

## The Story of Rural Schooling in Virginia George McDowell and Karen Mundy

What determines how much localities spend on public schools? The amount they spend is a combination of federal, state, and local funds. Typically, localities in northern Virginia spend more dollars per pupil than do localities in southwest Virginia. Money, in and of itself, does not make for better schools, but the absence of adequate monetary resources does limit what can be done in schools.

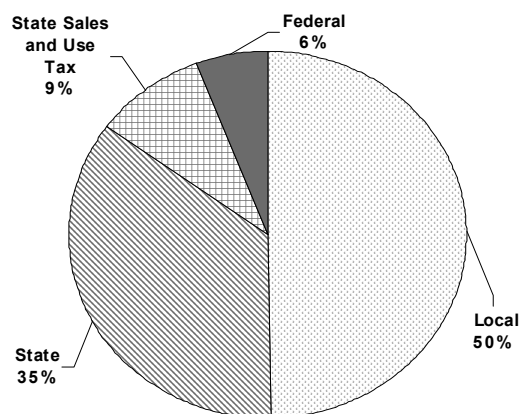
in 1997-98. However, the \$6.855 billion spent on public schools are not uniformly available to all children in the Commonwealth. More than 700,000 children in the Commonwealth—much more than 50 percent—do not have access to the statewide per pupil average. Total spending varied from \$4,580 to \$10,740 per pupil. (The cost for a student attending Virginia Tech was \$10,424 in 2000.)

Rural is defined by population per square mile: fewer than 120 people per square mile is considered rural.

Virginians spent about \$6.855 billion dollars on K–12 schooling in 1997-98, which was the most recent year for which data were available when the study was made. The single, largest source comes from local sources, mostly from real property taxes (Figure 1).

### School Spending and Ability to Pay

The Constitution of Virginia of 1971 and the State Bill of Rights provide that the Commonwealth is responsible to “provide for a system of free public elementary and secondary schools for all children of school age throughout the commonwealth, and ... to ensure that an educational program of high quality is established and continually maintained” (Article VIII, Constitution of Virginia of 1971).



**Figure 1. Sources of Spending for Virginia Schools, \$6.855 Billion, 1997-98**

The average statewide expenditure was \$6,229 per pupil for each of the 1,100,499 children in the Virginia public schools

The Commonwealth of Virginia has placed substantial control and responsibility for schools in local communities. Local communities, the Commonwealth believes, have a vested interest in educating their children. Therefore, local communities must provide the necessary local support. Yet the disparity in access to resources persists. Consequently, the real issue is not the dollar amount spent but what percentage of local income that dollar amount represents.

Often people assert that the disparity in resources available in Virginia's rural communities could, in fact, be corrected if rural people would simply make a greater effort by taxing themselves at rates that would overcome the disparity. The perception is that rural communities have inappropriately low tax rates and simply do not make sufficient effort.

George McDowell is Professor and Karen Mundy is Communications Coordinator, Department of Agricultural and Applied Economics, Virginia Tech.

Evidence about the ability to pay taxes does not support this assertion. Local taxes are levied based on real property values. In most communities much, if not most, of the real property value is in peoples' homes, which are more a reflection of their incomes than an asset that generates family income. However, people do not pay their taxes from those assets. People pay their taxes from their stream of income. It is not even on the basis of their total incomes that people decide together to pay for government services, but rather on the amount of money they have after they have taken care of the basic family needs.

Discretionary Income is the amount of money a family has after paying for basic family needs.

Clearly, the cost of meeting minimum living requirements is different in different localities. These differences have been taken into account by constructing a county-by-county standard of living index. The federal government defined poverty income for a family of four in 1998 as about \$16,000 or \$4,000 per person. That \$4,000 is then modified by the standard of living index. The survival income for the people in any community is \$4,000 times the standard of living index times the population of the community. That amount, subtracted from the total Adjusted Gross Income for the community, gives the community discretionary income. Comparisons between school divisions are made on the basis of per pupil discretionary income (community discretionary income divided by the number of pupils).

County A  
 Adjusted gross income (AGI) = \$125,926,226  
 Standard of living index County A = 0.61  
 Per capita poverty income = \$4,000 \* 0.61 = \$2,440  
 Total discretionary income = \$89,398,226  
 Number of pupils = 1,553  
 Per pupil discretionary income = \$55,633  
 Population = 16,200

Local spending by communities is equal, on average, to 5.1 percent of discretionary income.

<sup>1</sup> A standard of living index for each county was constructed using the Expenditure Score supplied by zip code from the commercial website **move.com**. The Expenditure Score is based on average yearly household spending on retail and non-retail expenses. The non-retail expenses include mortgages, rent, insurance, repairs, and maintenance. The Expenditure Score does not include savings, income taxes, or retirement plans. It ranges from 0.61 to 1.66 in Virginia. Thus, the community with the highest standard of living would have 1.661 times \$4,000 subtracted, and the lowest standard of living community would have 0.61 times \$4,000 subtracted.

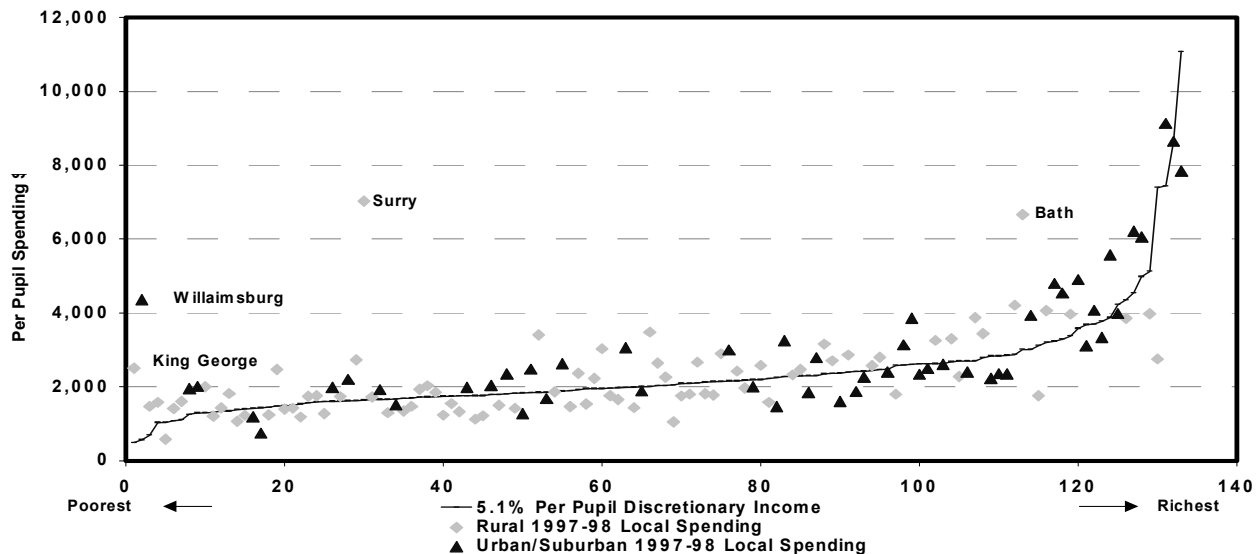
With few exceptions, the vast majority of the communities in the Commonwealth are spending close to the average 5.1 percent of discretionary income regardless of their overall wealth. The few major exceptions are communities like Surry, Williamsburg, Bath, and King George, which have unique assets that generate exceptional local government revenues. The people in those communities clearly spend in response to the special revenue circumstances of their communities. As a percentage of discretionary income, that additional revenue and associated expenditure makes it appear as if they are making an extra effort when, in fact, it only reflects their unique circumstances.

Most poor and most rural communities of the Commonwealth are concerned that their brightest and best students will leave the community to make their living in more economically vigorous parts of the Commonwealth and nation. Because these communities cannot capture the payoff from their investment in schooling, we expect them to underinvest in schools. But they do not. The proportional investment is 5.1 percent across all communities, regardless of wealth.

County Z  
 Adjusted gross income (AGI) = \$361,790,179  
 Standard of living index County Z = 1.66  
 Per capita poverty income = \$4,000 \* 1.66 = \$6,640  
 Total discretionary income = \$223,594,979  
 Number of pupils = 2,510  
 Per pupil discretionary income = \$89,082  
 Population = 20,800

Figure 2 illustrates the way in which the differences in discretionary income results in differences in per pupil local spending in the school divisions of the state. Rural and urban/suburban school districts are identified separately .

- The close relationship between actual local spending and the discretionary income measure reinforces the use of discretionary income as an indicator of ability to pay and of tax effort.
- The distribution around 5.1 percent is no different for rural than for urban/suburban communities. Thus, rural communities are making as much effort to support schools as are the urban/suburban communities.
- Because some poor rural communities spend above the average 5.1 percent of discretionary income and some wealthy urban/suburban communities spend below the average, it is fair to say that some rural communities make a greater effort in supporting schools than some urban/suburban communities that have a greater ability to pay.



**Figure 2. Per pupil spending by localities**

With discretionary income per pupil varying from \$13,500 to \$217,200, a 16-fold difference, several points must be made.

- Five percent of very little is a small amount of money to spend on the schools and accounts for nearly all the disparity in school spending in the State of Virginia.
- Five percent of very little means that spending the 5 percent may be a hardship for many families.
- Five percent of a lot of money provides a lot of money for schooling and leaves families with a lot of money remaining.

One of the major sources of concern for people in rural communities is that regardless of how much they spend on schools, the students who perform best usually leave to work and make their lives in other parts of the state or nation. Thus, many of the economic benefits of local school spending are captured in communities other than the communities that provided the education. And citizens in some communities must choose between voting to support schools or having a decent car, home, or some other claim on their discretionary income—the things that are more than survival but provide comfort.

### **School Performance, Reform, and Improvement**

Regardless of the amount of money available, organizing and implementing an effective K-12 educational program is complicated and difficult to accomplish. The principal of the St. Paul High School, Wise County, Virginia spoke to the Rural Virginia Prosperity Commission about the success in reform and improvement of their school. That testimony brought to the attention of the Commission the importance of strategies in school operations that seek to provide for effective schooling

of all of the children in the community, regardless of their backgrounds or previous experiences.

By employing the Effective Schools approach and with assistance from a variety of grant resources, the St. Paul High School has distinguished itself as an outstanding school, despite its limited resources in one of Virginia's poorest rural counties. With more resources, they could do even more.

### **Rural Schools and Community**

Rural people emphasized to the members of the Rural Virginia Prosperity Commission the importance of the schools in the lives of their communities. School leaders told of the importance of involving school children in learning circumstances within the community, whether in the private or public sectors. Some of the reportedly most successful schooling activities involved students undertaking their own businesses—in one case manufacturing computers—or working with local businesses via internships, cooperative time release programs, or vocational education programs.

Clearly, rural schools play an important social and community focus function within their communities that is not nearly matched in more urban settings.

### **Conclusions**

A great disparity exists in access of children to schooling resources based on where they live in the state.

Almost 90 percent of rural children have access to less than

the statewide average in per pupil expenditures for schooling.

The disparity in access to schooling resources is principally a function of local ability to support schools and is reflected in local expenditures for schooling.

All communities across the state spend, on average, 5.1 percent of their per pupil discretionary income on schools. The distribution around that average is no different for rural communities than for urban/suburban communities. Thus, poor rural communities are making as much of an effort to support schools as are urban/suburban communities.

The consistency of the spending pattern in response to discretionary income across communities suggests that as community incomes rise, residents will spend some of that increase on their schools.

Improving and sustaining viable rural schools are as important in their role of maintaining and developing rural communities as they are for adequately preparing workers who will likely migrate to jobs in more urban places.

Rural school divisions have a stake and a role to play in the economic and social development of their communities. They must be considered an important resource in community development.

## Notices

**\*\*Please** notify the REAP office if your address changes or if you know of anyone who would like to be added to our mailing list.

**\*\*How to reach us:** REAP, Department of Agricultural and Applied Economics 0401, Virginia Tech, Blacksburg, VA 24061; by phone: (540) 231-9443; by email: [reap01@vt.edu](mailto:reap01@vt.edu); or on the web at <http://www.reap.vt.edu>

**\*\* Rural Virginia Prosperity Commission** website has proposed recommendations for ways to help economically distressed areas, briefing papers, "The Continuing Story of Rural Virginia," Commission members, and more. View the site at <http://www.rvpc.vt.edu>

VT/001/1201/3:85M/221835  
Printed on recycled paper



**HORIZONS**  
Virginia Polytechnic Institute  
and State University  
Department of Agricultural and  
Applied Economics 0401  
Blacksburg, VA 24061  
Address Service Requested

Non-Profit Org.  
U.S. Postage  
PAID  
Blacksburg, VA 24060  
Permit No. 28