

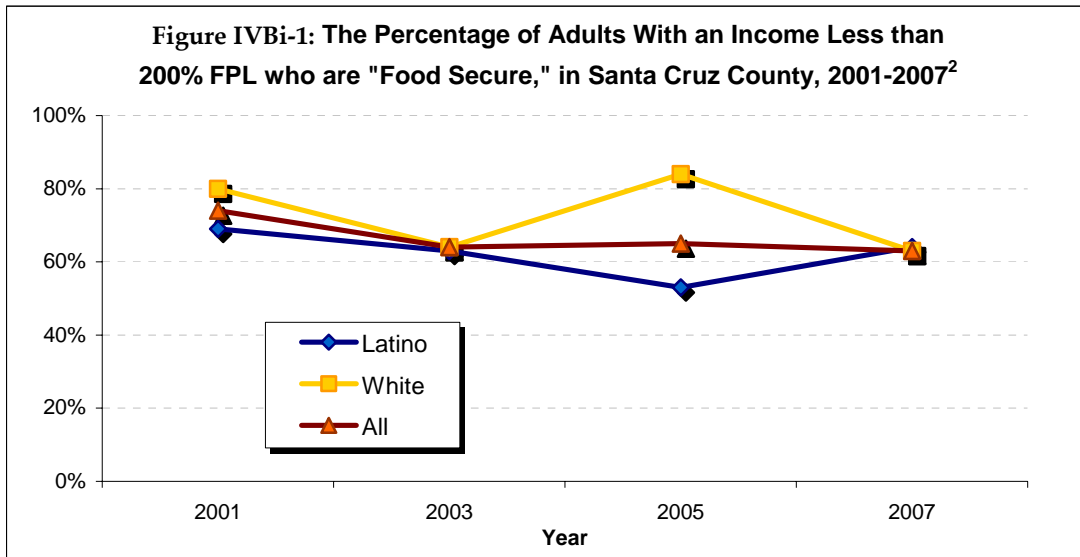
B. BUILT ENVIRONMENT

Importance	The environment in which we live often shapes the choices we make. If our built environment offers fast food restaurants and liquor stores and we have limited transportation, our ability to make healthy choices is limited. Transportation is also a factor in a person's ability to access healthcare and employment.
Highlights	<ul style="list-style-type: none"> ▪ Out of 24 California counties with populations of at least 250,000, Santa Cruz County had the 2nd best RFEI* ratio (of available fresh fruits and vegetables compared to fast-food restaurants and convenience stores).¹ ▪ Between 2001 and 2007, the percentage of adults with an income below the 200% federal poverty level (FPL) who were "food secure" dropped from 80% to 69% among Santa Cruz County Whites, but changed little (from 63% to 64%) among Latinos.² ▪ Santa Cruz County has 1.2 liquor stores per 10,000 population, compared to 0.9 per 10,000 population in California.³ ▪ The percentage of Santa Cruz County residents who commute to work by walking (4.7%) or riding their bicycle (4.0%) was higher than either California or the US in 2008.⁴
Definitions	<p><u>*Retail Food Environment Index (RFEI)</u>: The number of fast-food restaurants and convenience stores, divided by the number of supermarkets, produce stores, and farmers' markets. A community with twice as many fast-food restaurants and convenience stores will have an RFEI of 2.0. A low RFEI shows good access to healthy food. In California, county RFEI scores range from 2.06-5.60.⁵</p> <p><u>Food Security</u>: Access, at all times, to enough nutritious food for an active, healthy life.⁶</p> <p><u>Alcohol Outlet</u>: An establishment where alcohol is sold for consumption off premises, called an "off-sale establishment" (supermarkets, liquor stores, etc.), or where alcohol is consumed on the premises (bars, restaurants, etc.).⁷</p>
Healthy People 2010 Objective	<ul style="list-style-type: none"> ▪ Increase the proportion of food secure households (thereby reducing hunger) to 94%

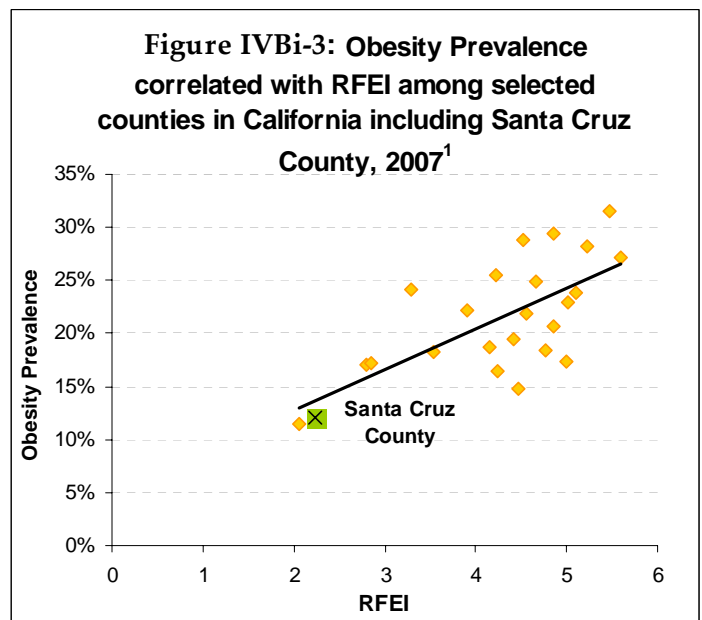
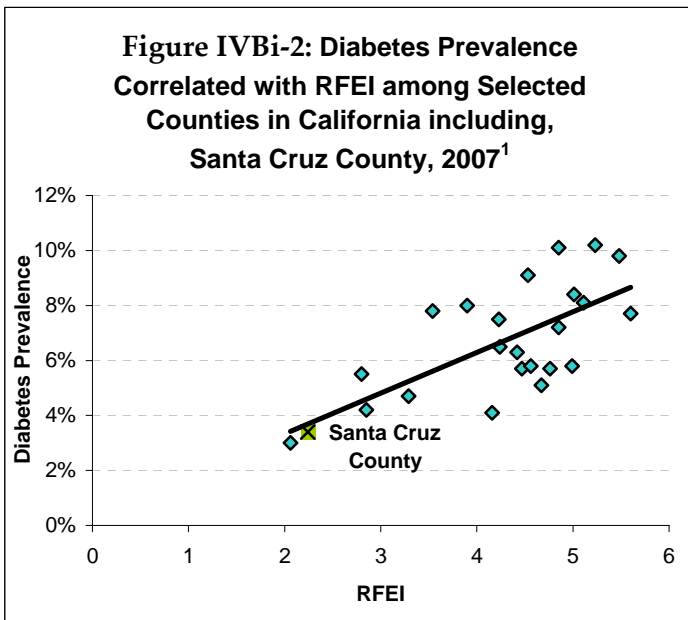
i. ACCESS TO HEALTHY FOODS

Food security, or being able to afford a complete and balanced diet, is a very important measure of health. The Healthy People 2010 goal is to increase the proportion of food secure households to 94%. Nationally, the proportion of food secure households was 89% as of 2006.⁸ In Santa Cruz, only persons with incomes below 200% of Federal Poverty Level (FPL) were asked about food security. In 2001, among Santa Cruz County adults with an income below 200% FPL, 80% of Whites reported being food secure, compared to 69% of Latinos (Figure IVBi-1).² In 2007, 63% of White adults reported being food secure, compared to 64% of Latino adults.² Between 2001 and 2007, the percentage of all Santa Cruz adults with incomes below 200% FPL who were food secure dropped from 74% to 63%.²

i. ACCESS TO HEALTHY FOODS (CONT.)

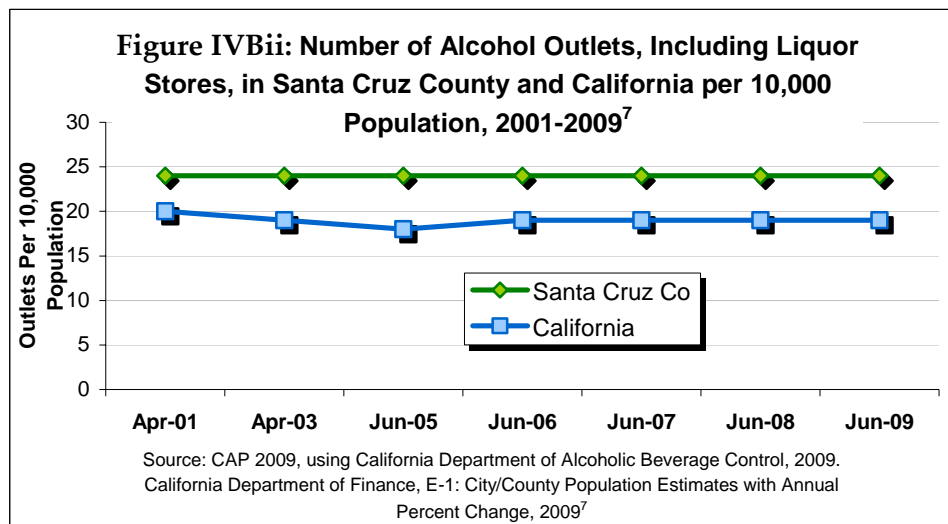


The amount of nutritious food available affects the food decisions that children, teens, and adults make. If healthy options are not available, then healthy options cannot be selected. Santa Cruz County ranks second best for Retail Food Environment Index (RFEI) out of the 24 California counties with populations greater than 250,000.¹ Based on data from the 2005 California Health Interview Survey and the 2005 InfoUSA Business File, the RFEI was calculated for each adult CHIS respondent by dividing the total number of fast-food restaurants and convenience stores by the total number of grocery stores and produce vendors within a given radius (a half-mile in urban areas, one mile in smaller cities and suburban areas, and five miles in rural areas) around the respondent's home address. These individual RFEI's were then averaged for the entire county. Santa Cruz County had an RFEI of 2.2, which can be interpreted as 2.2 fast food or convenience stores for each grocery store, produce stand, or farmer's market.¹ As can be seen in figures IVBi-2 and IVBi-3, higher RFEIs are positively correlated with the percentages of obesity and diabetes within a county.¹



ii. LIQUOR STORE DENSITY

The presence of liquor outlets, including liquor stores, restaurants, and supermarkets, is associated with increased underage drinking, binge drinking, violence, and poor health outcomes such as high mortality rates due to liver cirrhosis.³ In Santa Cruz County, alcohol outlet density has stayed steady at 24 outlets per 10,000 population, while California has experienced little change (between 18 and 20 outlets per 10,000 population between 2001 and 2009 (Figure IVBii)).⁷ Adult binge drinking between 2003 and 2005 and adolescent binge drinking between 2005 and 2007 remained similarly constant (see Alcohol Use).



Liquor stores sell larger quantities of alcohol than other liquor outlets.³ Santa Cruz County's density of liquor stores is 1.2 per 10,000 population, compared to California, which is 0.9 per 10,000 population, with other counties ranging from 0.0 to 3.1 per 10,000 population, based on 2006 data from the US Census Bureau's County Business Patterns.³

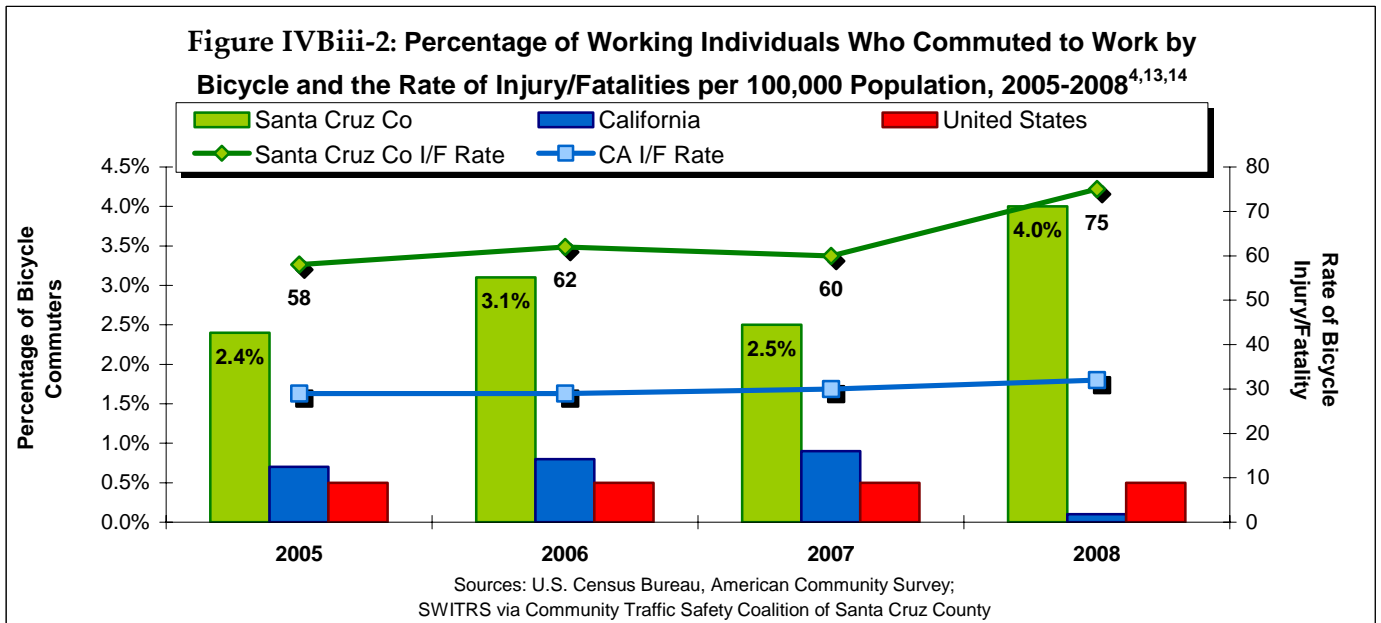
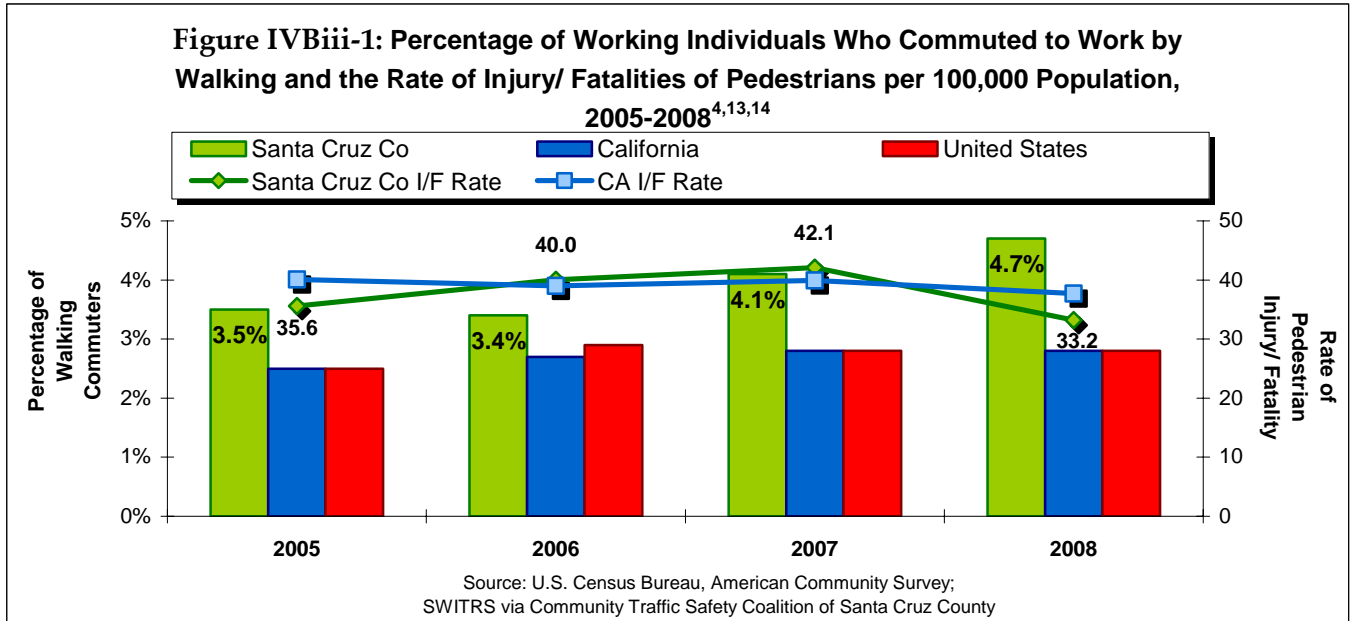
iii. TRANSPORTATION

Within Santa Cruz County, residents use alternative modes of transportation to work more often than residents of California and the United States. In Santa Cruz County, 4% of working individuals bike to work, which is a much higher rate than both California and the United States.⁴ Notably, the City of Santa Cruz was designated a Silver Level Bicycle-Friendly Community by the League of American Bicyclists in early 2008.⁹

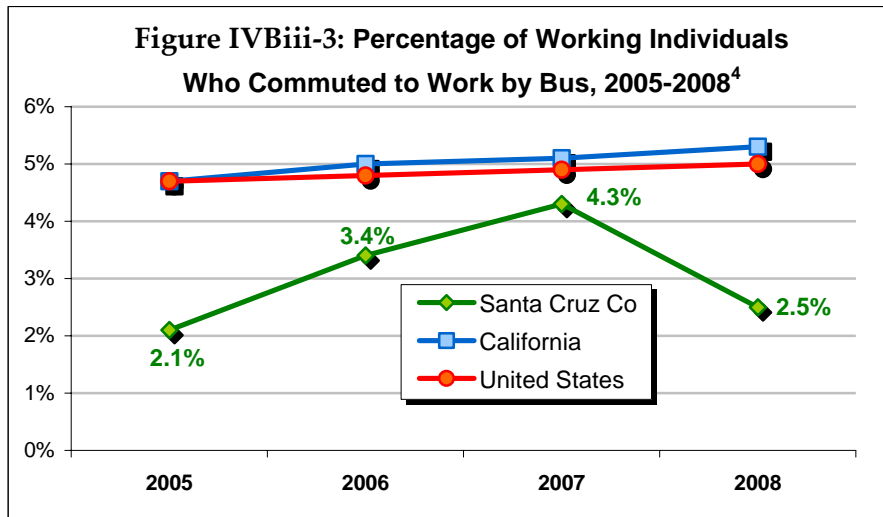
4.7% of working individuals walk to work in Santa Cruz County, compared to 2.8% statewide and 2.8% across the nation.⁴ This percentage has increased from 3.5% in 2005.⁴ Pedestrian facilities in Santa Cruz County range from large sidewalks in city centers with conveniently located businesses to rural roads without sidewalks. Unfortunately, poor driving behaviors and poorly maintained or absent sidewalks often affect community walkability in Santa Cruz County.^{10,11} Programs such as Pace Car and Ride n' Stride Bicycle and Pedestrian Safety Program have been initiated to improve transportation conditions for all members of the community.¹²

The proportion of working individuals who walk or bike to work is significantly higher in Santa Cruz County than in California or the United States, while the proportion of Santa Cruz County commuters who use the bus is lower than in the United States and California (Figure IVBiii-3).⁴ Additionally, between 2005 and 2008, increasing percentages of commuters have walked or biked to work in Santa Cruz County, and bus usage has experienced a slight increase from 2.1% to 2.5%.⁴ Meanwhile, across the state and the nation, bus usage has progressively increased, while walking and biking have stayed stagnant or decreased.

iii. TRANSPORTATION (CONT.)



While walking and bicycling to commute to work are considered health-conscious modes of transportation, a pedestrian or bicyclist faces a different set of dangers and safety precautions than a driver does. In the United States, 37,261 people were killed in traffic accidents in 2008, and 4,378 (12%) of them were pedestrians. 716 (rate of 1.44 per 100,000 population) or 2% of them were pedalcyclists (includes bicycles, tricycles, etc).¹³ The national pedestrian injury/fatality rate for 2008 was 24.1 per 100,000 population.¹³ In California there were 3,401 traffic fatalities in 2008, and 642 (18.9%) were pedestrian fatalities, for a rate of 1.7 fatalities per 100,000 population.¹⁴ There were 130 bicyclist fatalities, for a rate of 0.4 fatalities per 100,000 population.¹⁴ The combined pedestrian injury/fatality rate increased in 2006 and 2007, but 2008 was lower than the 2005 rate, even though commuting to work by walking has continued to increase (Figure IVBiii-1).^{13,14} The combined bicyclist injury/fatality rate increased dramatically by 29% between 2005 and 2008, corresponding with the 67% increase of those commuting to work by bicycle during that same time period (Figure IVBiii-2).^{13,14}



Primary Prevention Activities	<ul style="list-style-type: none"> ▪ To improve safe bicycling practices in the county, the Community Traffic Safety Coalition (CTSC) developed a Bicycle Traffic Safety School in 2008 for bicycle traffic offenders.¹² ▪ Programs such as Pace Car and Ride n' Stride Bicycle and Pedestrian Safety Program have been initiated to improve transportation conditions for all members of the community.¹²
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Sources	<ol style="list-style-type: none"> 1. UCLA Center for Health Policy Research. "Designed For Disease: The Link Between Local Food Environments and Obesity and Diabetes (County RFEI Tables)." 29 Apr 2008. http://www.publichealthadvocacy.org/PDFs/RFEI_countycharts.pdf 2. California Health Interview Survey 2001, 2003, 2005, 2007. http://www.chis.ucla.edu/main/default.asp?timeout=1 3. University of Wisconsin Population Health Institute. County Health Rankings 2010. Accessed July-September 2010. www.countyhealthrankings.org 4. U.S. Census Bureau. <i>American Community Survey: Economic Characteristics</i>, 2006 Estimates. Accessed May 2010. <http://factfinder.census.gov/>. 5. California Center for Public Health Advocacy. "Searching for Healthy Food: The Food Landscape in California Cities and Counties." January 2007. http://www.publichealthadvocacy.org/searchingforhealthyfood.html 6. United States Department of Agriculture. "Food Security Resources." <u>United States Food and Agriculture Food and Nutrition Service</u>. 3 Jul 2008. http://www.fns.usda.gov/fsec/. 7. Applied Survey Research. <u>Community Assessment Project Report</u>. Year 15. 2009. http://www.appliedsurveyresearch.org/projects/cap.html 8. U.S. Census Bureau. Food Security Supplement to the Current Population Survey (CPS). 9. League of American Bicyclists. <u>Bike Friendly Community Designation, 2007</u>. 01 May 2008. http://www.bikeleague.org/media/press/. 10. The Nutrition and Fitness Collaborative of the Central Coast. <u>Taking a Step in the Right Direction! Placing a Premium on Health by Promoting More Walkable Central Coast Communities</u>. August 2007. http://www.co.monterey.ca.us/health/CommunityHealth/pdfs/TakingAstep.pdf. 11. The Nutrition and Fitness Collaborative of the Central Coast. <u>1999 Santa Cruz County Walk-ability Survey</u>. 12. Community Traffic Safety Coalition of Santa Cruz County. <u>CTSC- Projects, May 2010</u>. http://www.sctrfficsafety.org/projects.html 13. National Highway Traffic Safety Administration's National Center for Statistics and Analysis. <u>Traffic Safety Facts 2008 Data</u>. Accessed 15 Sep 2010. http://www.walkinginfo.org/facts/docs/PedTSF_2008.pdf 14. Community Traffic Safety Coalition of Santa Cruz. <u>2008 Bicycle (Pedestrian) State of the County Health Reports</u>. Accessed 15 Sep 2010. http://www.sctrfficsafety.org/safe_info.html.
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