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**Purchasing South Carolina Farmers'
Development Rights**

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Purchasing Farmers' Development Rights¹

Verne W. House^{2 3}

The Issue

The "Farmland Protection Act," has been drafted to submit to the South Carolina legislature. A Wall Street Journal article, "S.C. Farmers May Get Paid to Keep Land," frames the question: "How do you keep developers from buying the farm?"⁴ The question was asked in Greenville County's recent public forum on urban growth issues and in the planning processes underway in both Charleston and Beaufort Counties. The proposed legislation would move this issue up to the state level.

South Carolina laws already on the books encourage tax donations of conservation easements, base property tax assessments on agricultural use-value, and protect the "right to farm" from nuisance lawsuits. There are federal programs too but mainly they target "swamp and sod busters," and threats to water quality. With these measures in force, where are new housing developments, factories, and even golf courses being built? Most are on farmland. One has to wonder about the efficacy of these laws.

Is this a problem demanding action? That is for each of us to judge. But for a variety of reasons some farmers and lots of non-farmers want to see farmland stay in farming. They share a concern about the amount, location, and type of land changing to non-farm uses. South Carolinians, like people everywhere, seem to like the high rate of economic growth while decrying the sprawl that attends it.

If farming is the highest-valued use, land will be used for farming. But it is not. Non-farm uses – subdivisions, malls, industrial sites and golf courses – make it possible for developers to pay much higher prices for land. More businesses mean more offices and factories, highways and subdivisions, and schools, and safety and other public services. They take up farmland. Why? Convenience and cost are big factors, and these are encouraged by our willingness to build infrastructure to support growth: governments build more schools, streets and highways and utility companies extend gas, electric and phone lines.

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² Prepared for Clemson Extension In-service Education, 3-4 Feb 98, Sandhills REC

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⁴ Randall Rosenberger contributed both information and wise counsel to preparation of this paper. His generous contributions are acknowledged but any errors of fact or logic are now the sole property of the author.

Motoko Rich. "S.C. Farmers May Get Paid To Keep Land," Wall Street Journal, 28 Jan 98, p S1.

Laws in force and proposed

South Carolina laws that provide use-value assessment of farmland and conservation easements and protect the “right to farm” are summarized in Table 1. Note that these laws do not regulate; they are more “carrot” than “stick.” Conservation easements provide a way to reduce taxes. Likewise, differential assessment gives landowners taxes based not on market value (*ad valorem*) but on use-value; the land is taxed as if farming was its only use, even if it is in demand for development. “Right to farm” laws are to protect farmers from people who move into farm areas but then sue farmers to stop normal practices that produce dust, odor, etc.

Table 1. South Carolina’s Farmland Protection Statutes

South Carolina

Conservation Easement	
Differential assessment of land subject to a conservation easement	<u>S.C. Code Ann. §§ 27-8-10 to -80</u>
Property Tax Relief	
Differential assessment	
.../Constitutional authority	<u>Constitution of the State of South Carolina Art. 10, § 1</u>
...Deferred taxation	<u>S.C. Code Ann. §§ 12-43-220 to -260</u>
Right-to-Farm	
Protection against nuisance lawsuits	
Protection against unreasonable local regulations	<u>S.C. Code Ann. §§ 46-45-10 to -60</u>

Source: Information from the Farmland Information Library website maintained by the American Farmland Trust, USDA Natural Resources Conservation Service, and USDA National Agricultural Library: <http://farm.fic.niu.edu/fic/home.html>

The SC Association of Conservation Districts, the SC Department of Natural Resources, and others propose that government and trusts should purchase development rights to retain farmland. Purchasable Development Rights (PDRs) are one more “tool” to keep land in farming.⁵ The PDR idea is simple. Farmers sell one part of their property rights, not the whole farm. The advantages are obvious: (1) It is cheaper to buy just the development right, so more acres can be controlled

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To view the whole “toolbox” see the Farmland Information Library website maintained by American Farmland Trust, USDA Natural Resources Conservation Service, and USDA National Agricultural Library: <http://farm.fic.niu.edu/fic/home.html>.

with a given budget. (2) The funds can be “targeted” to farms offering the most significant public benefits. (3) Primary responsibility for managing the land stays with the farmer rather than the owner of the development right. (4) Program costs are borne (roughly) by those who benefit from the program. (5) Because sales would be voluntary, PDR avoids the current debate over “takings.”⁶ And (6) Similar methods such as Transferable Development Rights (TDR) would reduce transaction costs because they would be traded privately, but they require landowners to agree on densities in a *de facto* development zone.

Another way to reduce program costs (or control more acres for the money) is to buy a “temporary” PDR. For example, a farmer might be willing to accept less if the development right reverts back to him/her after say 20 years.

Do South Carolinians want to use the PDR?

The Wall Street Journal article cited above identified several individuals and organizations that favor PDRs. Developers are identified as likely opponents because the program might push up prices for development sites. Opposition should be expected, if for no other reason than it will cost money and compete with other legislative proposals for tax revenue.

Knowing who is for and who is against provides a useful list of values and interests. We need also to ask some economic questions: How much are people willing to pay to keep land in farming? Given that capital gains from converting farmland to other uses can be huge; are South Carolinians willing to pay enough to offset the potential gain? Or is there some middle path? E.G., might a farmer accept something less than the potential capital gain because he/she wants to continue farming?

Over the last 20 years economists researched the “willingness to pay question” several times and in a wide variety of places, including Greenville County, SC. Six independent studies all reach the same two conclusions: Yes, we are willing to pay to keep land in farming. No, we are not willing to pay nearly as much as a developer will (See Table 2). How should these findings be interpreted? That is the question to be answered here.

An article in the December 1997 *Journal of Agricultural & Resource Economics* summarized previous studies and added Colorado estimates of how much people are willing to pay to preserve open space. Among these is a Clemson study of Piedmont farmland. The table includes another new study from Kentucky. Results are in (1994) dollars per 1,000 acres per year.

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For information about the takings issue see <http://www.webcom.com/~pcj/takings.html>.

Table 2. How much will people pay to preserve open space?⁷

<u>Study Area (year)</u>	<u>\$ per 1,000 acres</u>
Piedmont farms, Greenville County, SC (1982) ⁸	\$9 to \$14
Valley farms near Anchorage, Alaska (1983)	\$114 to \$216
Western Massachusetts farms (1981/85)	\$200 to \$358
New Brunswick, Canada farmland (1991/92)	\$49 to \$86
Valley ranchland, Steamboat Springs, CO (1997)	\$72 to \$256
Horse farms, Lexington, KY (1997) ⁹	\$25 to \$681

Interpreting the Results

“Local resident willingness to pay for valley ranch open space in the Rocky Mountains is substantially higher than for prime agricultural land in the Piedmont area of South Carolina and in eastern Canada. ... similar for historic farmland in south-central Alaska, but slightly less than for urban fringe farmland in western Massachusetts.” (p.306)

Smathers¹⁰ advises us that results will vary when researchers ask how much consumers are willing to pay (WTP in the jargon of the method) instead of how much landowners are willing to accept (WTA).¹¹ His point is that WTP is not the same as WTA. Rosenberger puts this in the context of property rights: Consumers’ WTP “is the theoretically correct economic measure since the right

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Randall S. Rosenberger and Richard G. Walsh: “Nonmarket Value of Western Valley Ranchland using Contingent Valuation,” *Journal of Agricultural and Resource Economics* 22(2): 296-309, 1997.

8 J. C. Bergstrom, B. L. Dillman and R. J. Stoll: “Public Environmental Amenity Benefits of Private Land: The Case of Prime Agricultural Land,” *Southern Journal of Agricultural Economics*, 139-149, 1985.

9 R.C. Ready, M. C. Berger and G. C. Blomquist. “Measuring Amenity Benefits from Farmland: Hedonic Pricing vs. Contingent Valuation,” *Growth and Change*, 28 (Fall) 1997, pp. 438-458.

10 Consultation with W. M. Smathers, Jr., Associate Professor, Department of Agricultural and Applied Economics, Clemson University, Clemson, SC.

11 See “Willingness to Pay and Consumer Welfare” in Richard E. Just, Darrell L. Hueth and Andrew Schmitz. *Applied Welfare Economics*, Prentice-Hall, 1982.

o use land rests ... with the landowner. Thus, PDRs can work because a second party can purchase the right to develop out of the landowner's bundle of rights associated with the property."¹²

WTP, WTA and Property Rights

Rosenberger offers this property rights example to explain why development debates are volatile. Suppose that instead of asking consumers how much they are willing to pay (WTP) to preserve open space we ask them how much they would be willing to accept (WTA) to give up their right to open space. This question assumes that the right to open space belongs to the consumer, not the landowner.

Consumers may have a de facto (felt) right to open space because the open space has traditionally been there, and with the development of the land for other uses, there is a real loss felt by the consumer. For example, the choice and location of one's residence may depend in large part on its proximity to open space. However, without the protection of this open space ... the consumer is making this choice under uncertainty. Because this consumer has no right to the open space, then he/she will have to pay to protect the benefits received from the land in farming or open space, even though there is a felt right to open space. [Loss of this felt right] can lead to public protests about the whole concept of paying, not just because of dislike for taxes or the use of public funds. Therefore, WTP to protect is measured instead of WTA compensation for the loss.

On the landowner side of the issue, WTA is the correct measure and is assumed to be equal to the amount the land is sold for. Market transactions, or land prices, are the accurate and accepted measure. The same argument holds for the landowner WTP to develop the property as above. With the current assignment of rights, it makes no sense to speak of a landowner's WTP to develop (although some forms of taxation resemble this side of the argument). Further examples of this situation is in the recent "takings" legislation that requires government agencies compensate landowners when police power is used to protect social values.

On comparing WTP for consumers with WTA for landowners, Rosenberger advises:

So long as WTP for consumers is less than WTA for landowners, we can expect economics to tell us that the land will be developed if sold. When this empirically is not the case (as in voluntary donations of land and/or development rights), there are other motivations or values unaccounted for in the simple economic analysis (probably as unmeasured costs and benefits).

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Randall S. Rosenberger, email, 2 Feb 1998.

The numbers relating WTP to the number of acres or percent of area being protected are not presented here but, as economic theory suggests, as open space becomes scarce people are willing to pay more, while willingness declines as protection increases:

“...local willingness to pay is a function of increments in the amount of open space protected in each county, consistent with the economic theory of diminishing marginal utility.” (p. 298)

Smathers re-emphasizes the principle advantage of PDRs is that a degree of control can be exercised without buying a property *en toto*. Further, he points out that amenities are not evenly distributed over the land, that “All land is not created equal,” so there is a strong desire to target funds to the most desirable sites. Last, even if a PDR program is funded some properties still will transfer to nonfarm uses. Tract A may provide more amenities than Tract B, but if it also is a potential industrial site the funds may have to be used to buy rights on Tract B. Rosenberger and Walsh:

“With few dollars available, intervention in the land market would best be served by selecting specific parcels of high quality land with little development pressure. However, there are other methods available, such as zoning and other regulations in which economic concerns may be overridden.” (p. 306)

So Rosenberger and Walsh conclude that (a) budget limitations suggest “targeting” properties, and (b) when voluntary agreements cannot be bought the alternatives are either to let it go or turn to regulation. The advantage of a PDR program is of course that it is voluntary. Owners are not coerced into selling. Taxpayers however can argue that their financial support is involuntary. Such is the nature of public goods.

Are other tradeoffs possible? E.G., would landowners be willing to give up the tax savings from differential taxation to fund purchasing development rights? This has not been studied, but on the surface it seems that such a tradeoff would shift benefits from all farmers to some farmers. Likewise, the public seems to have little appetite to either impose or accept more regulations on land use. And the most effective policy, a heavy capital gains tax on land quickly resold, seems least feasible politically. However, systematic study of these options may reveal new possibilities.

Comparing WTP to PDR or Gain

What does it mean to find that each household is willing to pay \$256? How can that be compared to the value of a PDR (which in theory would be similar to the value of a potential capital gain)? Rosenberger translated these data into dollars per acre.

The values reported in the article are average annual WTP per household, whereas the market value of development rights is \$/acre. To make them comparable, we need to find the total annual WTP/total acres. For the county estimates, this is

\$256 per household * 6200 households = \$1.6 million / 50,000 acres = \$32 / acre in resident WTP... Assuming a 6% interest rate, this is an investment value of \$533 / acre. ...¹³

Summary

South Carolinians pushing to retain land in farming seem now to prefer to accomplish this through purchasable development rights (PDRs) rather than regulatory means. While some development rights may be protected by donation to land trusts those that are purchased in voluntary transactions will require public funds. Research findings indicate that public willingness to pay often falls short of the value of development rights. These findings simulate economic behavior, whereas the PDR program will be determined by politics. The debate is likely to focus on the amount of funding to buy development rights, the criteria for targeting funds, and whether a bidding process will be used.