OVERVIEW
Rising obesity rates among U.S. school children represent a considerable public health risk. Two of the most commonly cited causes for the increased rates are decreased physical activity and high calorie/poor nutrient diets. This poster demonstrates how spatial analysis may be used to inform policy around the city’s response to the obesity crisis.

OBJECTIVE
GIS was used to assess three factors of neighborhood health for each of Boston’s 35 high schools. Using a 400 meter buffer, each school was scored by a ratio of walkability, acres of public open space and concentration of fast food restaurants. Walkability and quantity of open space are identified as two characteristics that promote physical activity. Concentration of fast food restaurants is identified as a deterrent to healthy meal options.

Street Score | Acres Score | Fast Food Score
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1 - 15.5 - 27.2% | 1 - <10 acres | 1 = 7-8 businesses
2 - 27.3 - 48.2 | 2 - 10 - 21 | 2 = 3-6
3 - 48.2 - 52.2 | 3 - 22 - 37 | 3 = 1-2
4 - 52.3 - 61.1 | 4 - 28 - 64 | 4 = 0

Conclusion
Using three criteria to assess community health around Boston’s public high schools provides interesting information about the characteristics of each school. While walkability, amount of open space and concentration of fast food restaurants do not cover all aspects of community health. It is useful to see how GIS analysis may be used as a tool for public health officials, planners, politicians and educators when developing strategies to address the growing rate of obesity among youth.