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Addressing Vermont Childhood Obesity Through Public Policy: Scoring Vermont Supervisory Union Wellness Policies Using the WellSAT Assessment Tool

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Introduction

In Vermont, 15% of youth ages 10-17 are obese – a 3% increase over the last two years and the highest amongst New England states.¹ Over half of students in the state are enrolled in school lunch programs, with some students relying on school meals for nearly half of their daily nutrition.²

In response to increasing obesity rates, the Child Nutrition and WIC Reauthorization Act of 2004, and the Healthy, Hunger-Free Kids Act of 2010, established the Local School Wellness Policy requirement which requires that each local educational agency participating in the National School Lunch Program and/or School Breakfast Program develop a local school wellness and nutrition policy that promotes the health of students and addresses this growing epidemic.

The WellSAT is a quantitative assessment tool to help score and improve these local School Wellness Policies and helps identify areas of strength and areas for improvement.³ In 1990, the Centers for Disease Control and Prevention developed the Youth Risk Behavior Survey (YRBS) to monitor priority health risk behaviors that contribute to the leading causes of death, disease, injury and social problems among youth.⁴

PROJECT GOAL: To score district wellness policies using the WellSAT tool and to analyze 2017 Vermont YRBS data to gain an understanding of factors contributing to Vermont's childhood obesity rates.

Methods

Wellness policies from 49 supervisory unions were collected and analyzed by strength and comprehensiveness using the established online Wellness School Assessment Tool (WellSAT) according to WellSAT guidelines.⁵

All wellness policies were assessed independently by two separate team members and the WellSAT scores were then averaged. If there was a discrepancy of >10 points in either category the WellSAT assessment was repeated by both parties together to give the final score.

Wellness scores were compared to reported obesity rates and amount of exercise from the Youth Risk Behavior Survey 2017.

Results

Figure 1

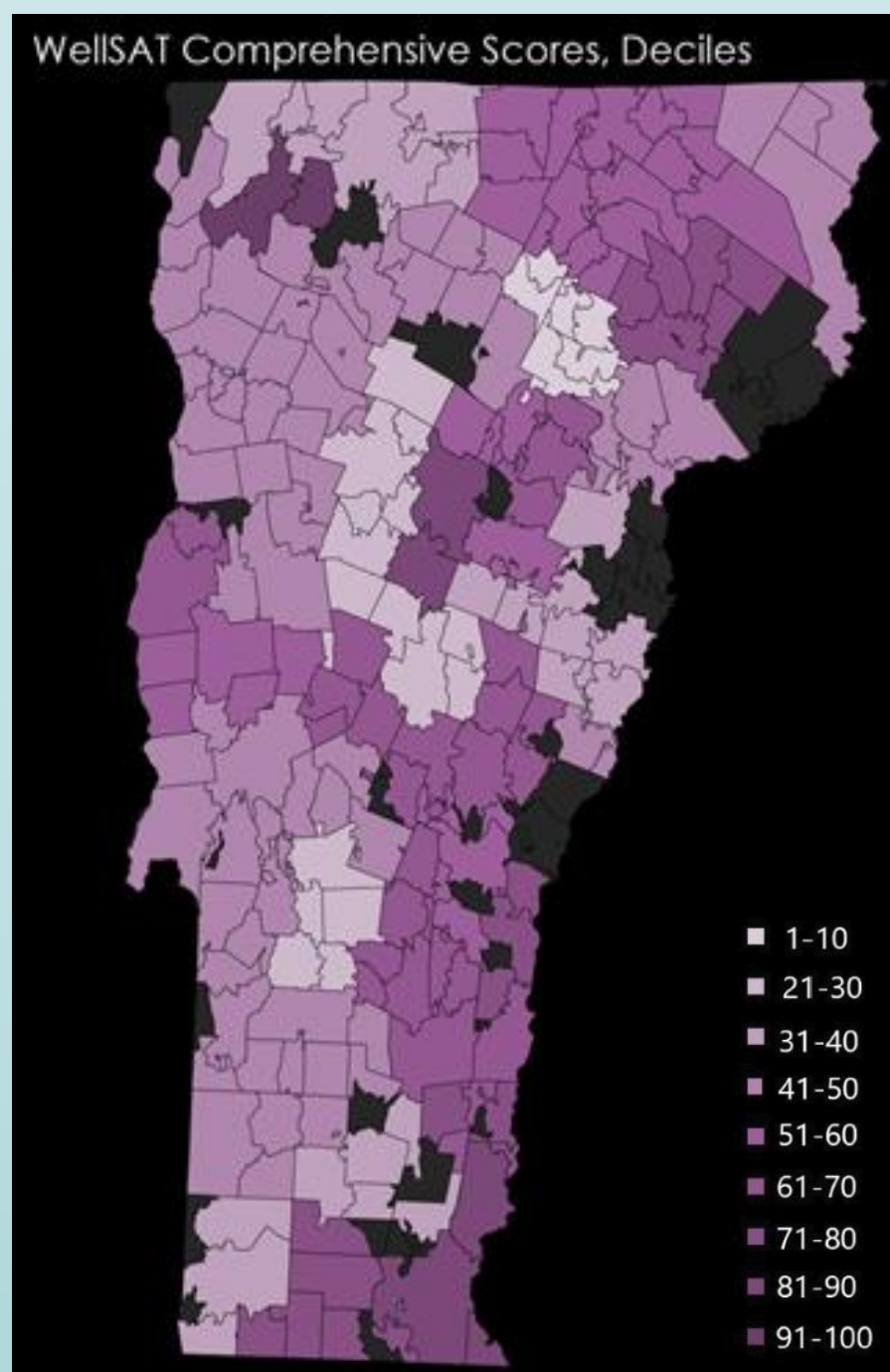


Figure 2

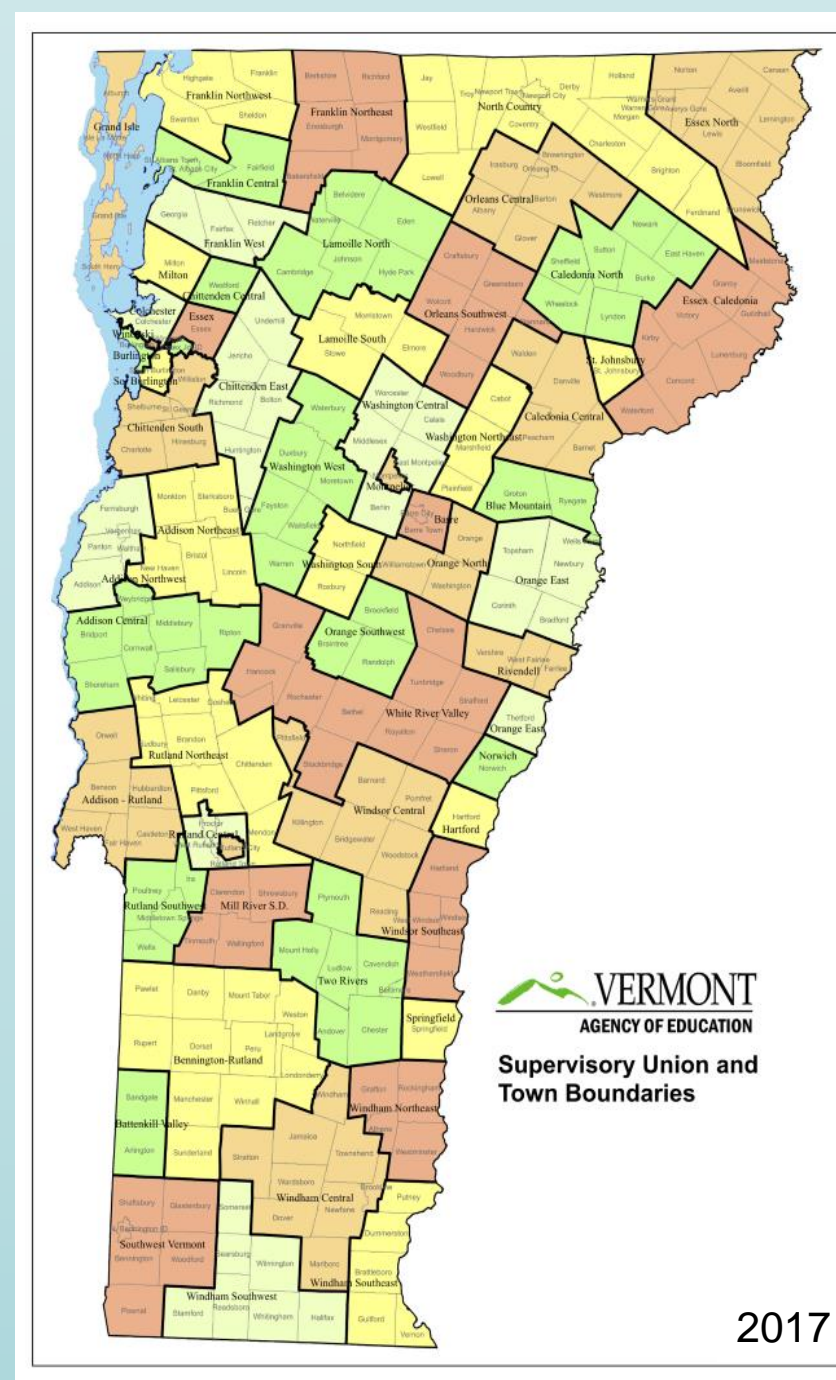
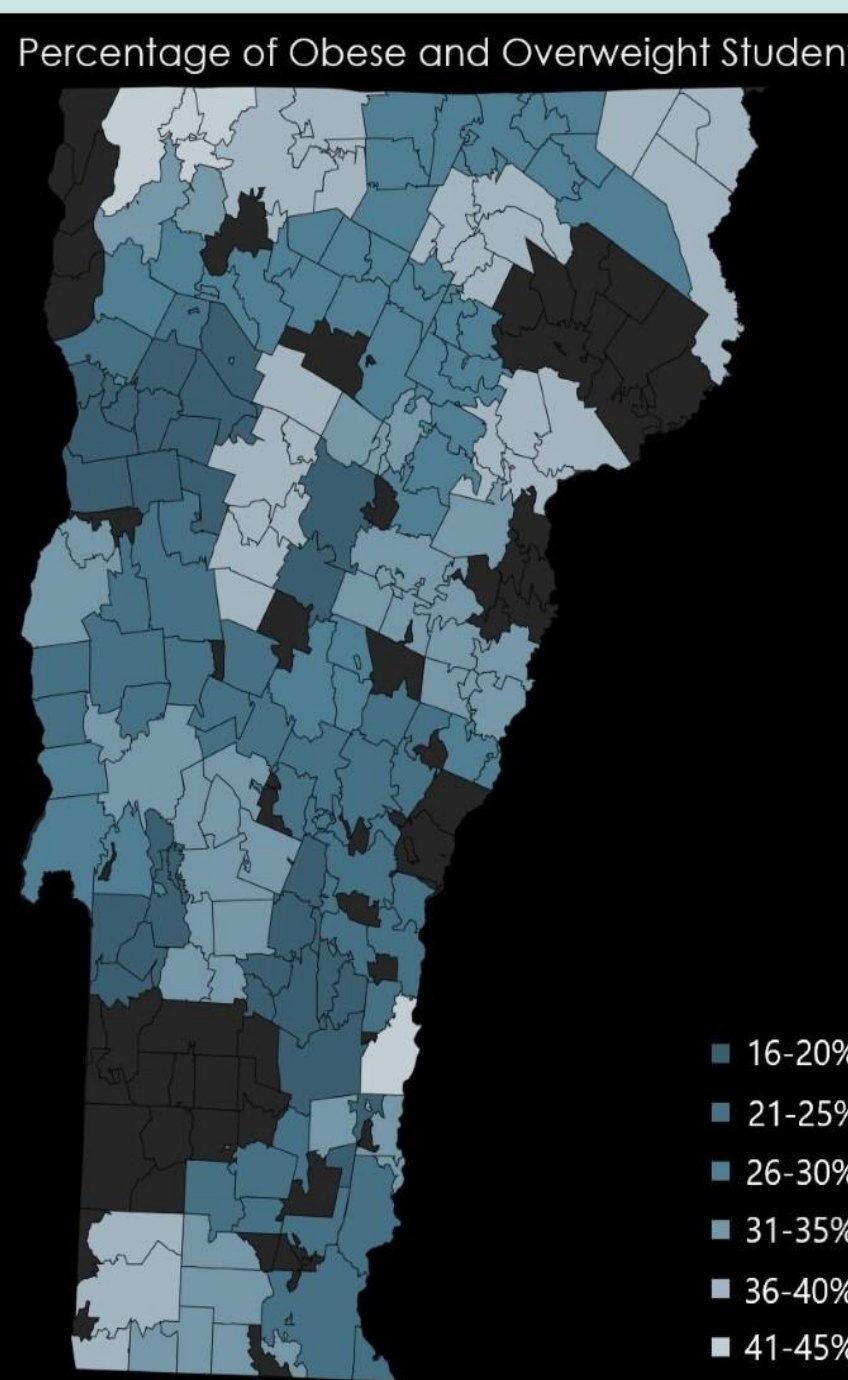
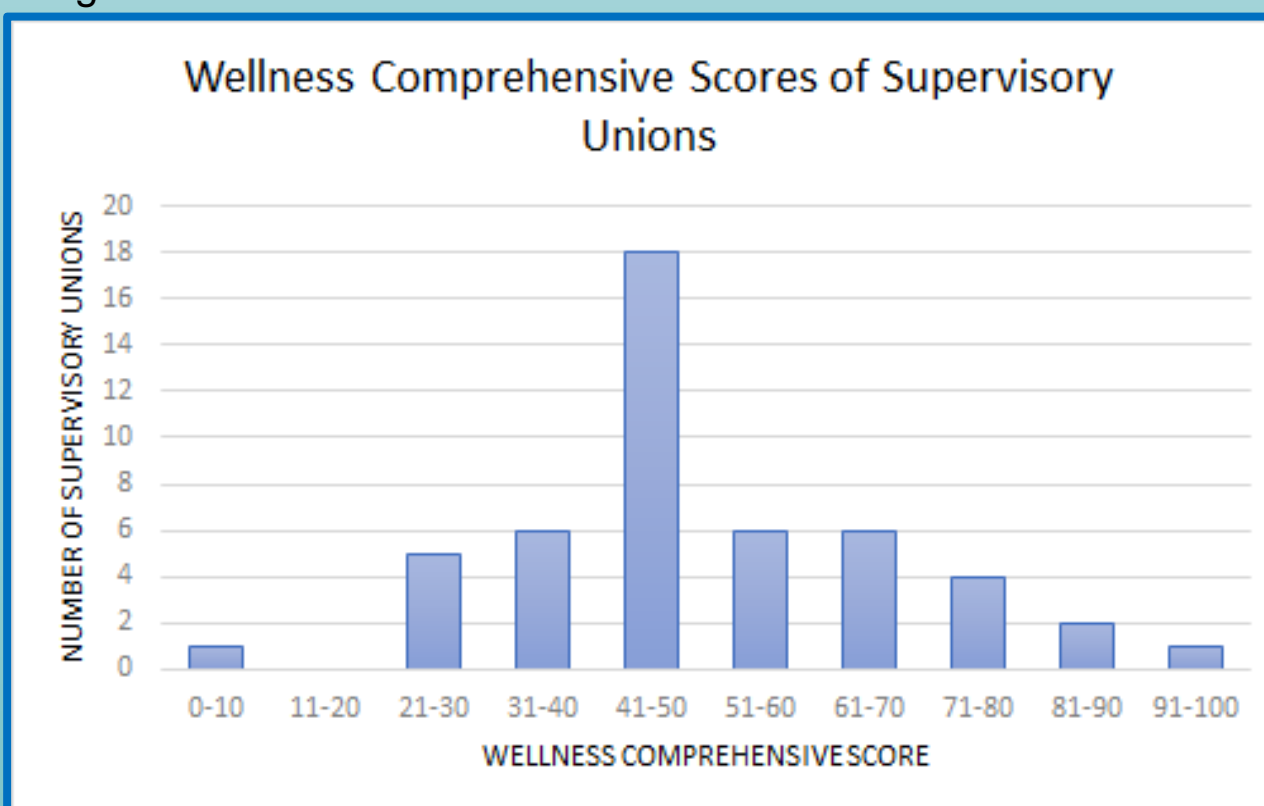


Figure 3



Heat maps of WellSAT Comprehensive Scores (Figure 1), self-reported Obesity and Overweight rates in children K-12 (Figure 3), and Supervisory Union boundaries (Figure 2). Blacked out regions on the maps indicate a lack of available data.

Figure 4



As reported by WellSAT, a 2018 national sample estimated an average comprehensiveness score of 54.⁵ Of the 49 Supervisory Union's Wellness Policies in Vermont that we scored, 35 (71.4%) are below the national average, and 14 (28.6%) are above.

Limitations

- We analyzed 49 out of 54 Vermont supervisory union wellness policies (omitted were not publicly available).
- Discrepancies in scoring among graders following the WellSAT guidelines, limited by blinded scoring by two different graders for each policy.
- Youth Risk Behavior data is based on self-reported responses.
- Survey responses were very limited and too few to give statewide conclusions regarding any of the questions asked.
- Youth Risk Behavior Survey data in 2017 may not represent current wellness policies.

Discussion

Given the current trends in youth health outcomes in Vermont, there is an urgent need for intervention.¹ Implementation of comprehensive school wellness policies is a powerful way for educational agencies to promote health and wellness. Evidence shows school wellness policies have been found to impact calories consumed and expended by kids and their weight and BMI.^{6,7}

Vermont school district and supervisory union wellness policies vary widely in their comprehensiveness and strength, as assessed by the WellSAT tool. Over 70% of Vermont policies fell below the estimated national average, highlighting the importance of statewide intervention.⁵

Improvement of school wellness policies should focus on areas such as on-site marketing, requirements for nutrition and physical activity education, and promotion of healthy lifestyles amongst students, staff and community members. Many of the wellness policy measurements are currently lacking under the federal model wellness policy – one that many supervisory unions use as a basis for their specific policies.

The timeline of specific policy implementation limits our ability to draw direct connections between current WellSAT scores and 2017 Youth Risk Behavior Survey (YRBS) data, but we hope that this project can lay a groundwork for analysis of future YRBS information. Specifically, we hope to find a connection between quality of wellness policy scores and reductions in childhood overweight/obesity rates.

We posit that improved wellness policy quality and implementation will impact a positive shift in Vermont health culture and that an increased emphasis on nutrition and physical education will equip Vermont youth with tools to embrace a healthy and active lifestyle.

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