

# THE COMMUNITY LEADER'S LETTER

NEWS & VIEWS FOR SOUTH CAROLINA'S  
GRASSROOTS LEADERS



## RISING SOLID WASTE DISPOSAL COSTS OVERWHELM LOCAL GOV'T BUDGETS

*Remote rural places without land-use controls are sitting ducks for hazardous waste sites. Page 4.*

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*School Size: How Big Is Big Enough? Recent research findings on page 3.*

***In furtherance of Clemson University's land-grant mission, the Community & Economic Development Program at Clemson provides access for community leaders in South Carolina to expertise in all branches of knowledge on the university campus.***

County property tax millage in South Carolina has increased an average of 40 percent in the past four years. In Abbeville, Barnwell, and Lee counties, the increase has been greater than 100 percent.

What is driving these big increases?

Loss of federal revenue sharing money is one explanation. Local governments are having to raise taxes to offset the loss of as much as 30 percent of revenues which were coming from Washington.

Yet the biggest single factor driving increases in local taxes is the rising cost of solid waste disposal. In 1988-89, solid waste disposal costs accounted for only 4.7 percent of the Pickens County budget; in 1990-91, they account for 11.4 percent. In Berkeley County, solid waste outlays have jumped from 3.6 percent of the county budget to 9.0 percent. Similar patterns appear in other counties recently surveyed.

Disposing of solid waste is also eating up an increasing

proportion of municipal budgets. Sanitation service costs rose 32 percent in the past five years in the state's five largest cities.

The increasing costs observed to date are likely to be only the tip of the iceberg. New EPA regulations require lining future landfills to prevent seepage into streams and underground water supplies. The costs will be about the same as if you had to wrap your household trash in new carpeting before putting it in the landfill.

Operators of landfills are also being required to drill and maintain monitoring wells around landfill sites to check for seepage. Except in a few cases, the costs of those wells are not yet showing up in solid waste disposal costs.

In addition, higher fuel costs drive up the costs of operating garbage trucks.

Some economists project that by the end of the decade solid waste disposal in many communities will cost an amount roughly equal to the costs of operating the public schools.

What can be done? The

amount of material going into landfills must be reduced.

Recycling is one way to achieve such reduction, but it is also expensive. New technologies to improve the efficiency of recycling are greatly needed. Because demand for recycled materials presently is limited, most communities lose money on recycling.

Even though landfill costs are rising, burying waste is still cheaper in most communities than recycling. That may change, however, as the new EPA regulations are implemented. Communities that have recycling programs are looking ahead to that time and trying to get citizens in the habit of recycling.

Finding new economic incentives to reduce the waste stream is also needed. Packaging waste accounts for a substantial portion of what enters landfills, and over-packaging is common because costs associated with disposal are not borne by manufac-

*(Continued p 4)*

ECONOMIC BRIEF NO. 2

**MEASURING IMPACT OF NEW \$\$\$\$**

The Community and Economic Development Program at Clemson University has the capability of estimating local economic multipliers for any South Carolina county. At the present time, however, it is not possible to produce reliable estimates of multipliers for economies that are not defined geographically by county boundaries except by custom data collection necessitating a large research expenditure.

*In the first of these economic briefs, we learned that every community must have something to sell to the outside world in order to bring in new dollars.*

*Dollars obtained from selling factory goods outside the community are used to pay factory workers. Factory workers use some of their pay to buy groceries. Grocers use some of their revenue to hire clerks who spend part of their checks getting their hair cut at the local barber or styled by the local hairdresser. So a new dollar coming into the community can eventually change hands several times; and each time it changes hands, it adds to the total income of the community.*

*The circulation of new money in a community is easy enough to understand. But how do we measure the economic impact of that circulation? We use a local economic multiplier.*

*Consider the following examples. A new dollar enters your county; and we count it as it enters, meaning that it has produced one dollar of effect on the local economy. Those who receive that new dollar spend fifty cents of it locally within the county. Hence, the new dollar has now produced an effect on the local economy of \$1.50. Suppose that those who receive that fifty cents also spend 50 percent of their income locally, then the initial dollar*

*has multiplied to cause an effect on the local economy of \$1.75. Hence, the multiplier is 1.75.*

*We could carry this process on for several successive rounds. But if the people in the community spend anything less than 100 percent of their income locally, the initial dollar will gradually leak out of the commu-*

**A local economic multiplier measures the economic impact of new money circulating in a community.**

*nity. So with each successive round of circulation, the effect of the new dollar on the local economy becomes smaller and smaller.*

*The size of local multipliers is determined by what percentage of new dollars gets spent within the local economy.*

*When the local grocers must purchase their stock from distant wholesalers, local barbers pay electric bills to utilities that bring in power from distant places, and local consumers go to other towns to shop, the local multipliers will be reduced to that extent. These purchases of goods and services from outside the local economy are called leakages. A totally self-sufficient*

*economy will have zero leakages.*

*Generally, the bigger and more diversified the local economy is, the larger the multipliers because there are fewer leakages. For any given situation, the multiplier for a county will be greater than for a town or city; and the multiplier for a state will be greater than for a county.*

*Counties with big cities will have larger multipliers than counties with small towns, and states with big cities will have larger multipliers than states with smaller cities.*

*Actually, there are many different types of multipliers. The impact of changes in the economic base on local retail sales is determined by a sales multiplier. The impact on income is determined by an income multiplier. And the impacts on total employment or tax revenues are determined by their own special types of multipliers. In almost every case, income and employment multipliers are considerably smaller than sales multipliers.*

*Whatever the type of multiplier, there are few that are larger than 5.0. Most multipliers for South Carolina counties will generally be no larger than 3.0, and for smaller communities, no larger than 2.0. In some rare cases, multipliers larger than these may reflect reality, but larger multipliers should always be treated with some healthy suspicion.*

## The School Size Debate: How Big Is Big Enough? STInstitute Reviews Recent Research Findings

School consolidation continues to be an issue in some South Carolina communities. The principal arguments for consolidated schools are that bigger schools can offer a greater variety of courses and better prepare students for the world and that bigger schools are more cost efficient.

A review of recent findings in education research by Dr. Davant Williams, Strom Thurmond Institute Associate, indicates that while both arguments are theoretically sound, the theoretical benefits of larger schools are often not realized in practice. Dr. Williams has examined the research literature as it relates to optimal school size.

Typical of the research findings are those reported by Professor David Monk of Cornell University. Monk concedes that it may be possible for larger schools to operate more efficiently than small ones, but finds little empirical evidence in New York state that, in fact, they do operate more efficiently. "Whatever savings are associated with offering larger classes in larger [high] schools are exhausted by the time enrollment reaches 400 students," Dr. Monk concludes.<sup>1</sup>

"It is clear," Dr. Monk writes, "that school size is related to the mix of courses as well as to how courses are offered. However, it is equally clear that there are limits on the degree to which schools take advantage of the efficiencies larger enrollments are alleged to offer."<sup>2</sup>

Other researchers have reached similar conclusions, too. For example, John Goodlad states: "I would not want to face the challenge of justifying a senior, let alone [a] junior high [school] of more than 500 to 600 students (unless I were willing to place arguments for a strong football team ahead of arguments for a good school . . .)." <sup>3</sup> He also prefers elementary schools no larger than 300 students and suggests that a size "of only 150 boys and girls can be very satisfactory."<sup>4</sup>

The greatest disadvantage of smaller schools seems to be in dealing with "students who are in some sense unusual."<sup>5</sup> Handicapped and gifted students may be able to obtain more specialized treatment in larger schools.

So why the push for larger schools? The theoretical advantages have something to do with movement toward

consolidation.<sup>6</sup> The desire for stronger athletic teams may also be behind some of the movement. The bureaucratic sense that bigger is better, particularly for the professional education establishment, is also a factor.<sup>7</sup>

Some schools may be too small, and local conditions must be taken into account in assessing the desirability of further school consolidation. But the research findings suggest that the burden of proof should rest on those advocating larger schools. As one researcher concludes: "In short, there is no strong empirical base to support the assumptions and assertions of school and district consolidation advocates."<sup>8</sup>

Copies of Dr. Williams' report may be obtained by writing the Strom Thurmond Institute at Clemson University.

**Whatever savings are associated with offering larger classes in larger [high] schools are exhausted by the time enrollments reach 400 students.**

—David H. Monk

<sup>1</sup> David H. Monk, "Secondary School Size and Curriculum Comprehensiveness," *Economics of Education Review* 6, no. 2 (1987): 143.

<sup>2</sup> *Ibid.*, 147.

<sup>3</sup> John I. Goodlad, *A Place Called School* (New York: McGraw-Hill, 1984), 310.

<sup>4</sup> *Ibid.*, 338.

<sup>5</sup> David H. Monk, "School District Enrollment and Inequality in the Supply of Classes," *Economics of Education Review* 6, no. 4 (1987): 375.

<sup>6</sup> Robert J. Tholkes and Charles H. Sederberg, "Economies of Scale and Rural Schools," *Research in Rural Education* 7, no. 1 (Fall 1990): 9-15 passim.

<sup>7</sup> David Strang, "The Administrative Transformation of American Education: School District Consolidation, 1938-1980," *Administrative Science Quarterly* 32, no. 3 (September 1987): 352.

<sup>8</sup> Jonathan P. Sher and Rachel B. Thompson, "Economy, Efficiency, and Equality: The Myths of Rural School District Consolidations," *CEFP Journal* 15, no. 2 (March-April 1977): 5.

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## REMOTE RURAL AREAS WITH NO LAND-USE REGS ATTRACTIVE FOR HAZARDOUS WASTE DISPOSAL

Remote, rural counties in South Carolina, and across the United States, seldom have land-use controls. Land-use controls and zoning are, at best, a necessary evil for many people; and places that are not growing seldom see much reason to put restrictions on the rights of private property owners.

Yet such remote counties may need land-use controls worse than counties that are growing rapidly. Without such controls, remote, sparsely populated counties are likely to be prime targets as places for urban areas to locate all sorts of undesirable activities, including hazardous waste disposal sites.

No one wants such activities in his or her own neighborhood. But they must be located somewhere, and there is a natural tendency to look for places to locate undesirable activities where it will irritate the fewest people. Because remote rural counties do not have large populations, they do not have much representation in state legislatures and in Congress. So sparsely populated rural counties without land-use controls are sitting ducks for those looking for places to dump their trash.

Land-use controls will not guarantee that remote counties do not become the sites for waste disposal activities. In fact, if geologic conditions

are right, there may be nothing a sparsely populated rural county can do to keep out waste disposal operations. But if land-use controls are in place, counties can establish ground rules for the location and operation of such facilities within their jurisdictions.

It is too late to try to get land-use controls in place after a county has been targeted for a waste disposal site. Establishing such controls takes time, and land-use ordinances cannot outlaw existing activities. The time to develop land-use controls is before those needing to dispose of waste begin scouting out sites.

### RISING COSTS \_\_\_\_\_ (From p 1)

turers. One way to attack this problem would be a tax on packaging materials at the manufacturing level. A similar tax might also be levied on problem items like disposable diapers, appliances, tires, and batteries. Yet no one has outlined a practical way to administer such a tax.

Problems with our growing mountains of trash are not going to go away soon. And disposal of that trash in an environmentally safe way will keep driving up local taxes in South Carolina for most of this decade.

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