APPENDIX G:
Transportation and health

The United States currently faces an obesity crisis, with 35.7% of adults being obese in 2009-2010; in addition, 17% of all children and adolescents are obese, according to the CDC. In 2007, only 53.6% of Washington residents met the recommended physical activity guidelines of moderate-intense activity 30 minutes a day, five days a week\(^1\). Using a bicycle or walking for transportation trips is a good way to incorporate physical activity into one’s day. A 150 pound person will burn 500 calories per hour when bicycling at a speed of 10-12 mph; they will also burn 230 calories while walking at a moderate pace of 3 miles per hour. Studies have shown that a new bicycle commuter will lose an average of 10 pounds in their first year of commuting.

The transportation system can affect resident’s health through pollution and mobility.

Pollution

Motor vehicles emit pollutants such as carbon dioxide and hydrocarbons; these degrade air and water quality. Residents who live within 330 feet of a major highway are exposed to higher levels of air and noise pollution, compared to those who do not live within this boundary. For every car trip that is replaced by an active transportation trip, there will be less pollution emitted into the environment.

Mobility

The built environment can determine whether or not a person is able to safely walk or bike for transportation trips. If there are no sidewalks or trails present, there will be fewer people outside walking. Likewise, if adequate bicycle facilities such as trails or bike lanes are not present, an inexperienced or young cyclist may not feel safe riding on the street, and may not ride at all. Access to transit also plays an important role in health and physical fitness, nearly 1/3 of transit users met the Surgeon General’s recommend daily physical activity guidelines.

\(^1\) http://apps.nccd.cdc.gov/PASurveillance/StateSumResultV.asp?CI=&Year=2007&State=52#data