



Funding of North Carolina Tobacco Control Programs Through the Master Settlement Agreement

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Changing political and economic forces in 1 tobacco-dependent state, North Carolina, demonstrate how the interplay between these forces and public health priorities has shaped current allocation of Master Settlement Agreement funds. Allocation patterns demonstrate lawmakers' changing priorities in response to changes in the economic climate; some of the agreement's funds targeted to tobacco farmers appear to reflect objectives favored by tobacco manufacturers.

Funds earmarked for health have underfunded youth tobacco prevention and tobacco control initiatives, and spending for tobacco farmers in North Carolina has not lived up to the rhetoric that accompanied the original agreement. We discuss the implications of these findings for future partnerships between public health

advocates and workers as well as tobacco control strategies. (*Am J Public Health.* 2007;97:36–44. doi:10.2105/AJPH.2005.070466)

ALLOCATION OF MASTER

Settlement Agreement (MSA) funds to tobacco control programs has fallen short of public health advocates' expectations. There are several reasons for this failure, some structural and others the result of shifting political objectives and fiscal crises that recently confronted most states. We examined the evolution of these changing forces in 1 tobacco-dependent state, North Carolina, and discuss implications for future tobacco control efforts.

North Carolina provides an excellent case study. It is a major tobacco-producing state with

above-average tobacco use, 2 factors likely to diminish lawmakers' and constituents' interest in tobacco control.^{1,2} State lawmakers face a complex array of competing interests and political issues: the tobacco lobby continues to exercise considerable political strength, tobacco-dependent communities face fragile economic futures, the substantial loss of manufacturing jobs in non-tobacco-dependent communities has introduced new pressures for economic development,³ and shrinking tax revenues combined with rapidly rising Medicaid costs have created a constrained economic climate. Additionally, North Carolina tobacco farmers' phase 2 settlement payments are being replaced by tobacco quota buyout payments. Although neither of the latter 2 funding sources is controlled by the state, their

purposes and those of MSA funds are intertwined.

THE MASTER SETTLEMENT AGREEMENT IN NORTH CAROLINA

In November 1998, the attorneys general of 46 states negotiated the MSA with the major tobacco companies.⁴ The settlement produced a framework for tobacco industry payments to states totaling more than \$200 billion through 2025 in exchange for states dropping current and any future lawsuits seeking remedy from the industry for health care costs related to tobacco-induced disease. In addition to monetary payments, the MSA imposed restrictions on advertising, marketing, and promotion of tobacco products, particularly those aimed at youth.



The second phase, which was the direct result of intervention by North Carolina's then attorney general, Michael Easley, tobacco-producing states negotiated a plan to compensate tobacco quota owners and tobacco growers for revenue losses resulting from declines in demand because MSA payments forced tobacco manufacturers to raise prices.⁵ This phase 2 settlement established the National Tobacco Growers' Settlement Trust Fund, into which the 4 participating cigarette manufacturers were to pay \$5.15 billion over 12 years. Allotment of funds among states was based on 1998 tobacco quotas, with North Carolina receiving the largest share (38%). Funds were to be paid directly to individual quota holders and producers, with no restrictions on use.

The public health community had strong reasons to expect that a significant portion of MSA funds would target tobacco control programs. Senator John McCain, a major architect of the MSA legislation, described the general agreement among state governors, saying that the money would be used "on smoking cessation programs."⁶ Resolutions passed by the National Governor's Association in 1999 and 2001 indicated a commitment by the governors to spend "a significant portion of the settlement funds on smoking cessation programs."⁷ Reports in the press and elsewhere reflected a belief that similar commitments would be made.^{8,9} However, several studies have documented that, with few exceptions, only a small proportion of MSA funds have been

devoted to tobacco control.^{2,10–15} Gross et al. showed that the average state received \$28.35 per capita from the settlement in 2001 but allocated only 6% of these funds, approximately \$1.70 per capita, to tobacco control programs.²

One possible explanation for the low proportion of MSA funds devoted to tobacco control in tobacco states is the redirection of funds to provide assistance to tobacco farmers and tobacco-dependent communities, an objective that formed the basis for the decision by North Carolina's then attorney general, and now governor, Michael Easley, to join the original lawsuit.^{5,16} Also, during the 1990s, some tobacco control advocates recognized that the economic health of tobacco-dependent communities and tobacco growers was an important determinant of physical health and well-being for both. Consequently, some advocates have collaborated with growers to address both public and economic health simultaneously.^{17,18}

Any detailed examination of states' MSA allocation decisions after the agreement was signed must be considered against a nationwide backdrop of dwindling state tax revenues in those early years. Schroeder provided evidence that increasing percentages of MSA payments were diverted directly into state coffers to alleviate budget shortfalls.¹¹ In 2003, nearly half (47%) of MSA funds were diverted, a sharp increase from 29% in 2002 and 16% in the 3 preceding fiscal years. There is evidence that state governors, whose budgetary

discretion varies by state, regard fund diversion as simply reflecting structural flexibility that is codified in the MSA by Public Law 106–31 (signed into law by President Bill Clinton on May 21, 1999, without mandated set-asides for tobacco control or farm community assistance).¹⁹

This flexibility may reflect the varying bases upon which states initially sought legal remedy. Some complaints did not cite Medicaid or health care costs, while others did, possibly leading states to view allocation of MSA funds as discretionary. North Carolina's governor had both incentive and ability to exploit this flexibility because the state constitution requires the governor to balance the budget in every year,²⁰ and North Carolina budget shortfalls ranged from \$702 million in fiscal year 2000 to 2001 to \$1.555 billion in fiscal year 2001 to 2002.²¹

If the diversion of funds away from tobacco prevention had been the result of decreases in smoking prevalence, public health advocates would be less concerned. However, this diversion appears to reflect political considerations and economic changes rather than decreased tobacco use. Loss of manufacturing jobs in North Carolina increased lawmakers' interest in economic development, especially in communities that lost textile, furniture, and other manufacturing jobs, regardless of their dependence on tobacco.³ Added to this were unprecedented fiscal pressures from rapidly dwindling tax revenues coupled with increasing Medicaid

costs. These pressures combined with increased sentiment against taxes generally. MSA funds may have enabled lawmakers to avoid or reduce tax increases or budget cuts and their political consequences by diverting these funds to satisfy balanced-budget mandates.

STRUCTURE OF MASTER SETTLEMENT AGREEMENT FUNDS

In North Carolina, 3 new institutional structures, each with its own broad mandate and board of directors, were created to receive and disburse MSA funds. The Golden LEAF Foundation (GLF), originally allocated 50% of total MSA funds, was broadest in scope and charged with improving the economic and social conditions of North Carolina's people, promoting the social welfare of North Carolina citizens, and receiving and distributing funds for economic impact assistance. The Tobacco Trust Fund (TTF), with 25% of MSA funds, was charged with assisting tobacco farmers, tobacco quota holders, persons engaged in tobacco-related businesses, individuals displaced from tobacco-related employment, and tobacco product component businesses in North Carolina by funding programs that support and foster a strong agricultural economy in the state. The Health and Wellness Trust Fund (HWTF) received the remaining 25% of MSA funds and was charged with addressing the health needs of vulnerable and underserved populations; supporting health



research, education, prevention, and treatment programs; increasing capacity of communities to respond to public health needs; and developing a comprehensive, community-based plan with goals and objectives to improve the health and wellness of North Carolina residents, with an emphasis on reducing youth tobacco use.

We extracted grant award data from the Web sites of the 3 North Carolina MSA-based foundations and from the phase 2 Web site.²² HWTF data were compiled from a table that contained total commitments through fiscal year 2003 to 2004.²³ GLF total expenditures for fiscal years 2000 to 2004 were compiled from the awards list by year and by sector on the GLF Web site.²⁴ TTF total expenditures for fiscal years 2001 to 2003 were compiled from the awards list by year and by sector on the TTF Web site

Master Settlement Agreement Fund Grant Categories

Agriculture (Tobacco Trust Fund and Golden Leaf Fund [GLF])

- Tobacco diversification
- Supporting tobacco farmers to grow tobacco
- Supporting tobacco farmers—unrestricted
- Equally beneficial to tobacco and nontobacco farmers

Inclusive economic development (GLF)

- Economic development (as defined by the GLF)
- Workforce preparedness
- Biotech consortium (2003–2004 only)
- Economic stimulus grants (2002, 2003–2004)
- Site certification

Health (Health and Wellness Trust Fund)

- Youth tobacco use prevention and cessation
- Medication assistance
- Prescription drug initiative
- Obesity

(no awards were made in 2004 because of diversion of funds by the legislature).²⁵

GLF grants were classified as focused on agriculture, economic development, or workforce preparedness, according

to definitions within GLF priority areas. GLF also defined certain economic development grants as economic stimulus or for “shovel-ready” certification of industrial development sites. Within the agriculture-focused category,

tobacco diversification—focused projects were defined broadly as any project that directly targets tobacco farmers to assist in diversifying to other enterprises or that produces knowledge, techniques, markets, financing, and so on that could assist tobacco farmers to diversify. Grants made by TTF and HWTF were categorized by each foundation’s specific focus area.

ALLOCATION OF MASTER SETTLEMENT AGREEMENT FUNDS

The box on this page presents grant categories by fund. Detailed data in Table 1 show that GLF grants for agricultural purposes decreased from 51% in 2000 to 4% in 2003 to 2004. Across all 4 years, 13% of total awarded grants targeted agriculture, and 87% funded economic

TABLE 1—Percentage Changes in Golden Leaf Fund (GLF) Grants, by Grant Category and Year: North Carolina, 2000–2004

| | 2000 | | 2001 | | 2002 | | 2003–2004 | | All Years | |
|--|-----------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| | Total, \$ | % of Total | Total, \$ | % of Total | Total, \$ | % of Total | Total, \$ | % of Total | Total, \$ | % of Total |
| Grant funding total (by purpose) | 5 073 945 | | 10 509 836 | | 17 141 030 | | 73 893 546 | | 106 618 356 | 100 |
| Agriculture | 2 604 450 | 51 | 3 364 250 | 32 | 4 458 129 | 26 | 2 994 500 | 4 | 13 421 329 | 13 |
| Tobacco diversification | 2 384 450 | 47 | 3 364 250 | 32 | 4 458 129 | 26 | 2 994 500 | 4 | 13 201 329 | 12 |
| Supporting tobacco farmers to grow tobacco | 200 000 | 4 | ... | ... | ... | ... | ... | ... | 200 000 | 0 |
| Supporting tobacco farmers—unrestricted | 0 | 0 | ... | ... | ... | ... | ... | ... | 0 | 0 |
| Equally beneficial to tobacco and nontobacco farmers | 20 000 | 0 | ... | ... | ... | ... | ... | ... | 20 000 | 0 |
| Inclusive economic development | 2 469 495 | 49 | 7 145 586 | 68 | 12 682 901 | 74 | 70 899 046 | 96 | 93 197 027 | 87 |
| Economic development ^a | 1 177 235 | 23 | 3 060 801 | 29 | 4 203 576 | 25 | 4 968 000 | 7 | 13 409 612 | 13 |
| Workforce preparedness | 1 292 260 | 25 | 4 084 785 | 39 | 3 366 559 | 20 | 1 956 262 | 3 | 10 699 866 | 10 |
| Biotech consortium | ... | ... | ... | ... | ... | ... | 60 000 000 | 81 | 60 000 000 | 56 |
| Economic stimulus grants | ... | ... | ... | ... | 5 099 766 | 30 | 3 453 130 | 5 | 8 552 896 | 8 |
| Site certification | ... | ... | ... | ... | 13 000 | 0 | 521 654 | 1 | 534 654 | 1 |

^aAs defined by the GLF.



TABLE 2—Percentage Changes in Distribution of Golden Leaf Fund Grants, by Organization Types: North Carolina, 2000–2004

| | 2000 | | | 2001 | | | 2002 | | | 2003-2004 ^a | | |
|--|--------|-----------|-------|--------|------------|-------|--------|------------|-------|------------------------|------------|-------|
| | Grants | Value, \$ | % | Grants | Value, \$ | % | Grants | Value, \$ | % | Grants | Value, \$ | % |
| University | 5 | 891 000 | 17.6 | 15 | 2 329 500 | 22.2 | 19 | 3 044 076 | 17.8 | 15 | 53 817 500 | 72.8 |
| Community college | 4 | 697 000 | 13.7 | 3 | 395 000 | 3.8 | 14 | 2 675 413 | 15.6 | 8 | 9 548 000 | 12.9 |
| Nonprofit economic development/ capacity building | 17 | 1 486 995 | 29.3 | 25 | 4 478 586 | 42.6 | 20 | 6 357 092 | 37.1 | 21 | 4 586 450 | 6.2 |
| County/city government/regional Councils of Government or county Economic Development Commission | 3 | 165 000 | 3.3 | 2 | 205 000 | 2.0 | 18 | 2 501 700 | 14.6 | 29 | 3 671 334 | 5.0 |
| Traditional agriculture plus life science research | 6 | 1 105 000 | 21.8 | 9 | 1 571 750 | 15.0 | 6 | 828 750 | 4.8 | 5 | 560 262 | 0.8 |
| Sustainable agriculture research plus technical assistance | 4 | 224 450 | 4.4 | 3 | 350 000 | 3.3 | 2 | 250 000 | 1.5 | 4 | 460 000 | 0.6 |
| Other | 2 | 275 000 | 5.4 | 4 | 650 000 | 6.2 | 2 | 327 646 | 1.9 | 4 | 400 000 | 0.5 |
| County cooperative extension agencies | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 3 | 91 853 | 0.5 | 1 | 360 000 | 0.5 |
| State government | 2 | 174 000 | 3.4 | 0 | 0 | 0.0 | 2 | 450 000 | 2.6 | 1 | 250 000 | 0.3 |
| Agriculture commodity associations | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 2 | 580 000 | 3.4 | 1 | 250 000 | 0.3 |
| Tobacco farmer support organization | 1 | 55 500 | 1.1 | 4 | 530 000 | 5.0 | 1 | 34 500 | 0.2 | 0 | 0 | 0.0 |
| Total | 44 | 5 073 945 | 100.0 | 65 | 10 509 836 | 100.0 | 89 | 17 141 030 | 100.0 | 89 | 73 903 546 | 100.0 |

Note. Percentages may not add to 100 due to rounding.

^aGrants in 2003–2004 totaled \$60.0 million and included the following special grants: North Carolina State University, Biotech Training Consortium, \$33.5 million; North Carolina Central University, Biotech Training Consortium, \$17.8 million; and North Carolina Community College system, Biotech Training Consortium, \$8.7 million.

development. These large changes in grant allocation percentages were primarily a result of GLF's decision in 2003 to provide \$60 million for a Biotechnology Training Consortium composed of major educational institutions. Total annual allocation between 2002 and 2003 to 2004 jumped significantly (from \$12.6 to \$70.9 million), because GLF policy temporarily departed from its policy of restricting grants to investment income. There is evidence that the consortium funding decision was influenced by the governor and powerful state legislators and that the decision likely prevented GLF funds being diverted to the state's general fund.²⁶ Table 2 shows

that GLF grant recipients were initially varied, with 8 types of recipients receiving at least 3% of GLF funds in 2000. By 2003 to 2004, there were only 4 such recipients, with the majority of funds awarded to universities or the community college system, mainly because of the Biotechnology Training Consortium.

In keeping with TTF's intended purpose, \$46 982 161 (97%) of its funding targeted agriculture and 3% targeted economic development. However, only 6.9% of agriculture funding was targeted to tobacco diversification. In a move that was arguably counterproductive to tobacco control, 89% of TTF dollars was directed to supporting

tobacco farmers to grow tobacco. The largest portion of this amount, \$41 million, was provided to tobacco farmers for retrofitting flue-cured tobacco barns. One conjecture is that this funding came at the behest of some tobacco manufacturing companies, who feared that the discovery that traditional curing methods increased nitrosamine levels in cured leaf would expose the industry to more lawsuits.²⁷ Most tobacco farmers, however, believed that the tobacco barn retrofits, which were then certified by the manufacturer and a requisite for contracting, were simply a mechanism for the industry to push forward with plans to eliminate the tobacco

auction system in favor of a farmer-to-manufacturer contracting system (Betty Bailey, executive director, Rural Advancement Foundation International, oral communication, March 2003). Despite TTF attempts to please tobacco farmers and manufacturers, lawmakers diverted a total of \$157 million—75% of the original allocation—from the fund to the state's general fund through 2004.

Of \$130 million total in grants awarded by HWTF, \$28 million, or 21%, went to youth tobacco use prevention and cessation; the remaining 79% targeted 3 other health objectives: medication assistance, prescription drug assistance, and obesity prevention.



In addition, \$97.9 million, 43% of total HWTF funds, was diverted by lawmakers to the state general fund through 2004. Despite the relatively small share of funds allocated to youth tobacco prevention, this was a substantial improvement in North Carolina's efforts to curtail youth smoking. Prior to 2003, the state spent no MSA funds on tobacco prevention. In 2003, North Carolina spent \$6.2 million to reduce smoking.

This figure has risen steadily through 2005 to \$15 million and represents an increase from 15% to 35% of the amount recommended by the Centers for Disease Control and Prevention (CDC) for the state.²⁸

Phase 2 funding to eligible tobacco growers and quota owners totaled \$665.8 million for the first 5 years of payment, ending in 2003 (Table 3). With no restrictions on these funds, individual tobacco farmers

could spend them in any way, including diversifying, growing more tobacco, paying off farm debt, or funding retirement. The lump sum value of the stream of phase 2 payments to growers was projected to significantly exceed grower losses caused by the MSA. However, total grower losses (caused by the MSA, excise tax increases, and declines in tobacco exports) would exceed the projected value of all phase 2 payments.²⁹

Table 3 also provides a detailed breakdown of MSA funds with and without phase 2 payments and amounts diverted to general funds between 2000 and 2004. Funding of health projects through MSA-only funds was the largest component, at 45.1% of the total. The bulk of this amount, about 70% of total health-related funds, went to medication assistance and a prescription drug initiative that fulfilled campaign promises made by Governor Easley.³⁰ Phase 2 payments (\$665.8 million) were more than twice the total allocation through the 3 MSA funds (\$290 million). Consequently, when phase 2 payments and diverted funds are included in the calculation (last column, Table 3), agriculture accounts for the largest fraction (60.3%), economic development is 7.8%, and health accounts for only 10.8% of total funds allocated. A large portion (21.1%) was diverted to general funds. The largest single allocation (55%) was unrestricted, direct phase 2 payments to tobacco quota owners and farmers.

Tobacco diversification (1.4% or 5.8%, with and without inclusion of phase 2 and diverted funds, respectively) and teen tobacco use prevention and cessation programs (2.3% or 9.6%, with and without inclusion of phase 2 and diverted funds, respectively) were allocated very small fractions of total dollars that accrued to the state and its tobacco farmers as a result of the MSA and the related phase 2 payments. Economic

TABLE 3—Percentage of Funding From Master Settlement Agreement Funds (With and Without Phase 2 Payments and Diversions to the General Fund), by Grant Category: North Carolina, 2000–2004

| | Amount Without Phase 2 | | Amount With Phase 2 | |
|---|---|------------|---|------------|
| | Funds and Diversion to General Fund, \$ | % of Total | Funds and Diversion to General Fund, \$ | % of Total |
| Grant funding total | 290 199 588 | 100.0 | 1 210 819 233 | 100.0 |
| Agriculture | 64 467 941 | 22.3 | 730 222 003 | 60.3 |
| Tobacco diversification ^a | 16 739 791 | 5.8 | 16 739 791 | 1.4 |
| Supporting tobacco farmers to grow tobacco ^b | 46 982 161 | 16.2 | 46 982 161 | 3.9 |
| Supporting tobacco farmers—unrestricted | ... | ... | 665 754 062 | 55.0 |
| Supporting tobacco and nontobacco farmers ^c | 745 989 | 0.3 | 745 989 | 0.1 |
| Inclusive economic development | 94 666 479 | 32.6 | 94 666 479 | 7.8 |
| Economic development ^d | 14 179 064 | 4.9 | 14 179 064 | 1.2 |
| Workforce preparedness ^e | 11 399 866 | 3.9 | 11 399 866 | 0.9 |
| Biotech consortium (2003–2004 only) ^f | 60 000 000 | 20.7 | 60 000 000 | 5.0 |
| Economic stimulus grants (2002, 2003–2004) ^f | 8 552 896 | 2.9 | 8 552 896 | 0.7 |
| Site certification ^f | 534 654 | 0.2 | 534 654 | 0.0 |
| Health, all areas | 130 875 000 | 45.1 | 130 875 000 | 10.8 |
| Teen tobacco use prevention and cessation ^g | 28 000 000 | 9.6 | 28 000 000 | 2.3 |
| Medication assistance ^g | 15 400 000 | 5.3 | 15 400 000 | 1.3 |
| Prescription drug initiative ^g | 78 000 000 | 26.9 | 78 000 000 | 6.4 |
| Obesity ^g | 9 475 000 | 3.3 | 9 475 000 | 0.8 |
| Diversion to general fund (FY01–02 to FY03–04) ^h | ... | ... | 255 055 751 | 21.1 |

Note. FY = fiscal year

^a\$13 421 329 from GLF, \$3 538 462 from the Tobacco Trust Fund (TTF).

^b\$200 000 from GLF, \$46 782 161 from TTF.

^c\$20 000 from GLF, \$725 989 from TTF.

^dAs defined by the Golden Leaf Fund; \$13 409 612 from GLF, \$769 452 from TTF.

^e\$10 699 866 from GLF, \$700 000 from TTF.

^fFrom GLF only.

^gFrom Health and Wellness Trust Fund (HWTF) only.

^h\$157 000 000 from TTF, \$97 900 000 from HWTF.



development grants were allocated a larger percentage (7.8% or 32.6%, with and without inclusion of phase 2 and diverted funds, respectively).

THE 2004 TOBACCO BUYOUT

The recently passed tobacco buyout legislation also provides funding to individual tobacco growers.³¹ North Carolina tobacco growers and quota owners will receive \$3.94 billion from the buyout over the next 10 years.³² In comparison, estimates of MSA payments to North Carolina were roughly \$9.62 billion over 27 years,³³ and phase 2 payments were expected to be \$1.9 billion over 10 years.³⁴ Buyout payments will replace, not supplement, phase 2 payments. With the removal of the quota system and price supports, many tobacco farmers are expected to exit tobacco production if prices fall below marginal costs, which tend to be higher in the piedmont and mountain regions. In 1997, it was estimated that if the tobacco program were discontinued, the total number of farmers of flue-cured tobacco would drop from more than 12 000 to 2000 or 3000.¹⁸

WHERE THE MONEY SHOULD GO

As in other states, North Carolina lawmakers' allocations of MSA and related funds to tobacco control have fallen short of tobacco control advocates' expectations. MSA outlays of \$290 million were dwarfed by

diverted funds (\$255 million) and phase 2 payments (\$667 million). Within MSA-only outlays, health-related projects received 45% of funding, but tobacco control received only 9.6%. Despite these figures, there are positive signs. Starting in 2003, there was clear evidence of increased expenditures for smoking prevention in a state that had previously demonstrated remarkable indifference, if not overt hostility, to this issue. As of 2004, North Carolina ranked 30th in tobacco prevention spending, above Kentucky, Tennessee, and South Carolina and below Georgia and Virginia, its sister tobacco-growing states. A recent HWTF increase from \$4.1 million to \$15 million per year to the Teen Tobacco Use Prevention and Cessation program moved North Carolina to 21st in 2005.³⁵ This represents increases in both nominal and real terms and as a proportion of the CDC's recommended dollar amount.

Is it enough? Clearly, by most public health standards it is not. North Carolina continues to be above the national average for tobacco use among both adults and teens.³⁶ There is significant evidence of the efficacy of tobacco control interventions,³⁶⁻⁴² and the CDC has recommended that North Carolina spend a minimum of \$42.6 million annually on them. North Carolina's allocation of \$15 million from MSA funds for tobacco use prevention in 2005 was only 35% of the CDC's recommended minimum.¹² Funds for tobacco use prevention were 8.3% of tobacco revenues, including tobacco

settlement payments and tobacco taxes, and was dwarfed by the state's estimated \$1.9 billion annual smoking-related health costs.⁴³ Moreover, North Carolina's almost exclusive focus on teen smoking prevention did little to reduce negative health and cost sequelae among adult smokers or among nonsmokers exposed to environmental tobacco smoke.^{44,45}

Is directing MSA funds away from tobacco control a better use of these funds? It is difficult to compare benefits from senior drug programs and economic development projects or from direct payments to tobacco growers and quota owners with benefits that would accrue to individuals and the state through tobacco control programs. However, research on the economic benefits of tobacco control programs and excise taxes provides some insight into the large potential gains from these interventions.⁴⁶⁻⁴⁸ Cutler et al. demonstrated that the MSA will produce significant health benefits simply from increased cigarette prices and from mandated anti-tobacco youth advertising campaigns.⁴⁶ They estimated that price increases alone would increase smoking cessation and, consequently, longevity by roughly 5.1 to 6.5 years per never smoker or quitter. Valuing the longevity increase in monetary terms, they estimated that every MSA dollar paid by cigarette companies generated \$6 in health benefits.

Why did North Carolina shift away from tobacco control and support for tobacco farmers in

transition? It is clear that supporting economic development initiatives, balancing the state budget, and fulfilling campaign promises for a drug program for seniors were high priorities for North Carolina lawmakers. If these shifts represented more efficient allocations of MSA dollars to initiatives that would yield higher net benefits for all North Carolina residents, then the flexibility granted to MSA fund overseers was justified. But if these shifts represent lawmakers' abandonment of original MSA objectives and North Carolina MSA trust fund priorities in favor of political benefits that would accrue primarily to their political careers or to their campaign supporters, then the absence of set-asides for tobacco farmer diversification and tobacco prevention defeated the implied purpose of the MSA.

Why did tobacco control advocates not had a stronger voice in MSA allocations? Certainly the climate of diminished tax revenues, antitax sentiment, and rising health care costs helped to drown out the voice of tobacco control advocates. But other factors also may have contributed. Pollack and Jacobson noted that tobacco control advocates had succeeded in passing strong national policy initiatives but had less success at the state level.⁴⁹ They attributed this difference to smaller, more stable regulatory and policy arenas that were often shielded from public view. Another factor may be that political constituencies were more homogeneous at the state level. Dennis et al. examined the US Senate's



vote on the North American Free Trade Agreement and found that for highly visible and controversial policy issues (such as tobacco control in a tobacco state), constituency variables were more important predictors of legislators' votes than were legislators' ideologies when constituencies were homogeneous in opinion.⁵⁰ Although their study was conducted at the national level, their results suggest that if constituencies were more homogeneous in favoring tobacco production and consumption at the state level, then votes and other actions taken by lawmakers to advance or hinder tobacco control would more likely reflect the will (or lack of opposition) of their constituents.

Snyder et al. found that state governor party affiliation was the most important political predictor of spending for tobacco control programs, with Democrats outspending Republicans.¹ North Carolina is a Republican state with a Democratic governor who was state attorney general when the state joined the MSA lawsuit and when the MSA was signed. This combination may help explain the low, but rising, level of tobacco control funding from MSA funds in recent years. Also, as in other parts of the country, sentiment about smoking seems to be changing in North Carolina.⁵¹⁻⁵⁴ If this trend continues, then changed constituent attitudes may produce the tobacco prevention programs that MSA funding alone could not. In this case, tobacco control advocates would do well to strengthen ties with local leaders and their constituencies.

Finally, what about the tobacco farmers and their communities? Remedy for them was a main focus of North Carolina's original decision to join in the MSA complaint.^{5,16} Tobacco farmers appear to have fared better than did tobacco prevention programs, at least in the short term. Despite relatively small allocations from MSA funds, there have been significant financial gains for farmers from phase 2 and the later quota buyout payments. It remains unclear whether these short-term payments will have lasting effects that go beyond easing short-term financial burdens among the relatively few people living in tobacco-dependent communities. Moreover, the large amounts paid to farmers under these programs belie the disproportionate share that has been and will be paid to a few owners of large tobacco farms.

It is estimated that 20% of tobacco farmers will receive more than 75% of total payments under the buyout, with roughly 270 in North Carolina receiving at least \$1 million.^{55,56} Median payout will be less than \$15 000 annually for 10 years. Coupled with the high indebtedness of most small farming operations and the disproportionate concentration of small farmers in Appalachian and Piedmont counties (where costs of farming are high, alternative enterprises are more difficult to cultivate, access to markets for enterprises such as organic produce is low, and off-farm jobs are in short supply), it appears that neither phase 2 nor the buyout will bring the kind of comprehensive, structural

economic assistance these vulnerable communities and families will need to survive in the long term.

Because of phase 2 payments, state lawmakers may have concluded that MSA funds were not needed by tobacco farmers or their communities. Alternatively, lawmakers may have anticipated the diminishing political power of tobacco farmers and their communities that would result from reductions in the number of small tobacco farms after the buyout.¹⁸ Political pressures from constituents with stronger political voices, such as those who can tie their objectives to economic development, have certainly increased as economic forces diminished manufacturing jobs.³ These developments are unfortunate, because tobacco farmers face significant barriers in diversifying. Without institutional support, the proportion of diversification successes may be low.³⁸

Public health advocates must continue to provide political support to still-vulnerable farmers and farm communities until these populations receive needed assistance for the transition away from tobacco production. In so doing, advocates will advance farm community health and signal their sustained commitment to this partnership as well as to future partnerships formed with workers and communities that depend economically on the production of goods that have negative health effects. In turn, these partnerships can fuel and strengthen constituent demands to lawmakers about the importance of comprehensive tobacco control programs. ■

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Contributors

A. Snow Jones, as principal investigator, provided funding for the study and public health economics expertise in framing policy issues. She did most of the writing and revision to develop and frame policy issues. W.D. Austin helped originate the study, collected data, conducted the analysis, and wrote preliminary drafts of the article. R. Beach helped originate the study and provided guidance, editing, and sources for agricultural economics issues, particularly related to tobacco farmers' issues and behavior. D.G. Altman helped originate the study and provided background information and guidance and writing to develop and frame tobacco control policy issues.

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Human Participant Protection

This study was approved by Wake Forest University Health Sciences' institutional review board.



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