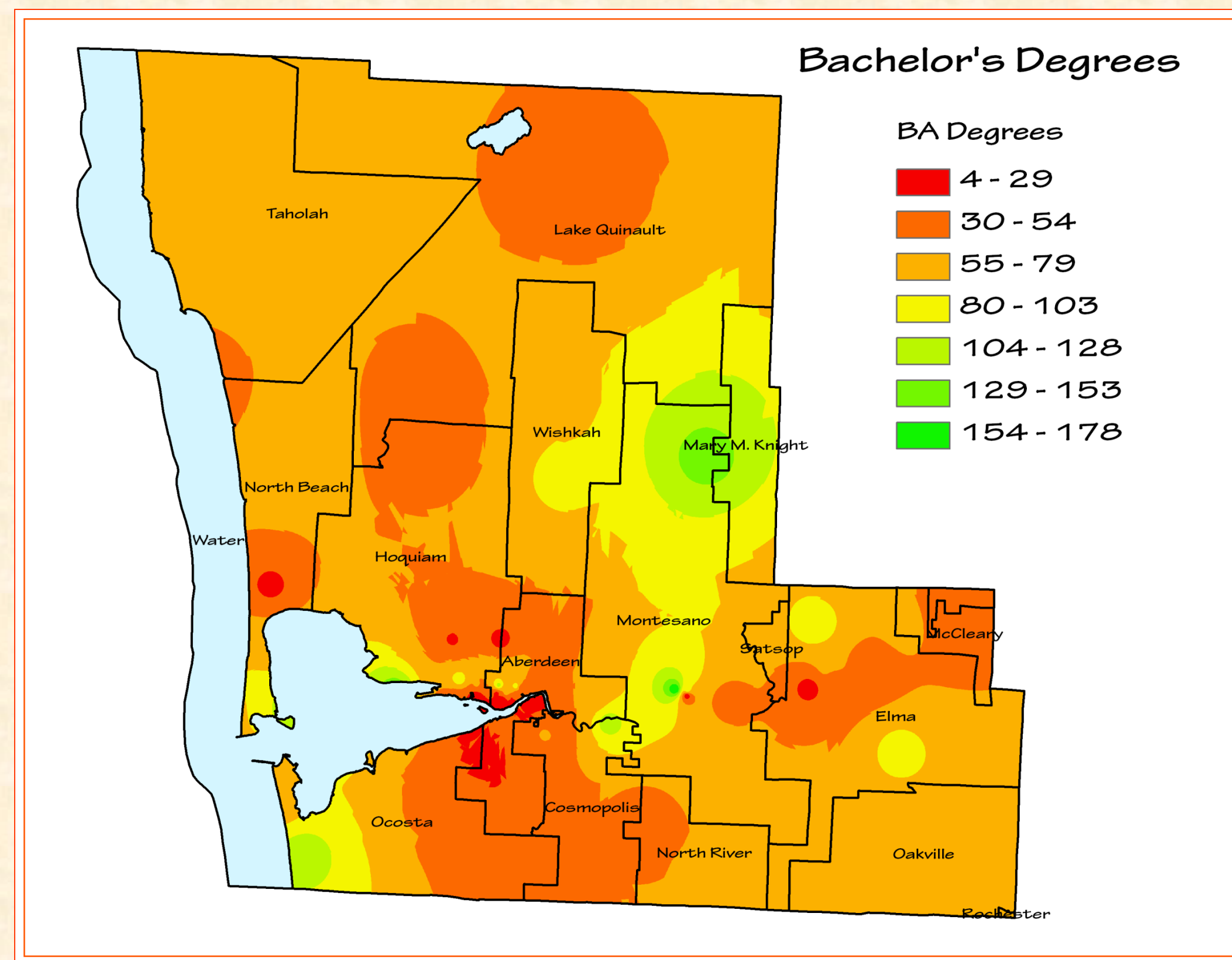
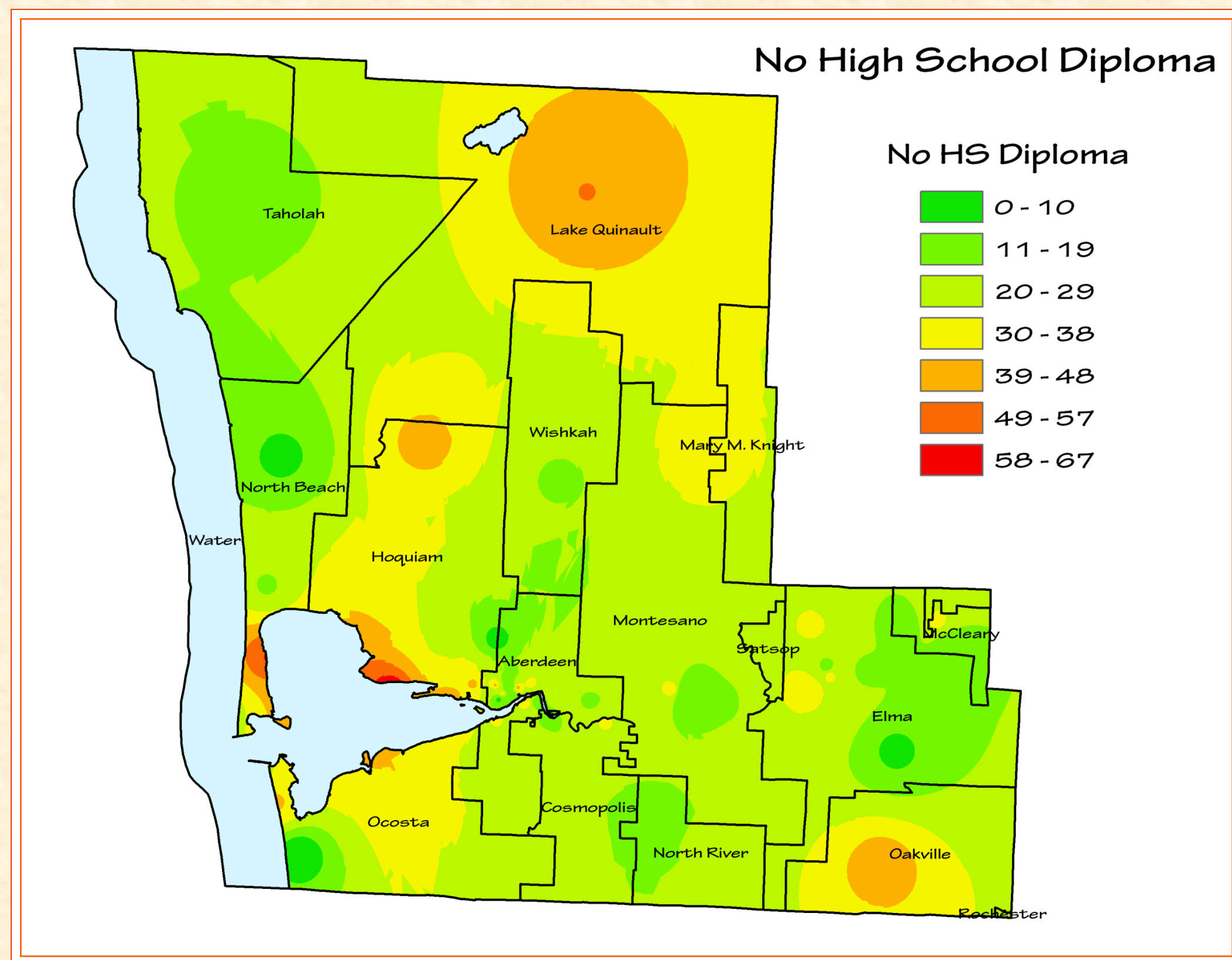
In Washington our kids have been subjected to standardized testing. The WASL. Regardless of merits of the test itself, it is still the only measure of students in our state.



No Correlation Found. According to my data, there is no correlation between the amount of taxes paid for education and the WASL average test results. While this is surprising it suggests that money is not the key to a better education. There must be another, and more significant variable as yet undetermined. The tax information for my data came from the Grays Harbor County Tax Assessor's Office. There was no explanation for high taxes in the North Beach school district. There is also no explanation for missing WASL data in the North River school district.



These are the average scores for the entire state. Washington's students are tested in four areas; reading, math, writing and science. The testing schedule varies from grade to grade and it is not until the 10<sup>th</sup> grade that students are tested in all four categories in a single year.

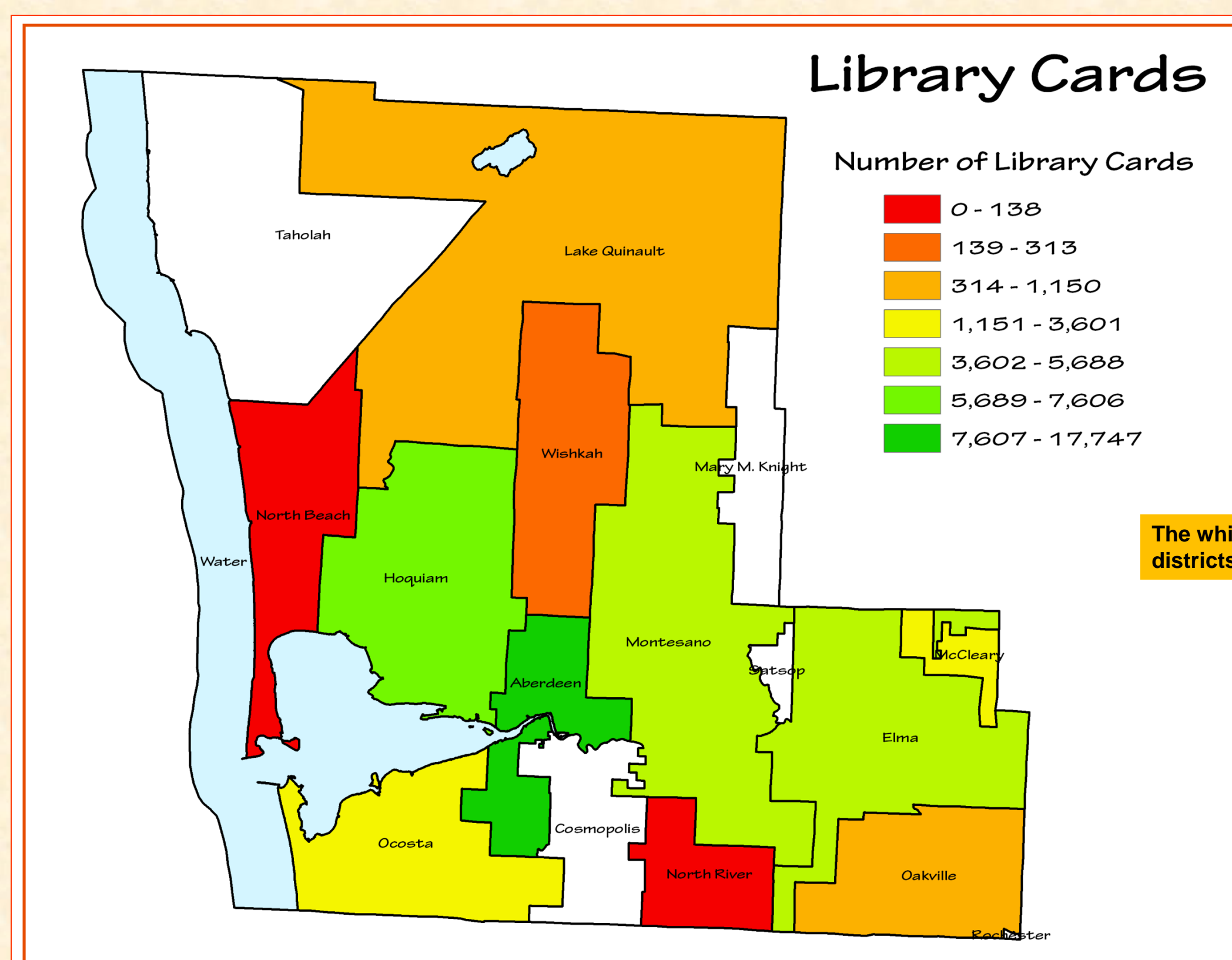


Degree or Not Degree. The results of these interpolated maps indicates contradictions. The area in north Montesano and over into Mary M. Knight school district shows both high rate of college achievement and also a relatively high drop out rate. Other areas are sadly in harmony, as in the Lake Quinault school district. The areas along the water in Hoquiam and the southern part of North Beach school district have the most people that do not have a high school diploma. While the Montesano school district has the highest number of Bachelor degrees in the county.

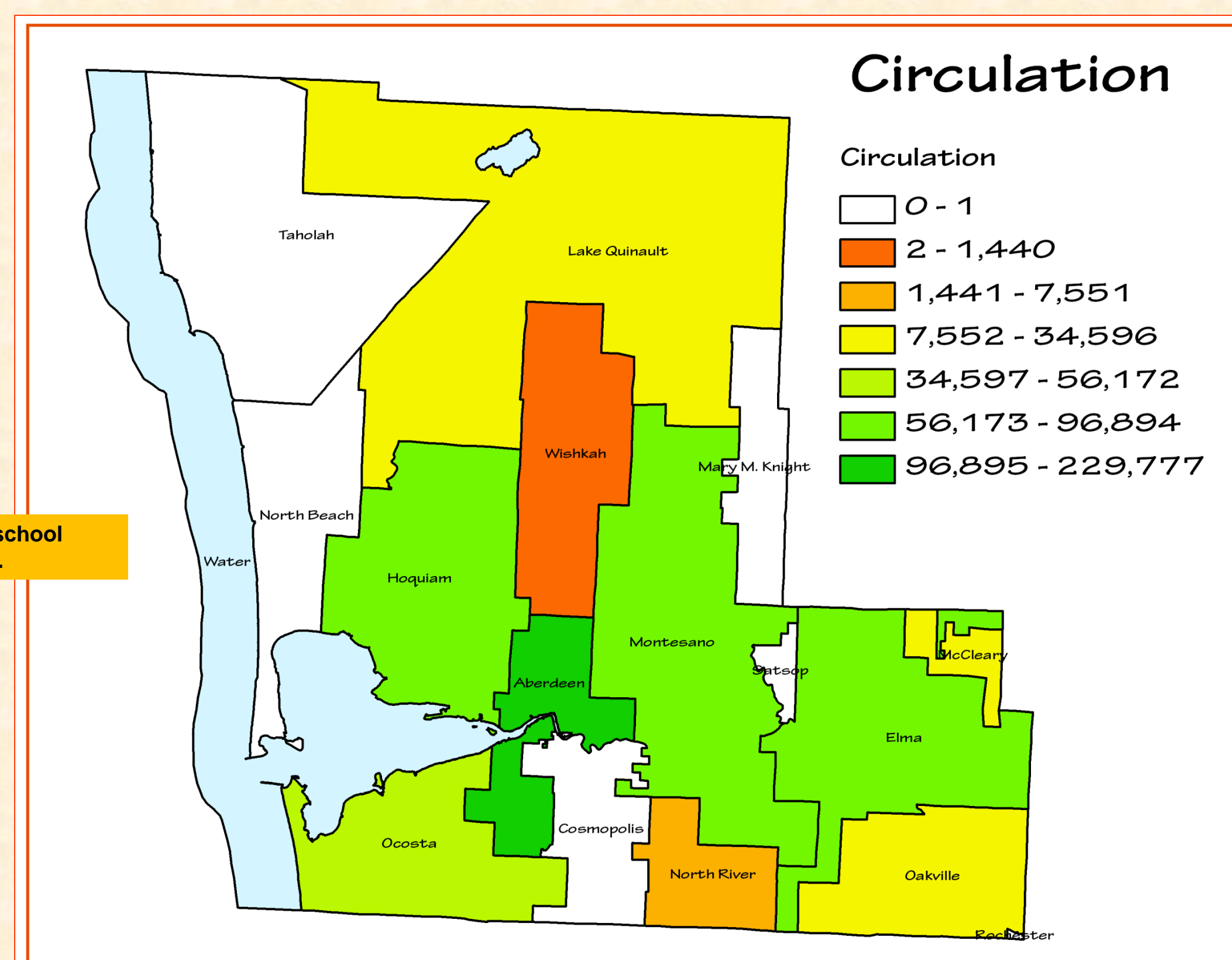
Layout: I chose these colors because they are bright and bold. I feel the simple representation is better in this instance. The idea is to convey the findings in a way that is easily deciphered. The font is easy to read but not standard.

## PROCESSES:

I created a geo-database and dataset with the correct projection, and added my data. As with any GIS project, collecting data and making it usable is at least half the battle. I had block group data and 15 school district boundaries that had to be clipped to separate the values for each district. Another truth about GIS is that if you don't do something right the first time it's very hard to correct it. I should have finished clipping by attaching the percentage of values to the correct school district. Once that was complete I was able to continue with the correct values and a population for each district. I converted data from the census on education statistics to a continuous surface raster and then interpolated. This gave me the two maps in the middle of the page.



The white areas signify the school districts that have no library.



My comparison of the statistics from the Timberland Regional Library and the WASL averages proved to be a lesson in contradiction. Five of the school districts did not have a branch library. The Aberdeen library is the largest and serves the entire county. The town of Satsop does not have a library at all and they top the WASL scores for the county.

SUMMATION: I learned more from the process than I did from the project. Planning and time management really need to be adhered to, especially with a long term event. GIS requires a lot of patience, perseverance and determination. If you don't understand something there is nothing to do but keep trying. I believe my proposal was flawed from the beginning. If I had taken a deeper look at what these variables really said about education, I would have continued to search for data that could have told the story better. As a first dalliance into the world of GIS I learned many lessons and next time I will do it all differently.

Acknowledgements: I would like to thank Mr. Wade Reuther of the Grays Harbor County GIS Office. Without his assistance my task would have been far more arduous. I also must thank Dr. Matthew Kelley for his unyielding patience and support.

SOURCES: Grays Harbor County: Wade Reuther, GIS Coordinator; Tax Assessor; Auditor. Timberland Regional Library. The Census Bureau.

What would I do differently? It would be interesting to try to add a student perspective. I could add a survey of a sample from each school district and try to determine their perspective on the quality of education in Grays Harbor County. Another research direction could be to look at poverty rates and early childhood education, Pre-K and earlier, to see if the scores are higher where the amount of kids that have access to these services.

Anecdote: The WASL averages are lowest when it comes to science. The state average is only 40% proficiency. While going over the data I noticed that McCleary School had a score of 68% for the 8<sup>th</sup> graders. Since that is such a substantial difference I asked a friend who has two sons in the school. "Oh, that's Mr. Patterson. He's fabulous!" Which sums up my findings; a quality teacher can go a lot farther than a pile of money. Therefore, it may be wise to throw the pile of money at the teachers to encourage the best ones to continue what they are doing.