



# An Indicator Research Paper from the Sustainable Community Roundtable

December 2006

Vol. 6, No. 1

The Roundtable is engaged in the facilitation of vision, dialog, action and celebration among the South Sound community. We bring people together to explore creative and sustainable solutions for meeting our present collective needs without jeopardizing future generations. We sponsor events and publish information that reflect our community's sustainability goals and trends.

We invite you to join the Roundtable! Become a member and join a project team, or contribute to support our work.

## INSIDE

Why Indicators?	- page 1
Human Impact	- page 1
Natural Environments	- page 2
Social Harmony	- page 2
Transportation	- page 2
Water Consumption	- page 2
Energy Consumption	- page 3
Resource Consumption	- page 3
Public Participation	- page 3
Housing	- page 3
Education	- page 4
Economy	- page 4
Health	- page 4
Locally Produced Food	- page 4
Summary	- page 4

## Roundtable Board:

Karin Kraft, Jack Spence, Karen Matheney, Chris Hawkins, Taylor Pittman, Nicole Ricketts, Russell Gilsdorf, Ron Smith, Larry Hall, Michael Cade, Erica Weichman

## Published by:

Sustainable Community Roundtable  
209 4<sup>th</sup> Ave East, Suite 206  
Olympia; WA 98501  
(360)754-5352  
www.sustainsouthsound.org  
info@sustainsouthsound.org

## Why Indicators?

The Sustainable Community Roundtable Indicators were developed to sketch an outline of quality of life in the South Sound region. These social, economic, and ecological indicators give us clues about our community health, assets and liabilities. They help us make better-informed decisions impacting the future of our communities.

To develop the Indicators, the Roundtable hosted a series of community workshops in the early 1990's. Citizens developed the indicators by asking:

- Does it matter in the long-term?
- Is it inspiring or compelling public and media interest?
- Can it be measured?
- Is reliable local data regularly collected and reported?
- Does it show a trend?
- Is data available from at least three years?
- Can trends be compared to trends in other communities?
- Will community action make a significant difference?

Indicators give only a limited picture of how we're doing in the South Sound. We hope our report will be useful to citizens in making informed decisions and in promoting action.

The Human Impact Indicator is perhaps the most important because population impacts overall sustainability more than any other factor. As population grows, land available for food, water, and other ecosystem services decreases. The ecological footprint – land needed

to provide these services for each individual - is calculated from a formula in Our Ecological Footprint: Reducing Human Impact on Earth by Rees, Wackernagel, and Testemale. The land required to produce all the food, fuel, and fiber to sustain an average American in our current lifestyle is about 12.6 acres.

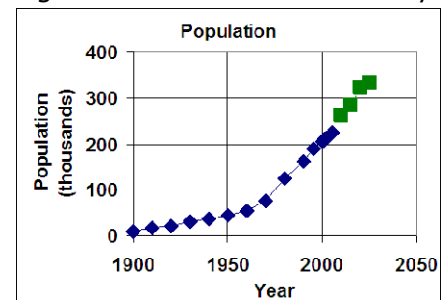
## Population Growth



The population of Thurston County in 2005 was 224,100\* people.

With the average American footprint, this requires six times the 480,000 acre area of the Thurston County to live sustainably. Each resident in Thurston County would have to reduce consumption of resources by more than 80% to support ourselves within the county borders.

In addition, population is growing 2.6% each year. Seventy-five percent of the increase since 2000 is immigration from King and Pierce Counties, where land prices are higher than in Thurston County.



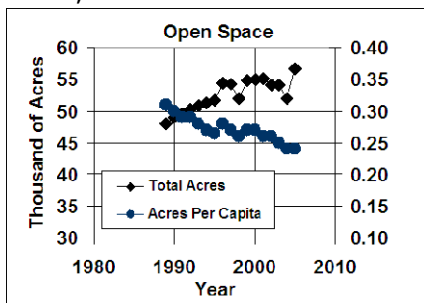
\*Current population estimate is slightly lower than reported last year by the Thurston Regional Planning Commission (TRPC).

## Open Space: Up in the Air



What we do on our land determines its capacity to support us now and in the future. The South Sound enjoys a lush, productive land base. It supports agriculture, forestry, fishing, shellfish cultivation, recreation, and many other activities making the area both attractive and vulnerable to population growth and urbanization.

Urbanization increases impervious surfaces (like parking lots, roads, and rooftops). It decreases farmland, forests and parks that absorb and filter water, distribute nutrients to plants, and provide wildlife habitat. If we are to sustain ourselves in the future, the importance of maintaining diverse habitats must be acknowledged. Key environments must be protected and in many cases, restored.



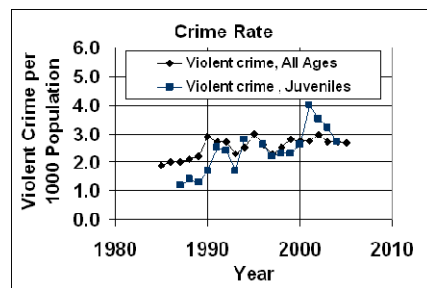
Open space as defined in this indicator is park and cropland, trails and preserves managed with the intent to preserve natural resources including scenic beauty. Population is growing faster than open space.

Statistics suggest we are holding steady on public open space. Since 1995, reported open space acreage (excluding the 92,000 acre Capitol Forest, not previously included in our numbers) has varied around 55,000. The reasons behind recent fluctuations in data from TRPC are not clear at this point, but probably relate more to reporting than real change. There is no current indication of public open space decreasing.

## Juvenile Violent Crime: Will Downward Trend Continue?



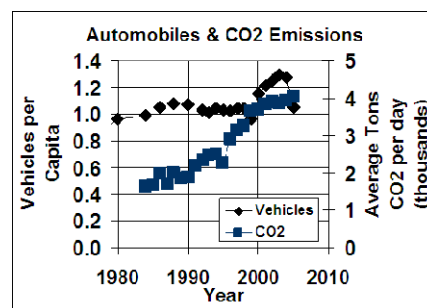
County data on juvenile violent crime is not yet available for 2005. Personal security is essential to maintaining the mutual cooperation needed in a sustainable community. To monitor this feature, we track violent crime in Thurston County. Crime for all age groups has remained approximately constant over the last 20 years. Juvenile crime jumped in 2001, but dropped steadily over the 2001-2004 period.



## Transportation: CO2 Emissions Level



Transportation is a key indicator in several ways. In a time of growing concern over climate change, transportation is one of the largest factors in CO<sub>2</sub> production and energy consumption. Efficient transportation systems also enhance the region's economic viability.



The Roundtable measures automobile use by tracking per capita motor vehicle ownership, including trucks. CO<sub>2</sub> emissions are estimated from local gasoline sales (converted to thousands of tons of CO<sub>2</sub> per day).

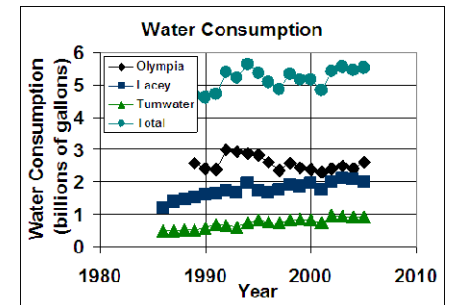
In 2005, data from the county indicated a drop in vehicles per

capita, and CO<sub>2</sub> emissions appear to be leveling off.

## Water Consumption: Debate Continues



Plentiful supplies of clean water are essential in maintaining sustainable communities. Water consumption is measured as total gallons per year consumed by Lacey, Olympia, and Tumwater water customers.

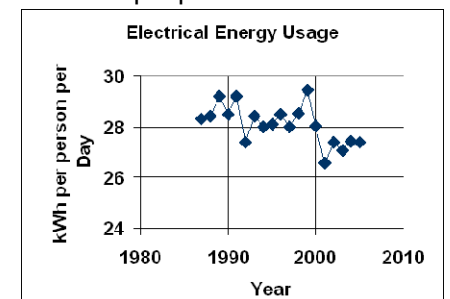


Data excludes water from other public water suppliers and private wells, for which figures are unavailable. The long term trend is a gradual increase in water consumption, with the 2005 data confirming this trend. Controversy persists over whether adequate supplies of groundwater exist in the county.

## Per Capita Energy Consumption: Stable



The Roundtable estimates energy consumption by tracking electrical energy use per capita. The statistic does not include other sources of energy such as natural gas, oil, wood or propane.

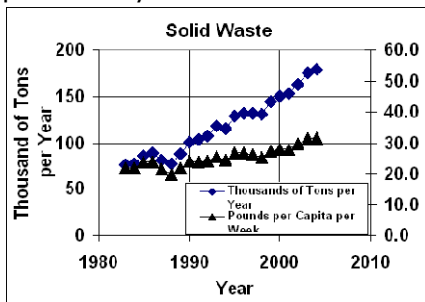


Although there has been no change in the last four years, there has been a slight downward trend since 1989. Total energy consumption has increased over that time due to population growth.

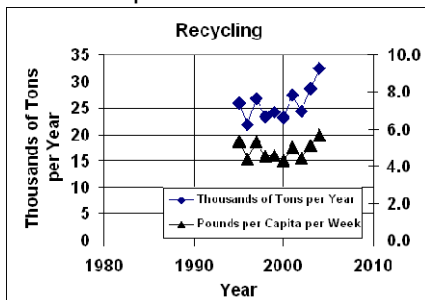
## Waste and Recycling Up



This indicator tallies solid waste sent to the Thurston County transfer station for disposal in Eastern Washington. It does not include recyclables or yard waste. Garbage has increased nearly every year since 1983, more than doubling over the 23 year period – from 76,000 tons in 1983 to almost 187,000 tons in 2005. This is a 6.5% increase every year, while population has grown only 3% per year. Every person in Thurston County now produces more than 1700 pounds of garbage a year, up from 1000 pounds a year in 1988.



Over the long term, recycling per capita has changed little, but in the last two years the trend has been positive.



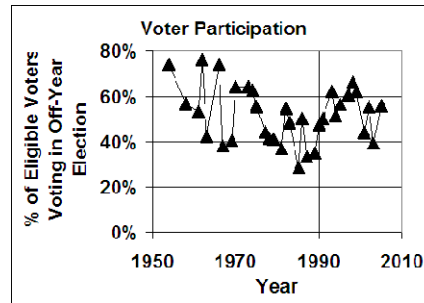
## Voter Participation Fluctuates



We measure public participation by tracking citizens who vote in off-year elections, because these may better reflect interest in local issues and candidates.

More active forms of citizen participation, e.g. testifying at public hearings, serving on citizen advisory boards, petitioning government, and demonstrating on public issues are difficult to quantify. Voter participation over

the last 52 years has been highly variable.

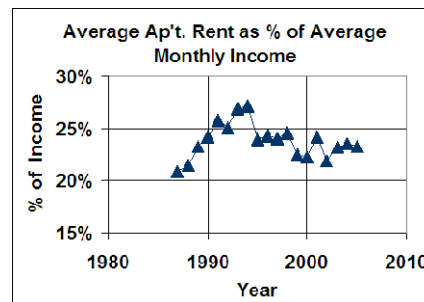


## Rental Housing Cost: Steady



This indicator gauges affordable housing by calculating average monthly rent as a percentage of income. Since 1985, this ratio has stayed largely the same, except for a peak in the early '90s.

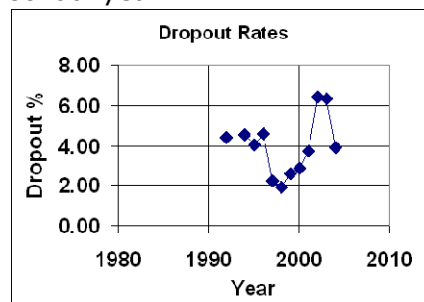
Availability of affordable housing is a concern because when wages do not keep up with inflation, more expensive housing means families must spend more of their income for rent.



## Drop-Out Rate Fell



Educational quality is often measured by high-school dropout rates, which can indicate personal and family problems and/or failure of the school system to engage students in learning. The Roundtable tracks the dropout rate of students in grades 9-12 in Thurston County for any given school year.

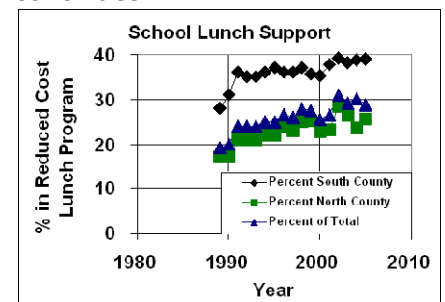


In the 2004-2005 school year the dropout rate has returned to an average of 4%, a 2% decrease. The cumulative rate over four years of high school works out to nearly 20%.

## Students Receiving School Lunch Support Increasing



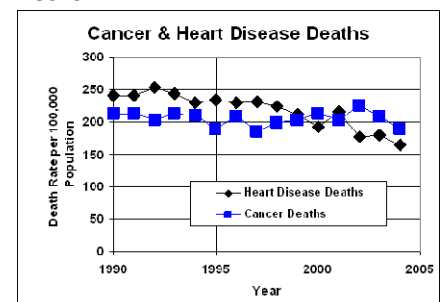
The number of children living in poverty is one measure of a society's ability to supply adequate economic resources for a decent life. The Roundtable monitors this factor by tracking the percentage of children in Thurston County schools who apply for free and reduced-cost lunches. Numbers have consistently exceeded 20% of school children countywide, and are 10-15% higher in south county schools than the north county. The trend of gradual increase in lunch support continues.



## Hearts Get Healthier



The Roundtable measures health of the population by recording the number of deaths from heart disease and cancer per 100,000 people. These are typically considered good long-term statistical measures of community health.



Deaths from both cancer and heart disease dropped in 2005. Long-term, heart disease deaths

appear to be falling in South Sound. While there is a short-term downward trend in cancer deaths, the long-term view shows little change. New health issues are emerging such as asthma, diabetes and obesity and we intend to track these in 2007.

**Locally-Produced Food: New Data**

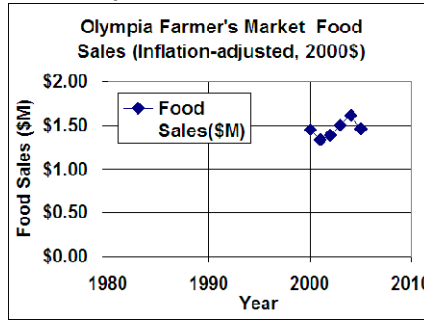


A sustainable community provides its inhabitants with a reasonable abundance of food.

Buying locally-grown food results in health and economic benefits, reduction in energy consumption, encouragement for small farms and reduces our community's reliance on outside resources.

The graph only includes sales at the Olympia Farmers Market, and does not take into account other sources of local produce which might show different trends. The Washington State Farmers Market Association lists approximately 100 different local markets, with three in Thurston County in Olympia, Tumwater, and Lacey. Other sources of locally grown produce include the Olympia Food Cooperative and private farmers providing contract

sales to businesses and residents. The average purchase of produce at OFM was unchanged at \$6.35 per person (adjusted for inflation).



For more information about the Indicator Project, see our website at <http://www.sustainsouthsound.org>.

**What do these trends mean?**

The quality of life we now lead and hope to maintain in Thurston County depends on many interconnected factors, only a few of which the Roundtable examines. Even though our view is limited, the information is a useful gauge of the overall health of Thurston County. It should encourage citizens to continue their efforts building a sustainable community in South Puget Sound.


The good news is that Thurston County residents are improving in health, actively

participating in government, and making some progress toward curbing automobile use. In addition, CO2 production appears to have stabilized, and more students stayed in high school than in the previous survey year. We each use about the same amount of energy, eat about the same amount of locally produced food, and pay about the same rent.

The bad news is that more of our children required assistance with school lunches. This suggests that more of our lower income families are struggling financially, especially in South County. The cumulative high school drop out rate of 20 percent needs to be addressed. It is unacceptable to have one out of every five students drop out of high school. Finally, while we are recycling more, we are still making significantly more waste each year.

In the coming year the Roundtable will be expanding the Indicator Project, with the understanding that knowledge will bring commitment to a better future. Come join the Roundtable. We want your help!

The Sustainable Community Roundtable thanks the City of Olympia for support in the production of this publication.



**The Sustainable Community Roundtable**  
 209 4th Ave East, Suite 206  
 Olympia; WA 98501  
 360-754-5352  
[info@sustainsouthsound.org](mailto:info@sustainsouthsound.org)  
[www.sustainsouthsound.org](http://www.sustainsouthsound.org)

***We want your help in building a sustainable community!***

Name \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_ ZIP \_\_\_\_\_

E-mail \_\_\_\_\_

Volunteer Interests \_\_\_\_\_

Yes! I'd like to help out the Roundtable by:

Volunteering for the Indicator Project

Volunteering for another project

Joining with a donation of:

\$100  \$50  \$25  Other