Oyster River Cooperative School District School Board

Long Range Planning Committee (LRPC)

2/8/2021, 7 pm via Zoom

Meeting Minutes

Committee Members Present: Katrin Kasper, Giana Gelsey, Robert Mohr, David Taylor, Heather Smith

School Board Representative Present: Denise Day

The meeting was called to order at 7:15 pm.

Robert Mohr presented a summation of the linear regression model. Please see the attached Powerpoint presentation for reference of material covered.

Initial discussion included the origin of the LRPC decades ago. LRPC was initially formed to understand growth and enrollment for ORHS, particularly in developing the ORHS tuition model with Barrington, as the predictions showed that ORHS has space for additional students. The original LRPC also occurred before the addition of Moharimet.

The current tuition agreement with Barrington is for 10 years; this is the 8th year.

A summary of the model was presented by Robert Mohr (please see attached slides):

The regression model, which is functionally fitting at trendline to data, is easy to generalize methodologies, and can have multiple explanations and variables added. It works well when the data is over a long period, and when the housing sales/local development is stable and constant. Errors are created by housing booms and events like COVID19. Another advantage is that the model is easy to run using a MS Excel; specialized software is not necessary.

Statistics are not used on current model, i.e. standard error and variance; it was suggested that 1st and 2nd standard deviations should be assessed. Model assumes standard/normal distribution; could also try assuming t-distribution to see if better fit.

As discussed in prior meeting, the model becomes more inaccurate up to 5 years, and then errors dissipate (upside down U-shaped curve). The reason for this is unclear.

The model is a linear egression for K-1, which is developed from birth data 5-6 years prior, known as lagged births. Cohort survival/grade progression ratio is used thereafter. The main flex points in the model are K, 1, 5, and 9th grade. It is unclear at this time whether K or 1 should be used moving forward, as full time kindergarten has not existed for many years, plus the fact that COVID19 has affected school enrollment. There has been a general trend downward for births since approximately 1990. There was some discussion on whether data prior to 1990 should be excluded from the model moving forward. The model has some issues projecting forward, as that necessitates predicting birth 4 years ahead, for example, to get at an estimate 10 years into the future.

The model was originally developed by Michael Goldberg. At the time, as described by David Taylor, investigations into what coefficients affected the model were quite exhaustive. Interestingly, housing data from housing starts had a negligibly small effect, and were excluded from the model.

Moving forward:

The committee will look into applying statistical methodology including t-distribution and standard errors to the model.

Years ago, there was a head tax that supplied excellent data on number of children per household. Now, it is hard to access that data. Suggestions for accessing that data include the kindergarten registrations submitted to elementary principals, which include sibling data. In addition, Powerschool may provide that data. Discussion was made accessing that data, and possibly including more questions in it to derive information about siblings who are not yet of school age.

The next meeting will hopefully be on the ORCSD's MS Teams system, as incorporating LRPC data onto the server is a work in progress.

Next meeting was declared for March 1, 2021.

Meeting adjourned at 8:15 PM.

Minutes submitted by Giana Gelsey