

4.1) INSTRUCTOR'S GUIDE TO QUANTIFYING URBAN SPRAWL

Overview: This main objective of this exercise is to generate scores that show relative differences in sprawl. The “walking distances” are based on straight lines (as the crow flies) because measuring every road is very time-consuming. The method used on this exercise is a compromise that allows walking distances to numerous locations to be roughly estimated within a reasonable period of time.

Lack of diversity in sprawl scores can be a problem if all the students live in the same area. You might address this problem by asking students who have lived somewhere else to use their former areas instead of their current address. It is ideal if the sprawling and traditional neighborhoods are in places that all the students have visited. To satisfy this requirement you might have to pick a nearby traditional-style town that most of the students know and create the map yourself (based on a residence you randomly picked) so that the students have something for comparison.

You may want to compare this with other methods for scoring walkability online such as www.walkscore.com

Answers to Questions: 1-6 Answers will vary. 7) Shops, entertainment and jobs within walking distance, better public transportation, ... 8) Cheaper housing, more parking space, lower crime (in some instances), less traffic in front of residences (in some cases), etc. 9) Answers will vary.

Logistics: Students should work individually on this assignment, but first get a list of places they choose to evaluate so you can make adjustments to the list if the sprawl scores are too similar.

Degree of Difficulty: 1—This assignment is more enjoyable to do during class but it can easily be completed online.