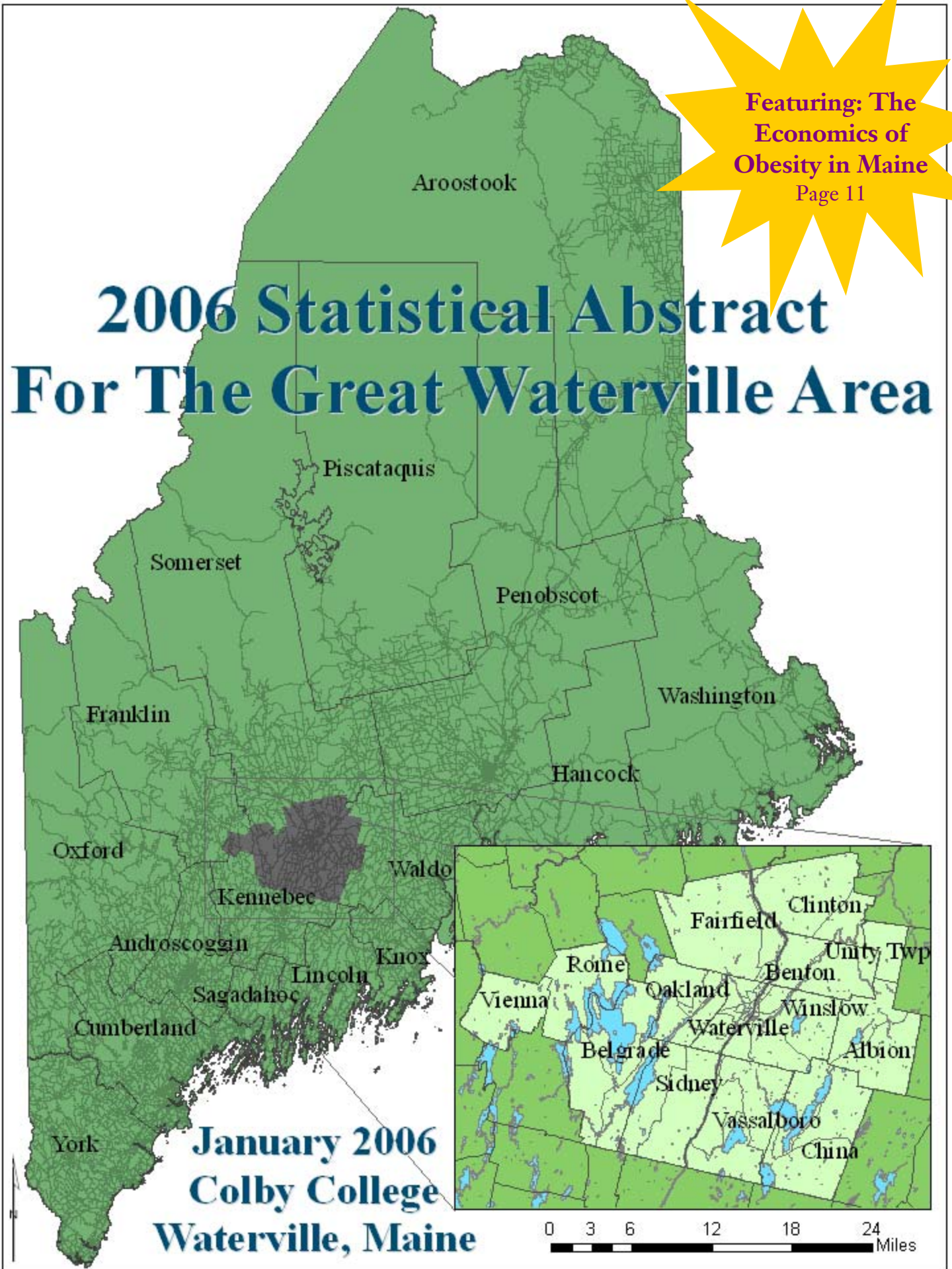


Featuring: The
Economics of
Obesity in Maine
Page 11

2006 Statistical Abstract For The Great Waterville Area



January 2006
Colby College
Waterville, Maine

Table of Contents

Defining the Greater Waterville Area	1
Demographics	
Maine, Kennebec, & Somerset Counties.....	2
Greater Waterville Area & The City of Waterville	3
Cities of Fairfield Oakland & Winslow	4
Regional & State Maps.....	5
Age Pyramids.....	9
The Economics of Obesity in Maine	11
Education Levels	17
Area Crime Statistics	18
Labor Market Statistics	19
Industry Statistics	20
The Cost of Living in the Greater Waterville Area	23

Defining the Greater Waterville Area

This abstract is designed to provide information about a very specific region in Maine that would be useful to professionals in the area who do not have ready access to these data. The target audience for this abstract includes community developers, public policy makers, city planners, grant writers, and program evaluators for social service organizations. The available data for the region come in a variety of different formats and definitional units, often making comparisons awkward at best. The first edition of this abstract appeared in January 2004. This edition updates some of the information in last year's Abstract and provides an estimate of year-over-year price increases for food and grocery items in the area.

In defining the Greater Waterville Area we began with the obvious – the communities of Waterville, Winslow, Oakland, and Fairfield. We then looked to the available data. The 2000 census became the initial focus of our data collection efforts and thus our preliminary definition of the Greater Waterville Area focused on census block groups. Labor market information from the Maine Department of Labor was also important to us but is not generally available by Census blocks. We then decided to look at the areas served by school districts in these communities and came up with a geographic definition that we felt had similar lifestyle patterns in terms of job opportunities and spending habits. This led us to minor civil divisions, a geographical subunit unique to New England, but generally in common with the Census and labor market data. Using a combination of all of these spatial characteristics we came up with the definition of the Greater Waterville Area illustrated in the map on the front cover of this year's edition of the Abstract.

Greater Waterville Area			
Minor Civil Division	Census Tract	Census Block Groups	City
Rome	155	1	Rome & Vienna
Belgrade	160	1 & 2	Belgrade Lakes
Belgrade	160	3	Belgrade
Sidney	170	1 & 2	Sidney
Vassalboro	180	1	Vassalboro
Vassalboro	180	2	S. Vassalboro
Vassalboro	180	3	E/N Vassalboro
China	200	1 & 2	China
China	200	3	S. China/Weeks Mills
Albion	205	1 & 2	Albion
Clinton	210	1 & 2	Clinton
Benton	220	1	Benton
Benton	220	2	Benton Falls
Winslow	230.01	1 - 4	Winslow
Winslow	230.02	1 - 3	Winslow
Waterville	241.01	1 - 4	Waterville
Waterville	241.02	3, 5 - 9	Waterville
Waterville	242	1 - 5	Waterville
Oakland	250	1 - 5	Oakland
Fairfield	9868	1 - 5	Fairfield

Demographics: Maine, Kennebec & Somerset Counties

Variable	Maine			Kennebec County		Somerset County	
	1990	2000	2004	1990	2000	1990	2000
Total population	1,227,928	1,274,923	1,278,725	115,904	117,114	49,767	50,888
Annualized rate of growth		0.38%	0.07%		0.10%		0.22%
Females	51.3%	51.4%	51.3%	51.8%	51.6%	51.1%	51.0%
Population Under 5 years	7.0%	5.0%	5.4%	6.7%	5.5%	7.0%	5.7%
Households	465,729	518,372	534,412	43,879	47,738	18,519	20,519
Percent change		11.3%	3.1%		8.8%		10.8%
Average household size	n/a	2.39	2.39	n/a	2.38	n/a	2.44
Housing units	587,045	651,901	676,667	51,648	56,364	24,927	28,222
Percent change		11.0%	3.8%		9.1%		13.2%
Vacant Housing Units	20.7%	20.5%	21.0%	15.0%	15.4%	25.7%	27.4%
Owner occupied housing	70.5%	71.6%	72.9%	70.9%	71.2%	77.3%	77.9%
Renter occupied housing	29.5%	28.4%	27.1%	29.1%	28.8%	22.7%	22.1%
Household income less than \$10,000	15.3%	10.3%	9.7%	14.8%	10.6%	19.7%	12.9%
Household income \$150,000 or more	0.9%	2.4%	3.3%	0.9%	1.7%	0.4%	0.9%
Median household income	\$27,854	\$37,240	\$42,163	\$28,616	\$36,498	\$22,829	\$30,731
Percent change		33.7%	13.2%		27.5%		34.6%
Median household income Inflation-Adjusted 2000 Dollars*	\$34,602	\$37,240	\$38,951	\$35,549	\$36,498	\$28,360	\$30,731
Percent change		7.6%	4.6%		2.7%		8.4%
Households with public assistance income	7.9%	4.8%	4.9%	8.2%	5.2%	11.6%	5.9%
Per capita income	\$12,957	\$19,533	\$22,896	\$12,885	\$18,520	\$10,471	\$15,474
Percent change		50.8%	17.2%		43.7%		47.8%
Per capita income Inflation-Adjusted 2000 Dollars*	\$16,096	\$19,533	\$21,152	\$16,007	\$18,520	\$13,008	\$15,474
Percent change		21.4%	8.3%		15.7%		19.0%
Income below poverty level	10.8%	10.9%	12.3%	10.2%	11.1%	14.5%	14.9%

*Inflation adjusted using the chain-weighted price index for personal consumption expenditures for the nation

Sources: US Bureau of the Census and the Bureau of Economic Analysis.

Demographics: Greater Waterville Area & the City of Waterville

Variable	Greater Waterville Area		City of Waterville	
	1990	2000	1990	2000
Total population	58,479	59,906	17,096	15,605
Percent change		2.4%		-8.7%
Females	51.8%	51.7%	53.7%	54.1%
Population Under 5 years	7.0%	5.6%	6.2%	4.8%
Population 80 years +	2.9%	3.7%	4.7%	6.2%
Households	21,671	23,652	6,621	6,236
Percent change		9.1%		-5.8%
Average household size		2.42		2.13
Housing units	25,341	28,061	6,975	6,819
Percent change		10.7%		-2.2%
Vacant Housing Units	0.1%	15.8%	6.1%	8.8%
Owner occupied housing units	71.3%	72.2%	49.4%	49.2%
Renter occupied housing units	28.7%	27.8%	50.6%	50.8%
Household income less than \$10,000	15.9%	11.0%	22.8%	17.3%
Household income \$150,000 or more	0.9%	1.5%	0.9%	2.1%
Median household income	\$28,145	\$35,841	\$22,617	\$26,816
Percent change		27.3%		18.6%
Median household income Inflation-Adjusted 2000 Dollars*	\$34,964	\$35,841	\$28,096	\$26,816
Percent change		2.5%		-4.6%
Households with public assistance income	8.9%	4.9%	12.4%	8.0%
Per capita income	\$12,367	\$17,533	\$12,002	\$16,430
Percent change		41.8%		36.9%
Per capita income Inflation-Adjusted 2000 Dollars*	\$15,363	\$17,533	\$14,910	\$16,430
Percent change		14.1%		10.2%
Income below poverty level	11.3%	11.5%	16.0%	19.2%
Single Parent Households	11.3%	15.6%	16.6%	28.6%
Married-couple families with children living in poverty	5.4%	4.5%	7.8%	3.5%
Median home value	\$78,009	\$81,778	\$74,700	\$76,200
Percent change		4.8%		2.0%
Median home value Inflation-adjusted 2000 Dollars*	\$96,909	\$81,778	\$92,798	\$76,200
Percent change		-15.6%		-17.9%

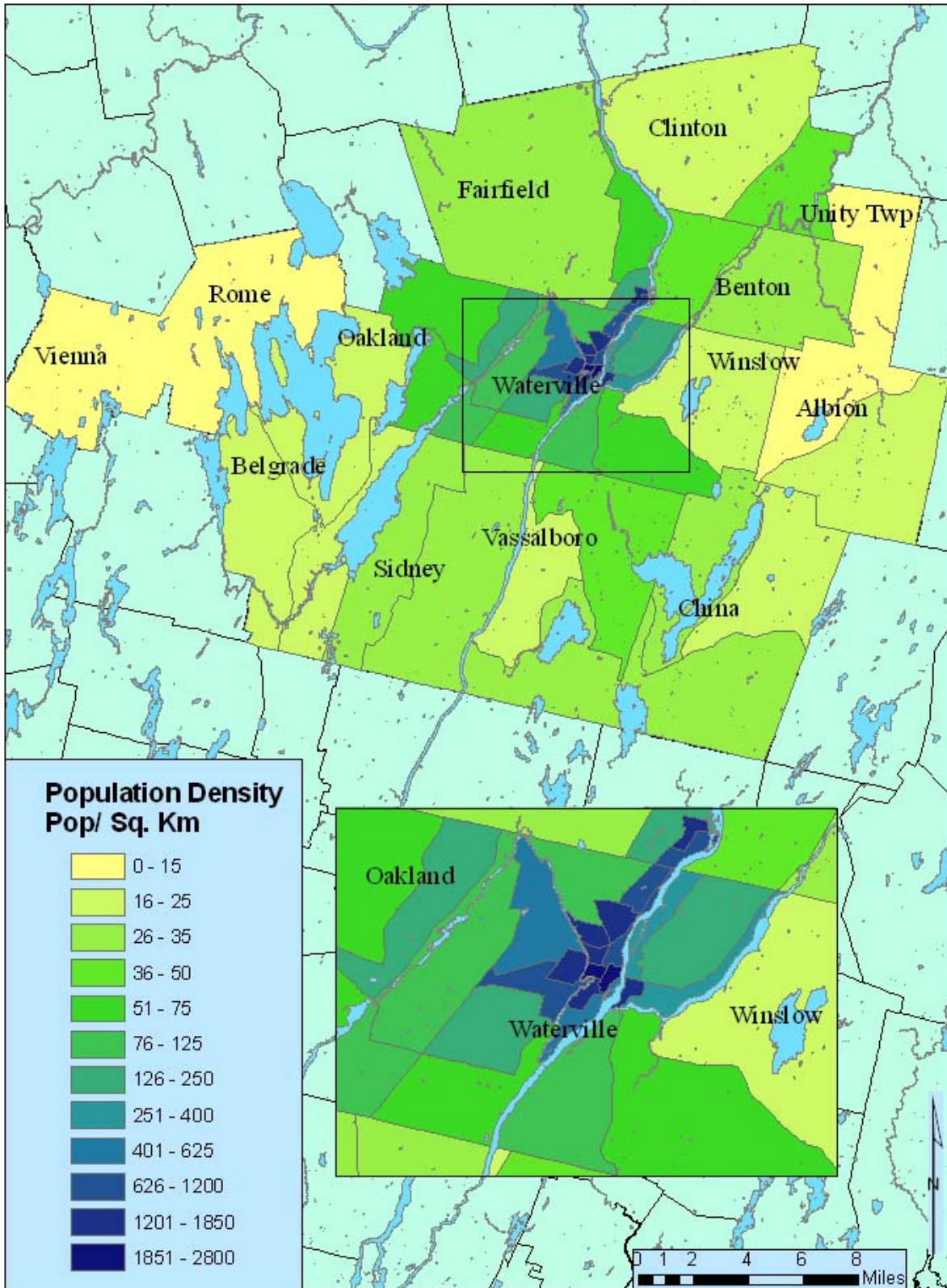
*Inflation adjusted using the chain-weighted price index for personal consumption expenditures for the nation. Sources: US Bureau of the Census and the Bureau of Economic Analysis.

Demographics: Cities of Fairfield, Oakland & Winslow

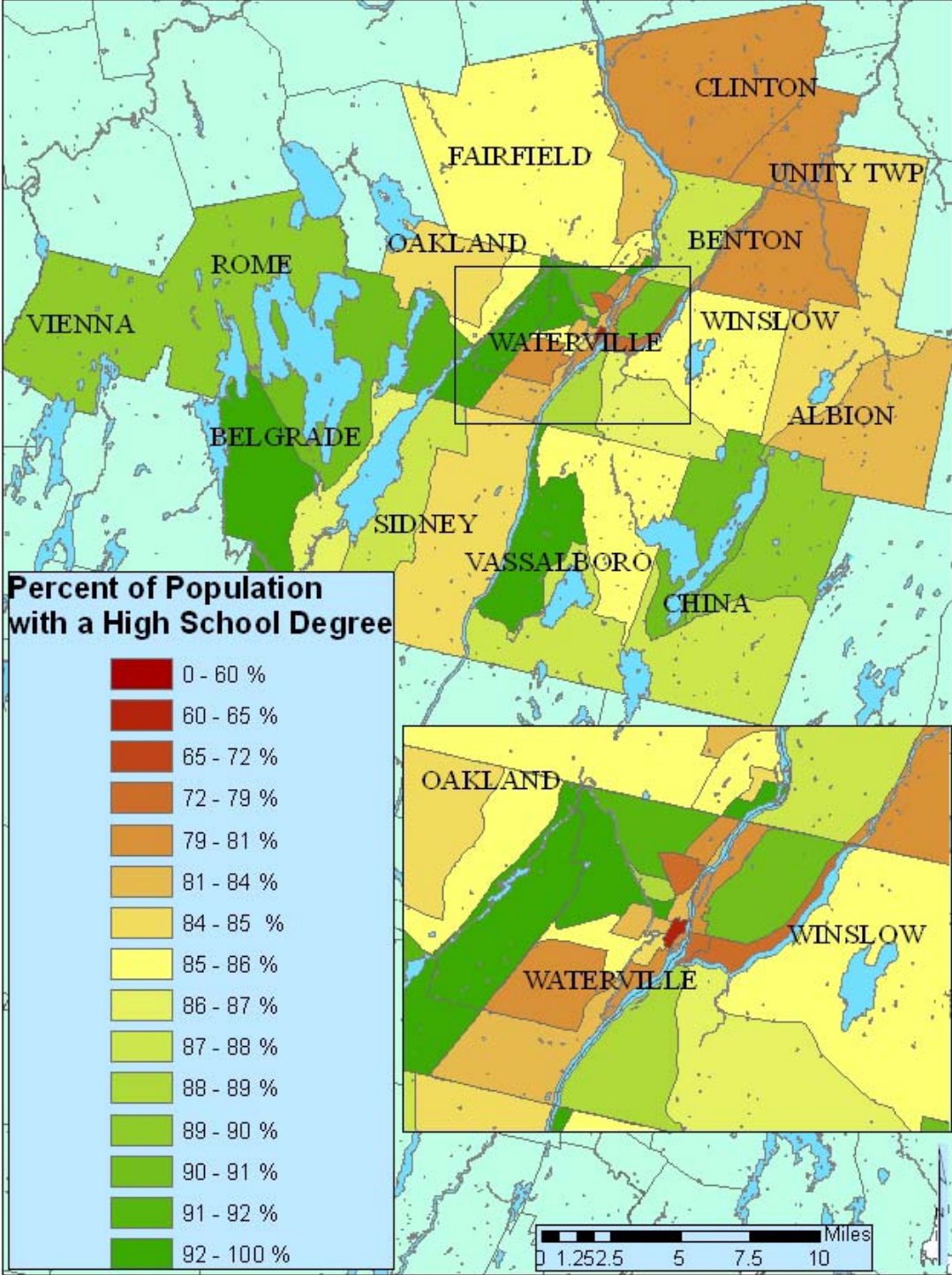
Variable	Fairfield		Oakland		Winslow	
	1990	2000	1990	2000	1990	2000
Total population	2,852	2,474	3,587	2,848	5,436	7,743
Percent change		-13.3%		-20.6%		42.4%
Females	53.2%	53.7%	51.5%	49.9%	53.6%	52.3%
Population Under 5 years	8.0%	4.8%	8.1%	5.7%	5.7%	4.1%
Population 80 years +	2.6%	4.2%	1.9%	3.5%	2.9%	4.4%
Households	1,176	1,079	1,327	1,110	2,206	3,261
Percent change		-8.2%		-16.4%		47.8%
Average household size	n/a	2.23	n/a	2.46	n/a	2.35
Housing units	1,261	1,224	1,481	1,327	2,270	3,591
Percent change		-2.9%		-10.4%		58.2%
Vacant Housing Units	5.5%	9.3%	6.1%	12.7%	3.7%	9.0%
Owner occupied housing units	61.2%	61.4%	73.0%	73.0%	69.8%	74.9%
Renter occupied housing units	38.8%	38.6%	27.0%	27.0%	30.2%	25.1%
Household income less than \$10,000	23.5%	13.5%	15.4%	6.9%	12.4%	8.5%
Household income \$150,000 or more	0.0%	0.0%	0.0%	1.4%	1.3%	0.2%
Median household income	\$19,698	\$31,303	\$26,360	\$32,700	\$29,704	\$39,580
Percent change		58.9%		24.1%		33.2%
Median household income Inflation-Adjusted 2000 Dollars*	\$24,470	\$31,303	\$32,746	\$32,700	\$36,900	\$39,580
Percent change		27.9%		-0.1%		7.3%
Households with public assistance income	14.1%	7.5%	8.5%	5.7%	4.6%	1.6%
Per capita income	\$10,796	\$15,070	\$11,451	\$20,741	\$14,107	\$18,501
Percent change		39.6%		81.1%		31.1%
Per capita income Inflation-Adjusted 2000 Dollars*	\$13,412	\$15,070	\$14,225	\$20,741	\$17,525	\$18,501
Percent change		12.4%		45.8%		5.6%
Income below poverty level	13.2%	10.6%	15.5%	12.2%	9.1%	7.0%
Single Parent Households	15.9%	23.4%	14.0%	22.1%	10.5%	21.1%
Married-couple families with children living in poverty	0.0%	0.0%	9.6%	1.9%	2.5%	0.5%
Median home value	\$64,000	\$66,600	\$73,000	\$73,500	\$77,100	\$82,400
Percent change		4.1%		0.7%		6.9%
Median home value Inflation-adjusted 2000 Dollars*	\$79,505	\$66,600	\$90,686	\$73,500	\$95,779	\$82,400
Percent change		-16.2%		-19.0%		-14.0%

*Inflation adjusted using the chain-weighted price index for personal consumption expenditures for the nation
Sources: US Bureau of the Census and the Bureau of Economic Analysis.

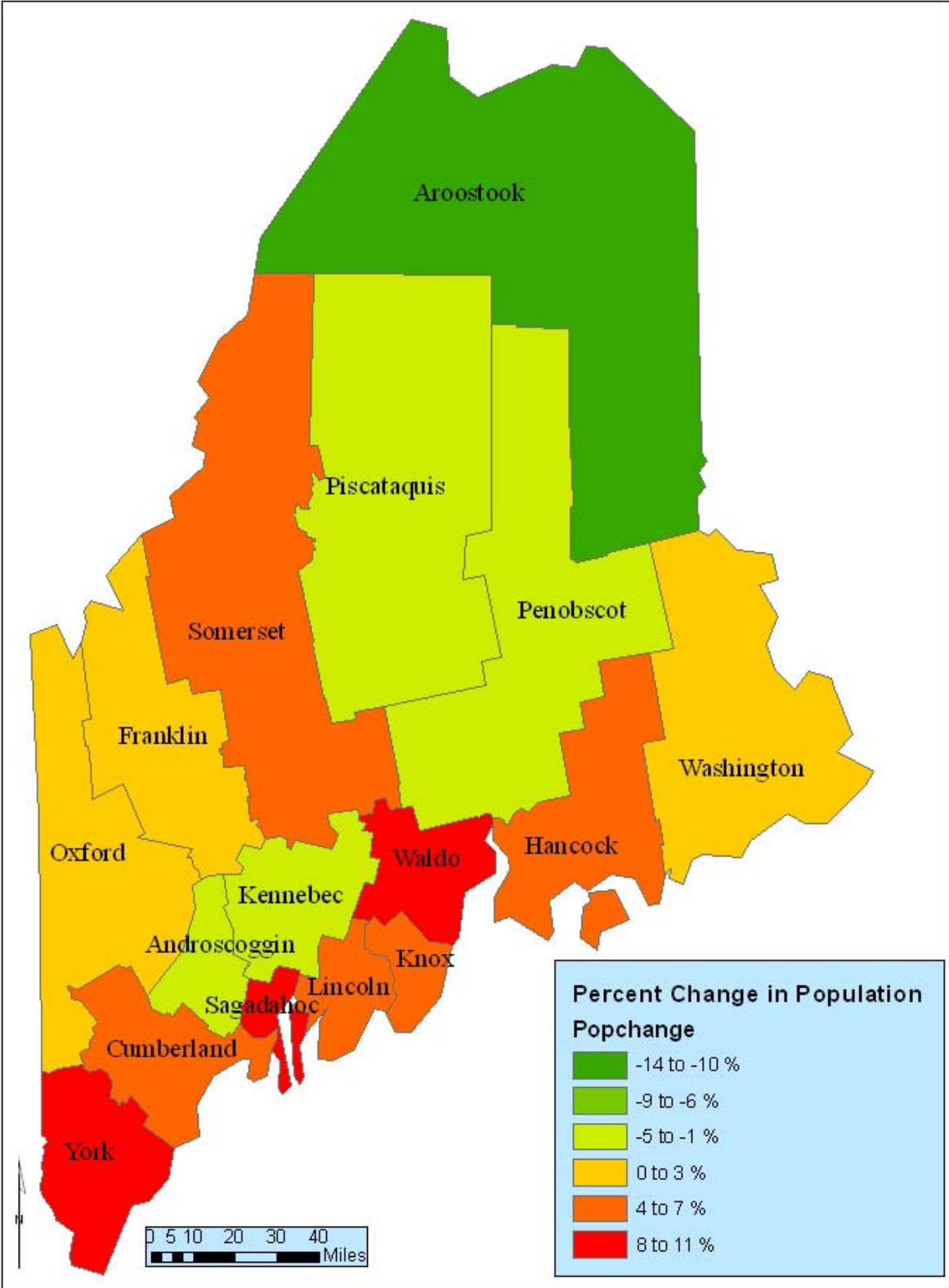
Population Density



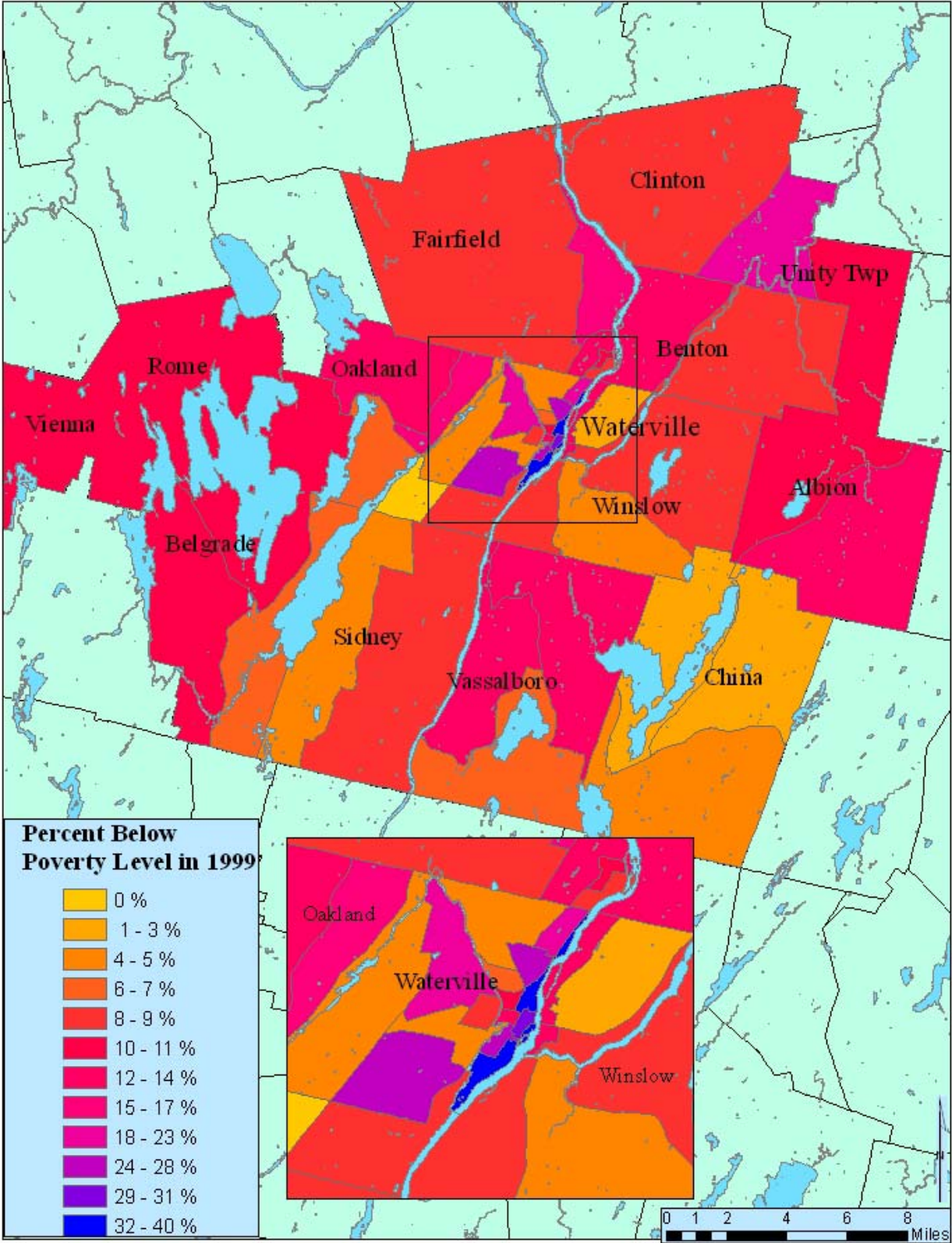
Population with High School Degree



Population Change by County

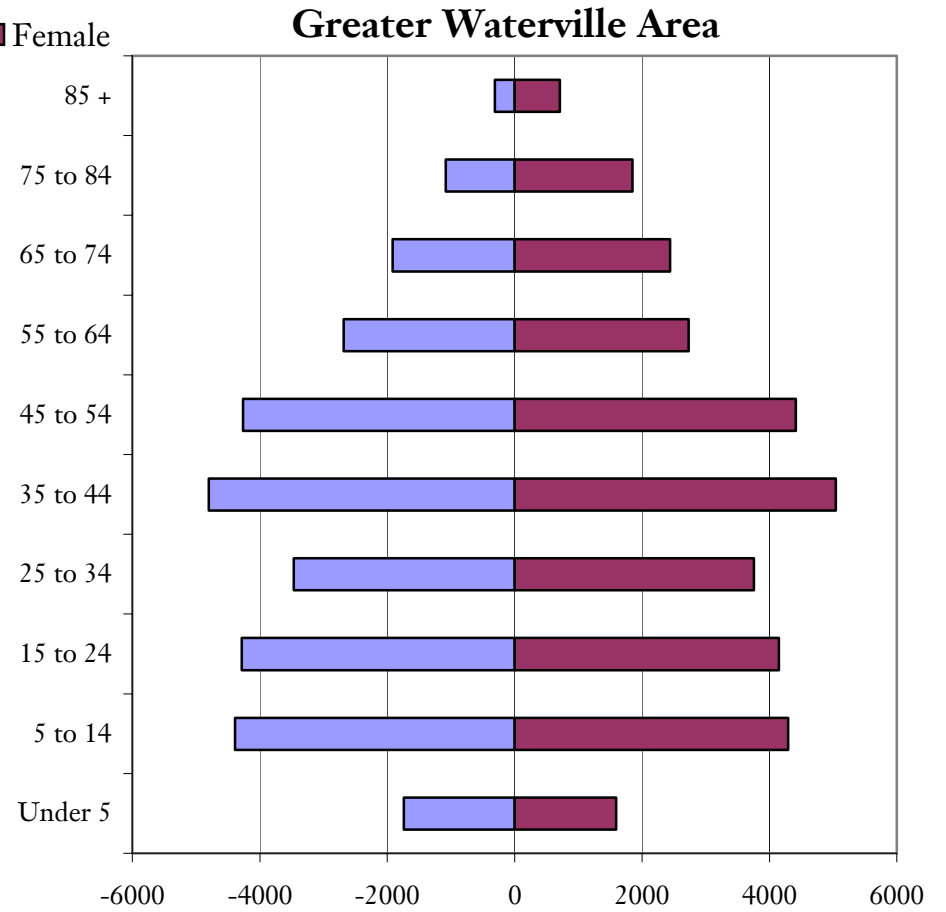
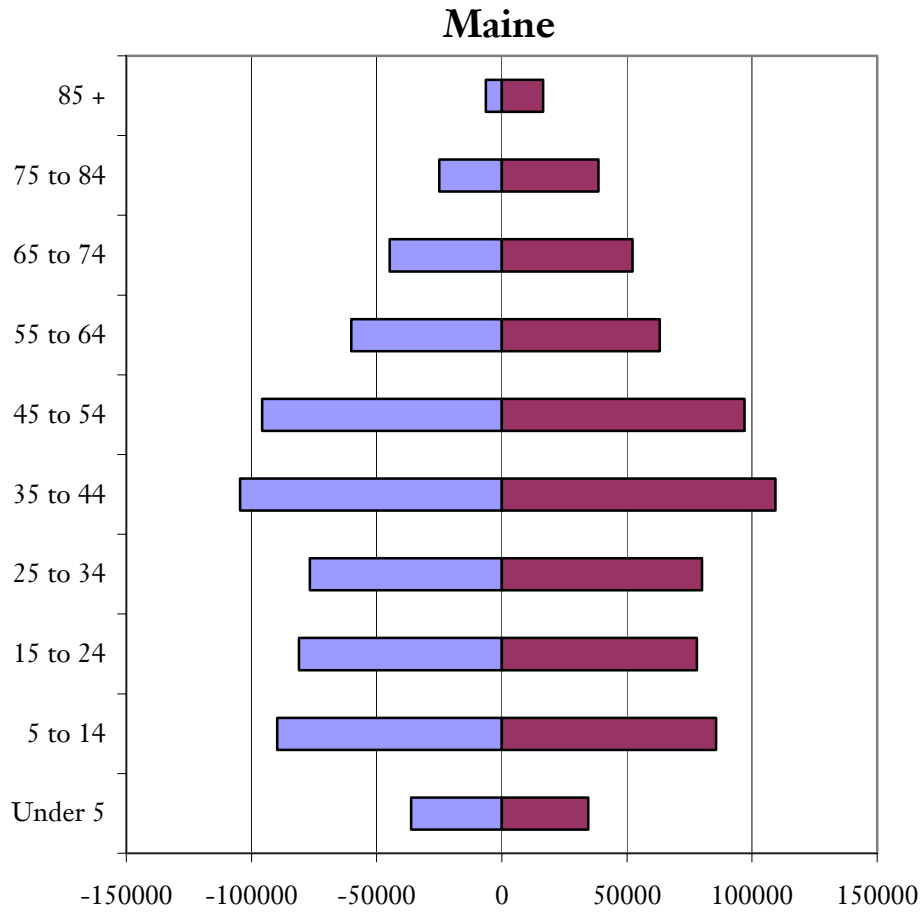


Poverty Levels

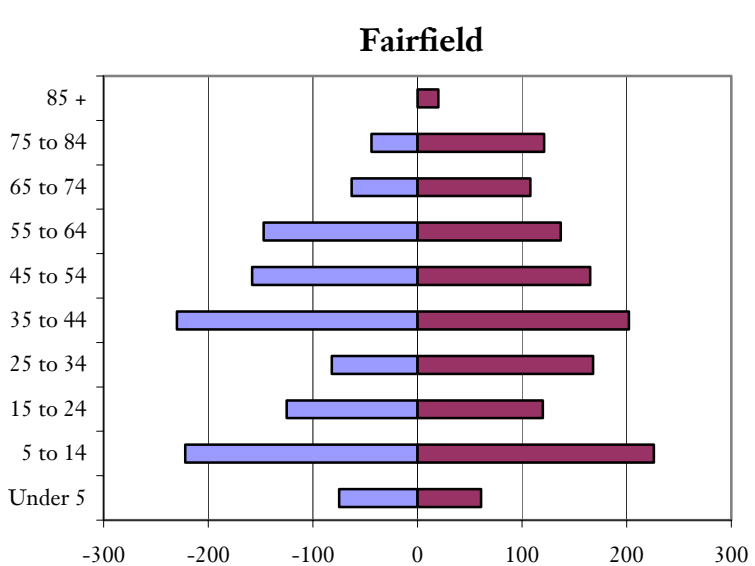


Age Distributions by Sex 2000 Census Data

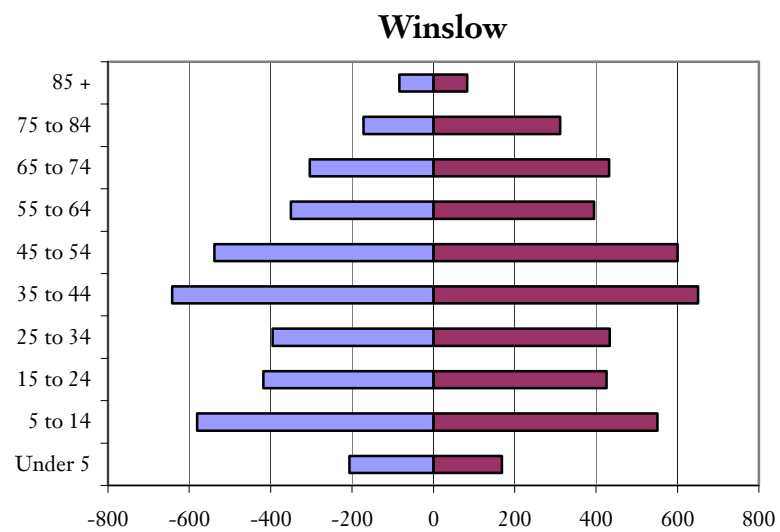
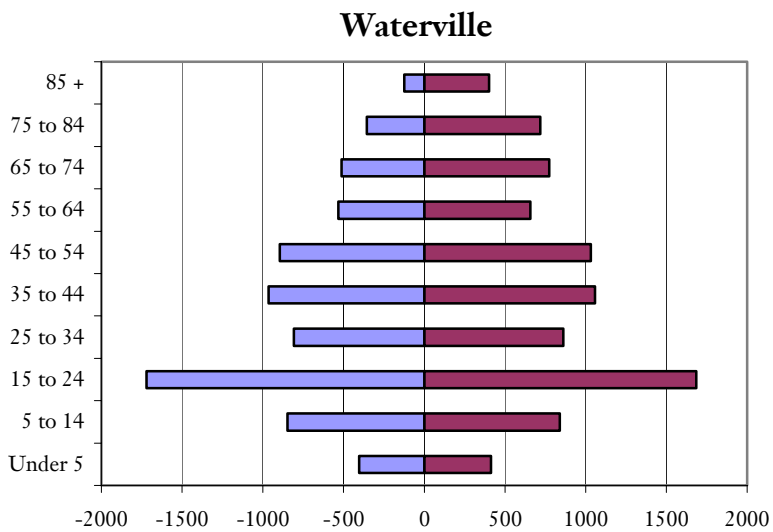
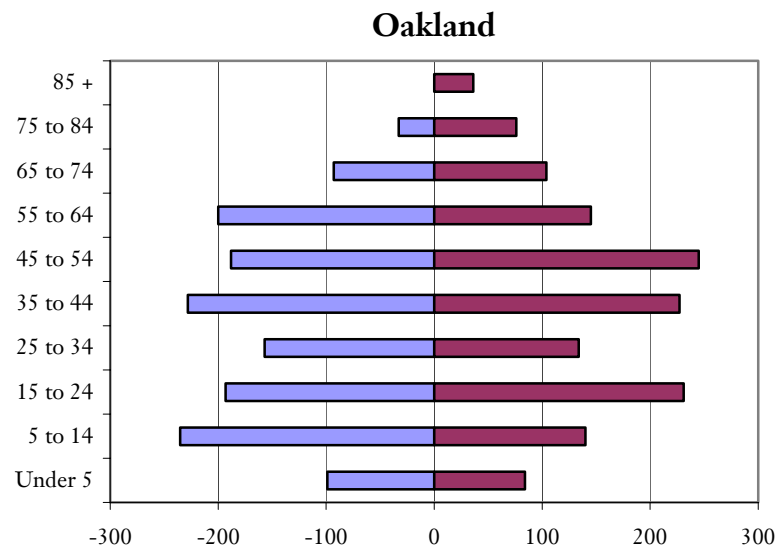
Male
Female



2006 Statistical Abstract for the Greater Waterville Area



Male
Female



The Economics of Obesity in Maine

In January 2006 students enrolled in Economics 219 at Colby College wrestled with the question “Is obesity an epidemic in Maine?” by focusing on the economic and policy issues surrounding recent health trends in the state. We read a variety of scholarly articles on the issue as well as Eric Schlosser’s book *Fast Food Nation*. We also discussed the movie *Supersize Me*; listened to evidence presented by a nutritionist from the Maine Cooperative Extension Service; heard testimony from an individual dealing with obesity in her own life; analyzed current data from the Behavioral Risk Factor Surveillance System (BRFSS) questionnaire for Maine; and followed our own food consumption with daily food journal entries. At the end of the month we sponsored a panel discussion whose members included public health experts, a representative from the food industry, a member of the state legislature, and an advocate for alternative public transportation initiatives in Maine. The case study that follows represents our collaborative effort to provide a better understanding of some of the important economic factors and policy issues relating to the prevalence of obesity in Maine.

Obesity in Maine

Body Mass Index, or BMI, is by far the most common measure of obesity. BMI calculations were first performed over 150 years ago by a Belgian astronomer, statistician, and sociologist named Adolphe Quetelet, known for his early applications of statistics to social phenomenon. For adults, BMI is calculated as $\frac{Weight(lbs)}{Height^2(inches)} \times 703$ and the weight status of individuals is conventionally determined according to the table at right.

BMI	Weight Status
Below 18.5	Underweight
18.5 – 24.9	Normal
25.0 – 29.9	Overweight
30.0 and Above	Obese
30 - 34.9	Obese I
35 - 39.9	Obese II
40.0 and Above	Obese III

There are some obvious shortcomings of defining obesity by focusing solely on a statistic like BMI. Most notably, BMI does not account for differences in gender, lifestyle, athleticism, socio-economic factors, or genetic traits that may contribute to overweight and obesity. On the other hand, BMI is convenient to calculate, has a long history of use, and requires no medical interventions.

Our primary source of data on obesity in Maine was the Behavioral Risk Factor Surveillance System (BRFSS) questionnaire.[†] The BRFSS program was established in 1981 by the National Centers for Disease Prevention and Control in Atlanta to provide state-level data to estimate risk factors for poor health and a variety of diseases. States collect

[†] The BRFSS database for Maine is maintained by the Maine Center for Disease Control (CDC) and we gratefully acknowledge their willingness to provide us with these data and their assistance in understanding the contents of the database. All of the analysis and calculations presented in this abstract based on the BRFSS data were completed by members of EC219 and do not represent calculations, analysis, or interpretations of the data performed or endorsed by the CDC.

self-reported information using telephone surveys. As a result, there may be a tendency to over estimate one’s height and under report weight, indicating the possibility of a downward bias in the calculation of a person’s BMI.

BMI levels in Maine have increased significantly over the past decade. In 1994, 14.6% of the adult population in Maine was estimated to have a BMI in excess of 30. By 2004 estimates of obesity in Maine had risen to nearly 23% of the adult population. The other disturbing trend in Maine during the past decade is the decline in the percentage of “healthy”, or normal weight people. In 1994, just below 45% of Maine adults had a BMI ranging from 18.5 to 25, i.e., a healthy weight status. In 2004 that figure had decreased to 36.3%. Interestingly, the percentage of overweight people has remained roughly the same during this time period. This suggests that people who were healthy 10 years ago probably moved into the overweight or obese status and those previously overweight have moved into the obese category.

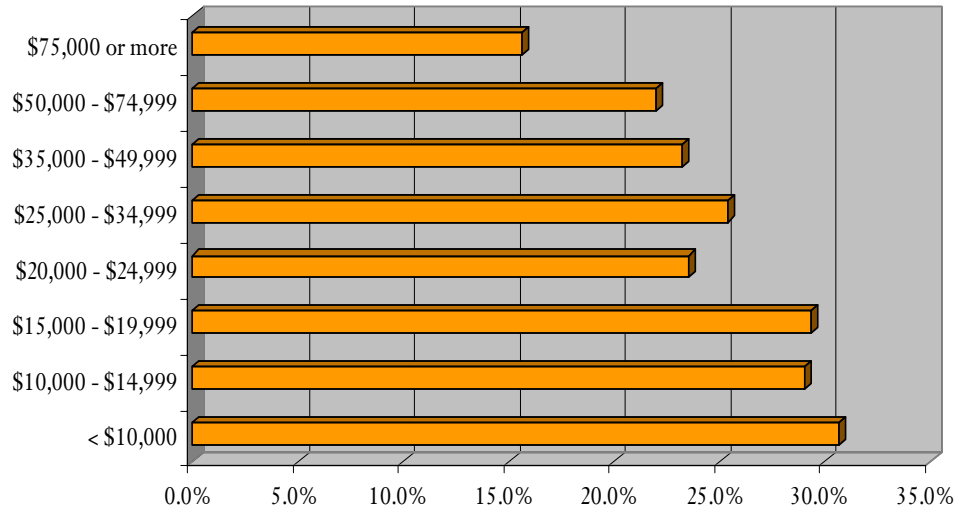
Weight Status Trends in Maine

Year	Underweight	Normal	Overweight	Obese
1994	5.3%	44.9%	35.1%	14.6%
1995	4.9%	44.9%	36.5%	13.7%
1996	5.7%	44.3%	34.5%	15.5%
1997	6.0%	42.8%	35.6%	15.6%
1998	4.9%	42.6%	35.7%	16.8%
1999	5.7%	41.5%	34.1%	18.7%
2000	5.4%	40.5%	34.9%	19.2%
2001	6.6%	37.6%	37.3%	18.5%
2002	6.7%	37.4%	36.1%	19.7%
2003	6.3%	38.2%	36.5%	19.0%
2004	4.6%	36.3%	36.4%	22.7%

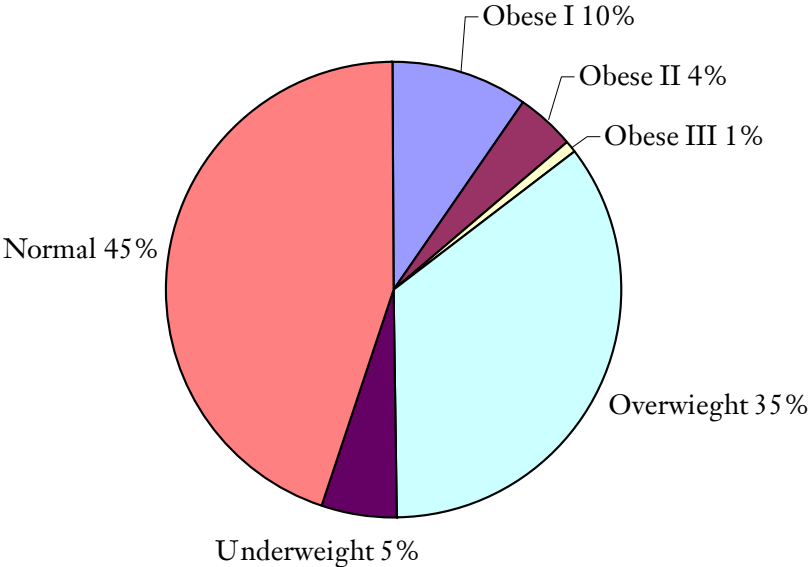
Source: Authors’ calculations using weighted sample estimates from the Maine BRFSS database.

A variety of scholarly studies indicate that households with lower incomes tend to have higher rates of obesity. The chart at right illustrates that people in Maine tend to be no different in this regard. In 2004, the prevalence of obesity was greatest among those in the bottom three income brackets. Adults in the upper income brackets experienced lower levels of obesity according to the BRFSS survey.

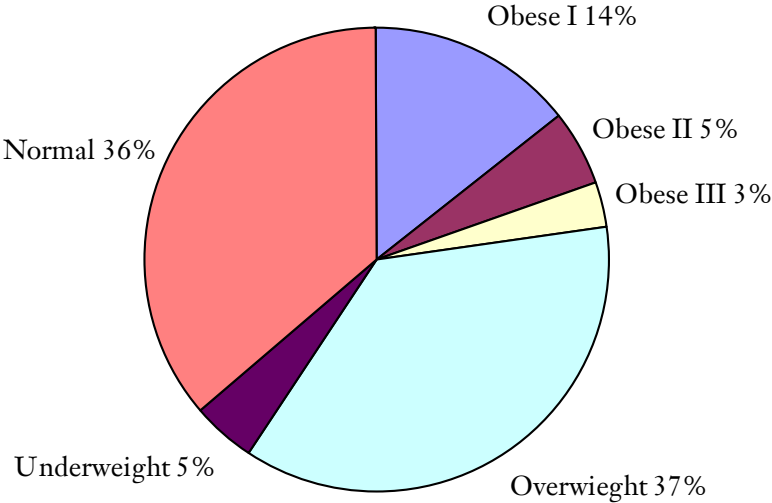
2004 Obesity by Household Income



Obesity Trends in Maine 1994



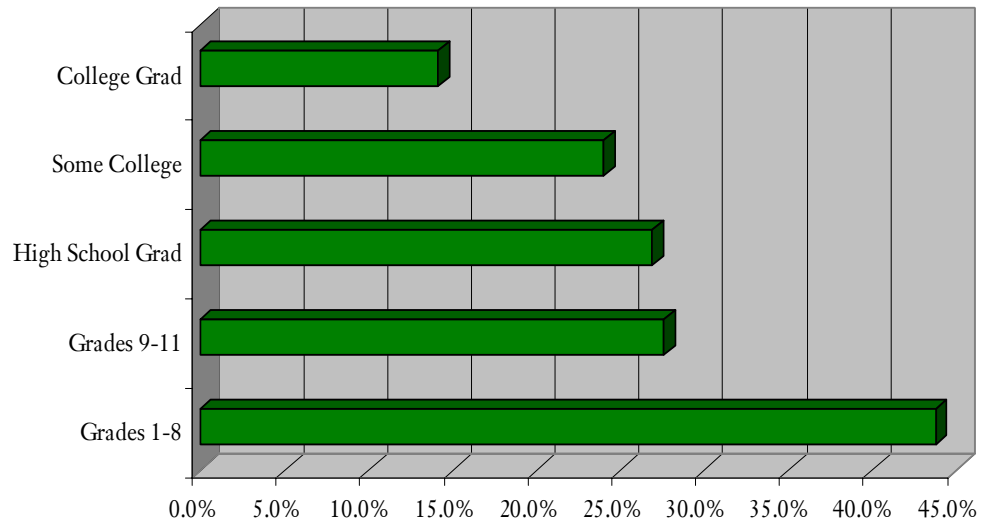
2004



The increase in the number of obese adults in Maine has been pronounced across all categories of obesity. The pie charts above illustrate this phenomenon, with the Class III level of obesity, also known as “morbidly obese”, increasing from 1% of the population in 1994 to 3% in 2004.

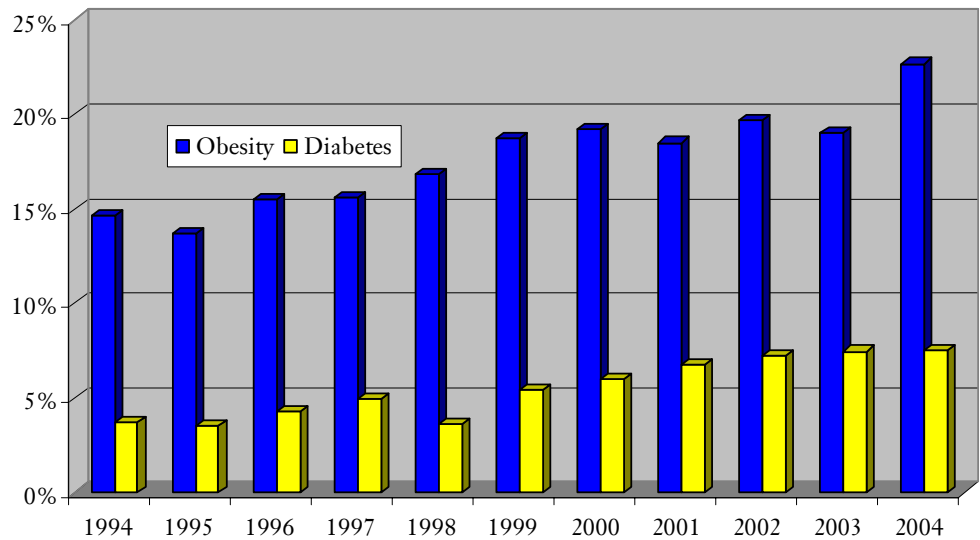
2004 Obesity by Education

Education is another factor cited by researchers as being correlated with obesity. Again, the BRFSS data for Maine appear to bear out this correlation. More than 40% of adults with no more than a primary school level of education were obese in 2004. Only 14% of those with at least a 4-year college degree had BMI levels above 30.



Obesity is also linked to several diseases and health conditions, including diabetes. In Maine during the last decade, diabetes has increased from being prevalent in 3.7% of the population in 1994 to 7.5% of the population in 2004. This increase has a strong correlation with the increase in obesity. We also found that diabetes is most prevalent in obese and overweight people and much less so in people with healthy or underweight BMI levels.

Trends in Obesity & Diabetes in Maine



Recommendations for further research

Fast Food Nation, by Eric Schlosser. New York: Harper Collins, 2005.
The Obesity Epidemic: Science, morality and ideology. New York: Routledge, 2005.
 BRFSS data for Maine: <http://www.maine.gov/dhhs/bohodr/brfsspge.htm>
http://www.cdc.gov/nccdphp/dnpa/obesity/state_programs/maine.htm
 CDC Resources: <http://www.cdc.gov/nccdphp/dnpa/obesity/resources.htm>

Why Have Americans Become More Obese?

The rate of obesity has been growing much faster in the United States than in the rest of the world. Some have argued that genetics are an important contributing factor to the obesity epidemic. However, the prevalence of obesity in this country has exploded in just one generation, which would seem to imply that genetics is not the main player in this “epidemic.” There are studies that indicate that a person’s genetic makeup may be responsible for approximately 20% of their obesity status. However, those same studies suggest that 50% or more is directly related to a person’s diet and health/lifestyle choices.

Personal responsibility plays an important role in the issue of obesity. Reportedly, it takes only an extra 100 calories a day (less than one can of soda) to gain a significant amount of weight in a year. One reason why we, as a nation, are gaining weight is that we are consuming more calories than we are burning; and technology, both in terms of food production and availability plays a critical role. The problem is most pronounced in the increased availability of snack foods.

Technology has also played a role in the availability of processed meals, making eating quicker and easier thus matching our busy lifestyles. And because eating has become more time-efficient, people tend to eat more in the course of the day. There is no more slaving over a hot stove for hours to prepare a meal as fewer families sit down and eat together than in the past. We believe that the reduction in the time cost of eating has played a significant role in the incidence of obesity in this country. Delivery, drive-through, and even the microwave oven are all quick ways to eat with almost zero time cost to prepare the food.

As the data for Maine indicate, there appears to be a correlation between lower socio-economic status and obesity. For households in the lowest socio-economic group, there is less choice on what to eat. Organic foods are expensive. Any in many instances, alternatives for exercise may not exist. Walking may be a low cost exercise alternative to fight the onset of obesity, but there are some communities, especially in urban areas, where neighborhoods are not safe. Such neighborhoods also tend to hold larger concentrations of poorer people.

The Fast Food Industry

In the midst of the obesity debate is the question: What role does the fast food industry play? McDonald’s, Wendy’s, and Burger King are icons of our “grab and go” society and have molded themselves into the perfect culture to become a successful business model.

The attraction to fast food is often times on the subconscious level and fits our life style so nicely that many Americans have fallen victim to a poor diet. Our capitalist society thrives on personal achievement and therefore we value time very highly. After working a full day at the office, the fast food industry provides a quick and cheap meal that requires little to no clean up. Most fast food restaurants have a drive-through window to spare us the time and calories it takes to park and walk to the counter. Fast food has always been a cheap alternative to a nicely made sandwich at a “Mom and Pop” restaurant. The invention

of the “dollar menu” has brought cheap food to a whole new level. For only ten dollars a mother can now provide a family of two or three children to a tasty meal with more than enough calories to get through the day. This appeal to low income households is so strong that it poses a major problem for the health of such families.

Recently, the fast food industry has come under heavy scrutiny. Law suits have been filed against McDonald’s for making consumers become obese. Film documentaries have been made criticizing and exploiting the negative effects that unhealthy food has on the human body. Increased obesity imposes real costs on society in the form of increased health care expenses, lost work days, and the risk of associated diseases and health conditions. As a result there has been a call for regulation of the fast food industry.

Policy Responses

We examined several policy responses to the obesity problem in the United States. None of them represent true solutions and at best have the potential to help provide incentives for healthier lifestyles. There was broad support among members of our panel for reductions in subsidies to the oil and gas industries, with state and local governments promoting instead the use of bike paths and walking trails.

There was also a sense in the class that government should protect children from heavy advertisement from the fast food industry, especially of the sort that dominates Saturday morning cartoons frequently viewed by very young children. In a related fashion, a number of studies point to risk factors facing children in the public schools where advertising and the relatively poor nutritional food value from some school lunch programs have recently become part of the public debate surrounding juvenile rates of obesity.

A number of other legislative initiatives were also discussed, including better food labeling, posting nutritional information in restaurant menus, improved education around nutrition and exercise, and various forms of “snack taxes”.

Conclusions

Fast food and fast food restaurants are ubiquitous throughout our society. Many people believe that fast food is the true culprit for the nation’s fast growing obesity rates. However, scholarly literature and survey research indicates that the real blame should be placed on our tendency to snack and eat more frequently. Personal responsibility is an important part of the solution. To the extent there is a role for government here, it involves early education in nutrition and lifestyle choices. Improved opportunities for physical education in the public schools should be encouraged. More recently, incentives for exercise and proper eating in the workplace are also emerging as part of the increased awareness of the obesity problem in this country. Finally, reduced subsidies for energy and poor agricultural practices could also help us combat the problem of obesity in the US.

Education Levels

1990	No High School	Some High School	High School Graduate	Some College	College Graduate	Graduate Degree
Greater Waterville Area	9.2%	12.7%	39.9%	20.9%	11.2%	6.0%
Fairfield	10.1%	13.7%	47.8%	15.8%	7.4%	5.1%
Oakland	11.0%	11.3%	37.6%	23.0%	13.7%	3.5%
Waterville	12.3%	13.2%	32.4%	19.9%	12.8%	9.5%
Winslow	10.4%	14.8%	39.5%	20.5%	9.0%	5.7%
Maine	8.8%	12.4%	37.1%	23.0%	12.7%	6.1%
Kennebec County	9.5%	11.6%	38.0%	22.8%	7.1%	6.2%
Somerset County	11.3%	16.7%	43.9%	17.6%	5.2%	3.2%

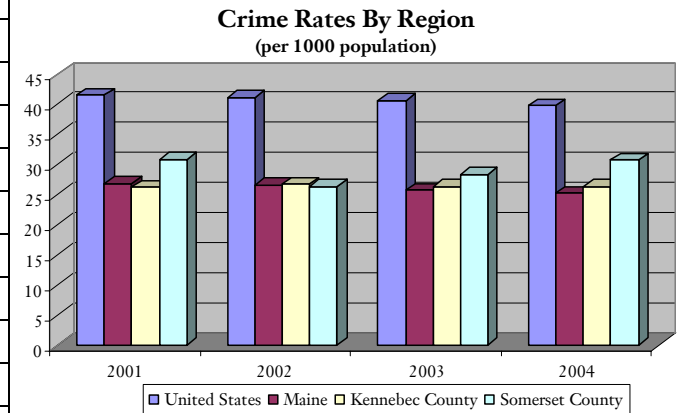
2000	No High School	Some High School	High School Graduate	Some College	College Graduate	Graduate Degree
Greater Waterville Area	5.2%	9.4%	40.3%	26.8%	11.7%	6.5%
Fairfield	3.8%	7.7%	49.2%	24.9%	8.2%	6.2%
Oakland	2.9%	7.8%	39.7%	30.4%	10.9%	8.3%
Waterville	6.6%	10.7%	37.6%	24.1%	12.8%	8.2%
Winslow	5.9%	9.5%	36.3%	28.4%	14.8%	5.1%
Maine	5.4%	9.2%	36.2%	26.3%	14.9%	7.9%
Kennebec County	5.7%	9.1%	37.7%	26.9%	13.1%	7.6%
Somerset County	6.8%	12.3%	45.3%	23.7%	8.4%	3.4%

Source: US Census data. Educational attainment levels among adults 25 years and older.

Area Crime Statistics

Crime	State of Maine				Kennebec County				Somerset County			
	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004
Murder	19	14	17	19	2	0	1	1	0	1	2	1
Rape	322	391	351	313	35	42	32	32	7	11	15	17
Robbery	263	269	289	288	16	35	11	23	4	5	6	7
Aggravated Assault	819	728	755	728	35	62	45	46	37	37	33	32
Burglary	6878	6,944	6,571	6,344	606	565	622	601	423	350	358	396
Larceny	24515	24,496	24,064	24,087	2,243	2,345	2,299	2,362	1,017	904	985	1,063
Motor Vehicle Theft	1667	1,418	1,450	1,305	138	116	123	102	99	47	62	60
Arson	212	174	196	192	26	15	13	26	2	7	3	11
Total Crime	34,695	34,434	33,693	33,276	3,101	3,180	3,146	3,193	1,589	1,362	1,464	1,587
<i>Rate Per 1000 Pop.</i>	<i>26.96</i>	<i>26.6</i>	<i>25.8</i>	<i>25.26</i>	<i>26.24</i>	<i>26.74</i>	<i>26.38</i>	<i>26.45</i>	<i>30.94</i>	<i>26.36</i>	<i>28.48</i>	<i>30.75</i>

Crime	Area Totals		Waterville		Winslow		Fairfield		Oakland	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
Murder	2	0	0	0	0	0	1	0	1	0
Rape	10	13	3	5	4	4	0	2	2	2
Robbery	6	5	5	2	0	0	1	2	0	1
Aggravated Assault	16	15	7	7	1	1	4	4	2	3
Burglary	209	186	85	88	51	39	33	33	28	26
Larceny	905	912	451	489	119	140	196	186	93	97
Motor Vehicle Theft	47	47	16	29	12	5	11	7	8	6
Arson	2	8	2	5	0	0	0	1	0	2
Total Crime	1197	1186	569	625	187	189	246	235	134	137



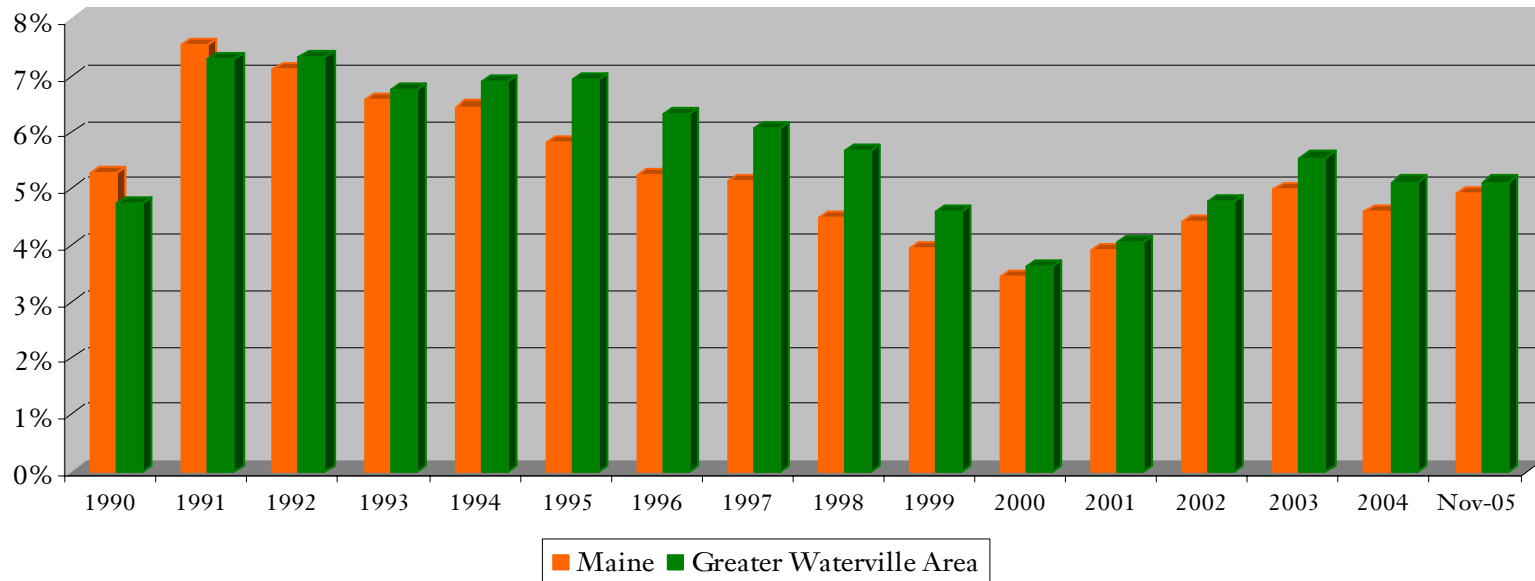
Labor Market Statistics

	Maine			Kennebec County			Somerset County			Greater Waterville Area		
	1990	2000	Nov '05 ^P	1990	2000	Nov '05 ^P	1990	2000	Nov '05 ^P	1990	2000	Nov '05 ^P
Civilian Labor Force	631,147	674,395	717,551	61,014	61,050	62,116	24,520	25,166	25,415	30,135	30,416	31,382
Employed	597,902	651,183	682,283	58,296	58,853	58,917	22,838	23,935	23,546	28,706	29,315	29,777
Unemployed	33,245	23,212	35,268	2,718	2,197	3,199	1,682	1,231	1,869	1,429	1,101	1,605
Unemployment Rate	5.3%	3.4%	4.9%	4.5%	3.6%	5.2%	6.9%	4.9%	7.4%	4.7%	3.6%	5.1%

	Waterville			Fairfield			Oakland			Winslow		
	1990	2000	Nov '05 ^P	1990	2000	Nov '05 ^P	1990	2000	Nov '05 ^P	1990	2000	Nov '05 ^P
Civilian Labor Force	8,313	7,348	7,561	3,538	3,409	3,467	3,097	2,986	3,077	4,299	3,989	4,132
Employed	7,836	7,058	7,111	3,348	3,286	3,292	2,936	2,879	2,936	4,138	3,867	3,938
Unemployed	477	290	450	190	123	175	161	107	141	161	122	194
Unemployment Rate	5.7%	3.9%	6.0%	5.4%	3.6%	5.0%	5.2%	3.6%	4.6%	3.7%	3.1%	4.7%

^P Preliminary. Source: Maine Department of Labor

Unemployment Rates



**Industry Statistics
2005Q2**

Industry	Maine			Kennebec County			Somerset County		
	Firms	Workers	Average Wages	Firms	Workers	Average Wages	Firms	Workers	Average Wages
All Industries	48,230	596,644	\$609	3,557	57,968	\$610	1,412	18,331	\$545
Goods-Producing	9,185	104,949	\$743	558	5,502	\$619	330	6,161	\$693
Natural Resources & Mining	1,073	5,078	\$508	34	333	\$412	60	466	\$531
Construction	6,111	33,899	\$637	412	2,526	\$577	191	1,956	\$693
Manufacturing	2,001	65,972	\$815	112	2,643	\$684	79	3,739	\$713
Service-Producing	39,045	491,694	\$580	2,999	52,466	\$609	1,082	12,170	\$470
Trade, Transportation & Utilities	11,750	129,382	\$534	779	12,739	\$521	374	3,398	\$449
Information	846	11,637	\$744	51	859	\$737	24	154	\$756
Financial Activities	3,745	33,369	\$796	273	1,642	\$616	65	390	\$553
Professional & Business Services	7,254	51,360	\$725	512	4,470	\$709	119	767	\$564
Education & Health Services	5,268	158,694	\$624	541	16,989	\$638	182	4,933	\$532
Leisure & Hospitality	4,755	62,155	\$262	319	4,801	\$230	139	1,538	\$199
Other Services	3,665	17,134	\$458	342	1,653	\$499	103	372	\$402
Public Administration	1,503	27,786	\$733	182	9,313	\$831	76	618	\$561

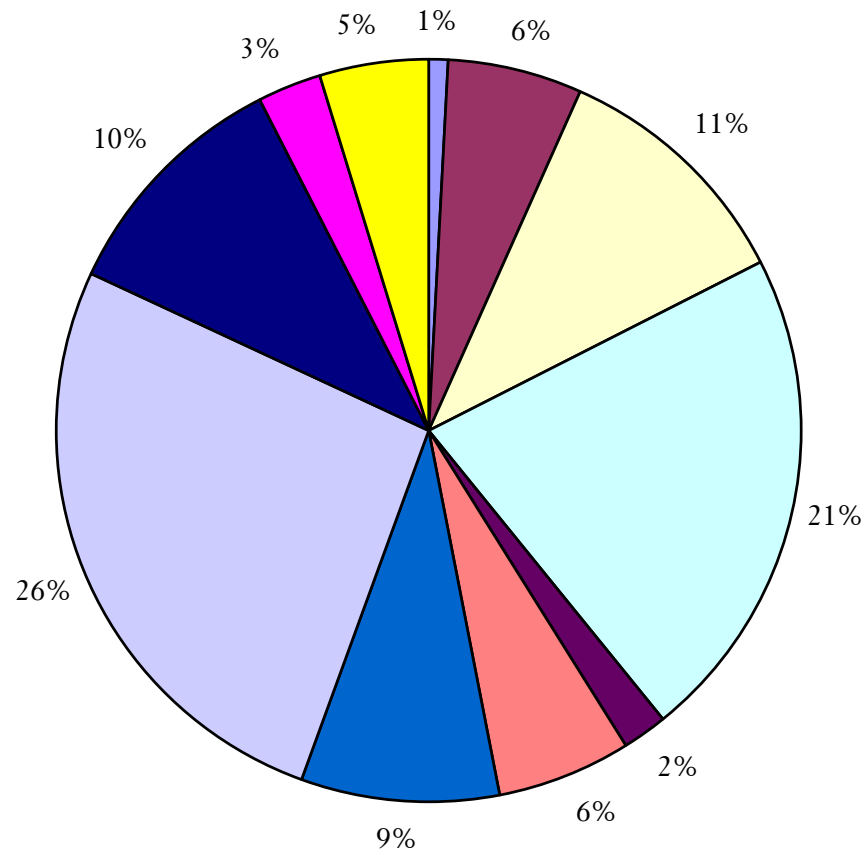
Source: Maine Department of Labor. Wage data are weekly averages. All of the firm, worker and wage data are averages for the second quarter of 2005.

**Industry Statistics
2005Q2**

Industry	Fairfield			Oakland			Waterville			Winslow		
	Firms	Workers	Average Wages	Firms	Workers	Average Wages	Firms	Workers	Average Wages	Firms	Workers	Average Wages
All Industries	186	2,537	\$561	147	1,405	\$595	635	11,962	\$539	183	2,216	\$600
Goods-Producing	43	673	\$631	38	197	\$507	31	710	\$714	37	547	\$711
Natural Resources & Mining	4	63	\$896	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Construction	32	525	\$621	26	134	\$522	24	220	\$538	25	111	\$516
Manufacturing	7	85	\$497	11	62	\$471	n/a	n/a	n/a	12	437	\$761
Service-Producing	143	1,865	\$536	109	1,208	\$610	604	11,252	\$527	146	1,669	\$563
Trade, Transportation & Utilities	56	530	\$525	38	468	\$642	159	3,144	\$433	49	558	\$504
Information	n/a	n/a	n/a	n/a	n/a	n/a	15	80	\$780	n/a	n/a	n/a
Financial Activities	7	42	\$511	6	48	\$412	70	453	\$645	8	61	\$490
Professional & Business Services	19	99	\$484	21	87	\$614	81	534	\$609	n/a	n/a	n/a
Education & Health Services	22	922	\$573	15	437	\$723	140	5,070	\$664	19	425	\$539
Leisure & Hospitality	11	113	\$228	15	90	\$237	72	1,477	\$207	18	231	\$200
Other Services	15	70	\$589	8	41	\$221	54	366	\$349	26	93	\$294
Public Administration	11	82	\$660	n/a	n/a	n/a	13	127	\$761	n/a	n/a	n/a

Source: Maine Department of Labor. n/a denotes too few firms to report. Wage data are weekly averages.

Distribution of Workers in Maine 2005Q2



Industries	
(clockwise, beginning from the top)	
Natural Resources & Mining	1
Construction	2
Manufacturing	3
Trade, Transportation & Utilities	4
Information	5
Financial Activities	6
Professional & Business Services	7
Education & Health Services	8
Leisure & Hospitality	9
Other Services	10
Public Administration	11

The Cost of Living in the Greater Waterville Area

To estimate the cost of living in the Greater Waterville Area we used a Cost of Living Survey of area residents, sampled prices of food and grocery items at the major stores, and conducted telephone and in-person sampling of the cost of a visit to the doctor, dentist, and the purchase of various fuels for home heating and gasoline. The results presented here do not provide a definitive answer to the cost of living in the Greater Waterville Area, but do provide a current assessment of some of the key components of basic consumption patterns for area households.

Cost of Living Survey

In January 2004, a detailed survey containing 121 questions on consumption patterns for a wide variety of items was sent to roughly 500 employees of Colby College who live in the Greater Waterville Area. An additional 500 surveys were mailed to a random sample of households in the area.* We received a total of 302 valid responses, for a response rate of approximately 30%. As the table at right shows, our results are not perfectly representative of the population in the Greater Waterville Area. However, we do believe that our survey results illustrate relevant consumption patterns for area households.

Some highlights of the 2004 survey results include the following statistics:

- 15.6% received Medicare or Medicaid.
- 32% of the households had children.
- Households in our sample consume an average of 80 gallons of gasoline, 163 gallons of home heating oil, and 14.6 gallons of kerosene in a typical month.
- People in our sample eat at fast food restaurants on average 3 times each month and casual dining restaurants twice a month.
- The average household size in our sample is 2.5 persons – approximately equal to the average household size in the Greater Waterville Area.
- 83% of our sample had computers in the home connected to the Internet.
- The average household in our sample owned 2 cars.

Location	% of GWA population	% of sample
Fairfield	4.3%	7.0%
Oakland	4.6%	11.3%
Waterville	26.0%	53.0%
Winslow	12.9%	11.6%
Income		
Under 10,000	4.4%	2.0%
10,000-14,999	3.2%	1.7%
15,000-24,999	6.2%	8.9%
25,000-34,999	5.6%	11.6%
35,000-49,999	5.4%	13.6%
50,000 or more	12.3%	61.0%
Education		
Some High School	9.4%	0.7%
High School Graduate	40.3%	9.3%
Some College	26.8%	12.3%
College Graduate	11.7%	19.2%
Graduate Degree	6.5%	56.9%

*Households were selected at random using a current telephone directory.

The Cost of Food

One of our goals was to try to identify the bundle of food and grocery items purchased each month by the typical household in the Greater Waterville Area. On the survey we asked how much each household consumed of 83 different food and grocery items. We asked only about goods usually purchased and consumed in a month. Goods that lasted more than a month did not appear on our survey, e.g., baking soda, mustard, light bulbs, etc. From the results we then identified a ‘shopping cart’ of goods that seemed to fit the average household.

In January 2004, we completed an initial price index for food and grocery items in the Greater Waterville Area based on these survey results. Using the same methods during the third week of January 2005 and January 2006, three retail outlets (Shaw’s, Hannaford’s, and Wal★Mart) were again surveyed for an identical market basket of goods. For each good, we recorded a price for two name-brand items, one store brand item, and one organic alternative. In some cases (e.g., snack foods) the price of several different products were surveyed (e.g., potato chips, pretzels, & corn chips). We tried to record the price of the same sized package at each location. Further, we sought to use the same brand names and product sizes as those recorded in the 2004 survey. We also recorded ‘per unit’ prices (e.g., price per pound) for each item to facilitate comparisons. Over 100 prices were recorded at each location, and an average price was then computed for each item on the survey.

Based on the shopping cart of goods identified in the list at right, we applied the average price of each good across the three stores to calculate the cost of the total bundle. For name-brand goods, a shopping cart containing these items would, on average, ring up as \$333.78 at the check-out register. By substituting store brand goods when available instead of name-brand goods, the resulting shopping cart would cost \$271.47, for a savings of \$62.31, or almost 20%.

Typical Monthly Shopping List

- 5 gallons of milk
- 2 dozen eggs
- 2 pounds of butter
- 2 pounds of margarine
- 2.5 pounds of cheese
- 8 servings of yogurt
- 3 heads of lettuce
- 3 pounds of broccoli
- 5 pounds of bananas
- 4 pounds of apples
- 4 pounds of oranges/grapefruit
- 2 pounds of squash
- 3 pounds of carrots
- 2 heads of garlic
- 8 pounds of potatoes
- 3 pounds of onions
- 4 packages of frozen vegetables
- 5 frozen prepared meals
- 4 pounds of hamburger
- 5 pounds of chicken
- 4 pounds of pork
- 3 pounds of fish
- 4 cans of tuna
- 2 packages of hotdogs
- 6 cans of soup
- 4 pounds of deli meats
- 2 boxes of oatmeal
- 4 boxes of breakfast cereal
- 4 boxes of pasta/rice
- 3 jars of pasta sauce
- 4 boxes of macaroni & cheese
- 3 bottles of juice
- 6-pack of soda
- 2 large bottles of soda
- 3 bags of chips
- 3 loaves of bread
- 1 jar of peanut butter
- 1 jar of jelly
- 2 boxes of crackers
- 2 packages of cookies
- 1 gallon of ice cream
- 1 tube of toothpaste
- 1 bottle of shampoo
- 1 stick of deodorant
- 8 rolls of toilet paper
- 3 bars of soap
- 4 rolls of paper towels
- 1 box of garbage bags
- 1 package of feminine products
- 1 bottle of dish detergent
- 1 bottle of laundry detergent

Notably, the variety of organic goods available in local grocery stores has increased dramatically since January 2004. To determine how much more consumers pay for organic goods we constructed a hypothetical shopping cart containing organic foods and environmentally conscious grocery items. If organic items were not available, we assumed that our shopper would choose name-brand items. Constructed in this fashion, a shopping cart reflecting a preference for organic goods would cost \$513.68. This “earth-friendly” bundle costs nearly 54% more than a basket consisting of only name-brand goods.

Since the basket of name-brand goods has remained constant, a comparison of the 2005 and 2006 prices enables us to calculate an estimate of inflation for the Greater Waterville Area during the past year. As reported in last year’s Abstract, the cost of our bundle rose by 2.46% in 2005. However, from January 2005 to January 2006 the cost of our name-brand market basket of goods rose by just 1.1%, perhaps reflecting the presence of the new Super Wal★Mart in Waterville which opened shortly after our price survey in 2005. On a national level, food prices (excluding grocery items) increased by 2.65% from January 2005 to January 2006 according to the US Bureau of Labor Statistics’ consumer price index.

Several items did not make it into our shopping basket because not enough people in our original survey chose them and therefore we opted not to call them ‘typical’. However, many of these items are important to households in the area. Average prices for these goods and recent rates of inflation are reported in the table below.

Average Prices – January 2004, 2005, and 2006

Item	2004	2005	2006	Percent Change	
				2004-05	2005-06
6-pack of beer	\$4.74	\$5.12	\$4.46	8.0%	-12.9%
Bottle of wine	\$8.49	\$8.74	\$9.27	2.9%	6.1%
Carton of cigarettes	\$37.70	\$38.40	\$51.77	1.9%	34.8%
Half gallon of soy milk	\$2.32	\$4.79	\$3.02	106.5%	-37.0%
Pound of salmon	\$3.99	\$5.49	\$6.09	37.6%	10.9%
Pound of lobster	\$8.99	\$6.99	\$9.04	-22.2%	29.3%
Pound of Gourmet cheese	\$6.49	\$7.53	\$6.75	16.0%	-10.4%
Small jar of baby food	\$0.62	\$0.70	\$0.57	12.9%	-18.6%
Liquid infant formula	\$4.69	\$5.18	\$5.53	10.4%	6.8%
Box of dry mix formula	\$9.88	\$9.48	\$12.89	-4.0%	36.0%
Can of dog food	\$0.53	\$0.55	\$0.41	3.8%	-24.7%
Can of cat food	\$0.41	\$0.45	\$0.36	9.8%	-19.8%
Bag of dog food	\$5.03	\$3.80	\$4.41	-24.5%	16.1%
Bag of cat food	\$3.94	\$5.28	\$5.72	34.0%	8.3%

Average Costs of Living in the Greater Waterville Area*

Item	2004	2005	%change
Gallon of gasoline	1.66	1.88	13.5
Fast food meal	3.59	4.11	14.5
Cable TV Service (per month)	40.25	45.90	14.0
Dentist visit: basic cleaning, no x-rays	71.25	71.83	0.8
Doctor's visit: physical exam, no blood work	167	160	-4.2
Interest rate on a 1-year CD	0.70%	1.79%	
Interest rate on a passbook savings account	0.35%	0.38%	
Haircut: male	8.66	10.33	19.3
Haircut: female	17.33	14.67	-15.4
Large cheese pizza delivered	9.99	10.59	6.0
2004 Toyota Corolla, 4-door, automatic transmission	14,370	15,500	7.9
Child care (per week)	96.25	95.17	-1.1
Skiing: one-day lift ticket & equipment rental	86	91	5.8
Retirement home (per month)	2286.00	4195.33	83.5
One night movie rental: new release	4.00	3.83	-4.3

*Based on a sample of several alternatives.

Co-Authors of the 2006 Statistical Abstract

Bennett Barnwell '06
 Francis Chapuredima '06
 Robert Glotfelty '08
 Trevor Hanly '07
 Andrew Heaney '07
 Paul Howanitz '07
 Lindsay Kohlhoff '07
 Brian Lam '08
 Wai Leung '09

Daniel Moss '08
 Michael Paleokrassas '07
 Andrew Peterson '08
 Jennifer Radcliffe '06
 Scott Roulston '07
 Justin Smith '07
 Chad Stecher '08
 Caroline Theoharides '06
 Jonathan Wong '06

Michael Donihue
 Associate Professor of Economics

The conclusions and analysis presented in this abstract represent the views and calculations of the authors and do not necessarily represent the opinions of the faculty and staff at Colby College or the source agencies for the data found in this abstract.

Copies of this abstract are available online at <http://www.colby.edu/economics>.