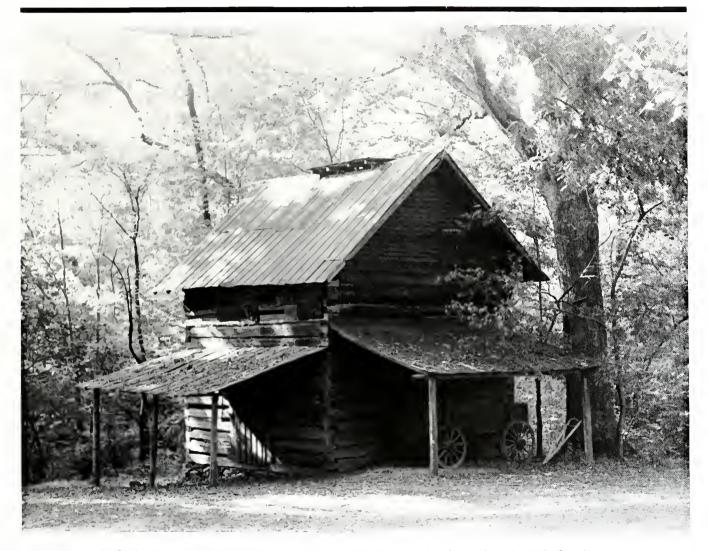
# Popular overnmen

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Adolescent Pregnancy 1987 Schools Legislation Upgrading Local Financial Reporting The Governors Center Center for Advancement of Teaching Fair Sentencing Act Municipal Personnel Departments Solid Waste Management

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# Prevention of Pregnancy Among Adolescents: The Schools' Role

## **Trudy Ennis**

he numbers of births and abortions among adolescents are much higher in the United States than in other developed countries because American teenagers have proportionately more unintended pregnancies than their counterparts elsewhere, not because they are more sexually active. Distribution of income, the degree of societal openness about sex, and the accessibility of contraceptives are among the factors identified in explaining the differences in adolescent pregnancy statistics between the United States and other countries that have similar levels of sexual activity in this age group.<sup>2</sup>

Almost weekly, the media cover a new development or study concerning teenage sexuality, pregnancy, or sex education. The controversy concerning the schools' role in sex education and prevention of pregnancy among adolescents is not new, but recent recognition of the high cost to the individual and to society of adolescent pregnancies, coupled with a new public health problem—

Acquired Immune Deficiency Syndrome (AIDS), has fueled the demand that the education system undertake an active, comprehensive role in dealing with sexuality issues, including prevention of unwanted adolescent pregnancies. Sex-related problems like adolescent pregnancy and AIDS are enormous societal concerns. Yet the present heavy demands on the school system, with calls for a return to basics and improved standardized test scores, have made school officials understandably reluctant to shoulder further health responsibilities. But because schools provide the one constant factor in the life of every adolescent until he or she graduates or drops out, schools may well be the only way to reach some "at risk" girls. Also, the problems of basic skills and adolescent pregnancy are connected—the likelihood that a girl will become pregnant is directly correlated to her level of educational skills.3

#### The dimensions of the problem

The number of pregnancies among adolescents increased in the 1960s and 1970s but declined slightly in the 1980s. The growing use of contraceptives explains

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<sup>1.</sup> Sushella Singh, "Adolescent Pregnancy in the United States: An Interstate Analysis," *Family Planning Perspectives* 18 (September-October 1986), 210.

<sup>2.</sup> Id.

<sup>3.</sup> See generally, Adolescent Pregnancy Prevention Clearinghouse, *Preventing Adolescent Pregnancy: What Schools Can Do* (Washington, D.C.: Children's Defense Fund, September 1986).

<sup>4.</sup> Preventing Children Having Children, Clearinghouse Paper No. 1 (Washington, D.C.: Children's Defense Fund, n.d.), p. 11.

why pregnancy rates did not skyrocket between 1970 and 1980, even though the number of sexually active adolescents increased by two-thirds during those years. Legalized abortions, which increased dramatically after the 1973 United States Supreme Court decision in *Roe v. Wade*, account for the increased discrepancy between pregnancy rates and birth rates. Thus current national, state, and local attention to adolescent pregnancy results not from a sudden awareness that more adolescents are becoming pregnant but rather from a recognition of the consequences for the teenage mother, her child, and society. The consequences of early parenthood for adolescent males are not so clearly understood, and only recently has a push developed to focus on the male in developing pregnancy-prevention strategies.

During 1987, an estimated one million pregnancies will occur among adolescents nationwide. Of these, over 400,000 will be aborted. Of the approximately 500,000 births, 55 per cent will be to unmarried adolescents. Even though only 45 per cent of the total are aborted, 80 per cent of all adolescent pregnancies 11 and 90 per cent of the pregnancies among unwed adolescents are unintended. These figures indicate that the behavior of these youngsters might be changed by emphasizing abstinence or postponement, by providing accurate information about effective birth control, by developing feelings of self-worth, or by providing a sense of hope and opportunity in life.

It is estimated that over a 20-year period the average cost to the public of a child who was born to an adolescent mother in 1985 will be \$15,620.<sup>13</sup> A third of all teenage mothers receive public assistance.<sup>14</sup> The aver-

age per-child cost to the public of children born to adolescents who receive welfare is \$36,508.<sup>15</sup> Pregnancies among adolescents cost North Carolina approximately \$269,000,000 annually.<sup>16</sup> Despite these large state expenditures, the fact that a child has an adolescent single parent is the best single predictor that the child will live in poverty.<sup>17</sup> Seventy-five per cent of the families headed by single mothers live below the poverty line.<sup>18</sup> North Carolina's poverty rate for children is 2 percentage points higher than the national average.<sup>19</sup>

A yet-undetermined cost to society is the cost of dealing with "a potentially explosive generation: the children of the children."20 Attention has thus far centered on the adolescent mother's hardships, but the problems are even more severe for her child.<sup>21</sup> Such children "are more likely to die in their first year, grow up in poverty, have a lower I.Q., repeat a grade in school, be victims of abuse and neglect, and become teen parents. . . . "22 The educational system and the social and health care agencies will be called on to deal with this "generation of children at risk of poor health, low educational achievement and shifting values . . . "23 Although children of adolescent parents tend to be less healthy than other children and have more learning difficulties in school, these problems can be partly overcome through early intervention with health and educational programs.24

In North Carolina in 1985, 16,280 unmarried girls aged 15 to 19 became pregnant (compared with 16,334 in 1980).<sup>25</sup> Of that number, 8,592 had abortions, and 7,583 gave live birth; 105 fetal deaths occurred. Reflecting a disturbing national trend,<sup>26</sup> the number of preg-

<sup>5.</sup> Adolescent Pregnancy Prevention Clearinghouse, *Adolescent Pregnancy: Whose Problem Is It?* (Washington, D.C.: Children's Defense Fund, January 1986), p. 5.

<sup>6. 410</sup> U.S. 113 (1973).

<sup>7.</sup> Lillian Tereszkiewicz and Marcia Henry, "Rising Teen Pregnancy: Behind the Numbers," Youth Law News 6 (September-October 1985), 2.

<sup>8.</sup> See generally House Select Committee on Children, Youth, and Families, *Teen Pregnancy: What Is Being Done? A State by State Look*, 99th Cong., 1st sess. (December 1985).

<sup>9.</sup> Id. at pp. xiv, 116-18.

<sup>10.</sup> Id. at p. ix.

<sup>11</sup> Adolescent Pregnancy Prevention Clearinghouse, *Building Health Programs for Teenagers* (Washington, D.C.: Children's Defense Fund, May 1986).

<sup>12.</sup> See Preventing Children Having Children, supra note 4, at p. 3.

<sup>13.</sup> Martha R. Burt, Estimates of Public Costs for Teenage Childbearing: A Review of Recent Studies and Estimates of 1985 Public Costs (Washington, D.C.: Population Options, 1986).

<sup>14.</sup> Id., Executive Summary.

<sup>15.</sup> Id.

<sup>16.</sup> North Carolina General Assembly, *Minutes of the Commission on Adolescent Pregnancy and Premature Births*, Attachment III (November 18, 1986).

<sup>17.</sup> Marcia Henry, "Child Poverty Up: Blacks Hit Hardest," Youth Law News 6 (July/August 1985), 12-13.

<sup>18.</sup> Adolescent Pregnancy Prevention Clearinghouse, Welfare and Teen Pregnancy: What Do We Know? What Do We Do? (Washington, D.C.: Children's Defense Fund, September 1986), p. 14.

<sup>19.</sup> North Carolina Child Advocacy Institute, *The State of the Child in North Carolina* (Raleigh, N.C.: 1984), p. 6.

<sup>20.</sup> Sharon Overton, "Speaker warns of teen pregnancy crisis," News and Observer (Raleigh, N.C.), November 13, 1986, p. 5C, col. 1.

<sup>21.</sup> Id.

<sup>22.</sup> Id.

<sup>23.</sup> Id.

<sup>24.</sup> See House Select Committee, supra note 8, at pp. 17-18.

<sup>25.</sup> North Carolina figures for 1980 and 1985 were derived from statistics provided by the North Carolina Department of Human Resources.

<sup>26.</sup> See Preventing Children Having Children, supra note 4.

nancies to girls between 10 and 14 increased from 753 in 1980 to 820 in 1985; the number of live births in this young age group decreased from 328 in 1980 to 311 in 1985, but the number of abortions increased from 414 in 1980 to 502 in 1985. To appreciate the magnitude of these statistics, one must remember that they do not include the number of teenagers who married as the result of an unintended pregnancy or the number of married adolescents who had an unintended pregnancy.

The health status of adolescents who give birth and their children is also an area of concern. Only about half of the adolescents who give birth receive prenatal care in the first trimester of pregnancy.<sup>27</sup> The infant mortality rate rises for the children of adolescent mothers—as does the percentage of low birth-weight babies, a factor in the rates of infant mortality and developmental disabilities.<sup>28</sup> Many of the pregnancy risks for girls aged 15 or older can be eliminated through early and comprehensive prenatal care, but the risks for younger girls remain, even with medical care.<sup>29</sup> These adolescents suffer more complications during pregnancy and delivery, and they are more likely to die giving birth.30 Also, the cost to society of pregnancies among young adolescents is higher than the cost of other pregnancies.31 For example, 30 per cent of the total cost of hospital deliveries to adolescents is paid by Medicaid.<sup>32</sup> One reason for this high percentage is that many of the pregnant girls who qualify for Medicaid have low birth-weight babies. These babies often must be placed in intensive care, and that cost is high-between \$10,000 and \$15,000 per child.33

#### Identifying the at-risk adolescent

The problem is societal. Nationwide, the number of births to all unmarried women increased from 4 per cent in 1950 to 20 per cent in 1982.<sup>34</sup> Although the increase in child-bearing by unmarried adolescents during the 1960s and 1970s focused attention on adolescent birth rates, such births reflect the general trend toward

cents, it is among whites that the increase has occurred among unmarried adolescents who give birth.<sup>36</sup> From 1970 to 1981, the birth rate among unmarried white adolescents increased 65 per cent in the 15-17 age group

greater numbers of births out of wedlock.35 Although

the percentage of sexually active black adolescents still

exceeds the percentage of sexually active white adoles-

The problems of basic skills and adolescent pregnancy are connected—there is a direct correlation between a girl's level of educational skills and the likelihood that she will become pregnant.

and 40 per cent in the 18-19 age group.<sup>37</sup> The birth rate among blacks in both age groups actually decreased by 14 per cent.<sup>38</sup> In North Carolina in 1981 the pregnancy rate for nonwhite girls—72 per 1,000—was substantially higher than for white girls—43 per 1,000.<sup>39</sup> But this discrepancy results from economic factors rather than race. The higher percentage of pregnancies and births among nonwhite adolescents reflects a much higher percentage of minority youths who are economically disadvantaged. Minority adolescents are no more likely to become pregnant or to give birth than are white girls of comparable economic and educational levels.<sup>40</sup>

The incidence of pregnancy among teenagers is closely linked to adolescents' feelings about the opportunities available to them; those who see possibilities ahead have an incentive to avoid pregnancy.<sup>41</sup> Nationally, 54 per cent of black teenagers aged 15-17, compared with 32 per cent of white adolescents in the same age group, are sexually active; yet blacks are 2½ times more likely to give birth and 5½ times more likely to be single parents.<sup>42</sup> Though poverty, not race, is the single big-

<sup>27.</sup> See House Select Committee, supra note 8, at p. 10.

<sup>28.</sup> Id. at 10-12.

<sup>29.</sup> Preventing Children Having Children, supra note 4.

<sup>30.</sup> Id.

<sup>31.</sup> Id. at p. 5.

<sup>32.</sup> Id.

<sup>33.</sup> *Id*.

<sup>34.</sup> Tereszkiewicz and Henry, supra note 7, at p. 2.

<sup>35.</sup> Id.

<sup>36.</sup> Preventing Children Having Children, supra note 4, at pp. 10-11.

<sup>37.</sup> Tereszkiewicz and Henry, supra note 7, at p. 2.

<sup>38.</sup> Id.

<sup>39.</sup> The State of the Child in North Carolina, supra note 19, at p. 18.

<sup>40.</sup> Preventing Adolescent Pregnancy, supra note 3, at p. 4.

<sup>41.</sup> Preventing Children Having Children, supra note 4, at pp. 6-7.

<sup>42.</sup> Id. at p. 6.

gest predictor of pregnancy in adolescence, the combination of poverty and lack of basic skills is an even more reliable indicator.<sup>43</sup> "Pregnant adolescents who have a baby are more likely to drop out of school, and those who drop out are more likely to become pregnant and to have a child."<sup>44</sup> Only half of the mothers younger than 18 complete high school, compared with 90 per cent of first-time mothers who are at least 20 years old.<sup>45</sup>

Teenagers from low-income families are more likely than middle- or upper-income adolescents to drop out of school, and minority youths are more likely than whites to drop out or to be behind grade level.<sup>46</sup> Inadequacy in basic skills limits career opportunities, and the failure associated with the lack of skills leads to low self-esteem.<sup>47</sup> This combination makes adolescents with poor basic skills more likely to become parents earlier than those with at least average academic skills.48 Adolescents with similar family income and basic academic skills levels, regardless of their race or ethnic group, have nearly identical rates of child-bearing.<sup>49</sup> The sense of opportunity that comes with having basic skills is as effective among minority adolescents in preventing early parenthood as it is among white adolescents.50 The following statistics should concern educators.<sup>51</sup>

- Eighteen- and 19-year-old women with poor basic skills are 2½ times more likely to be mothers than 18- and 19-year-olds with average basic skills.
- —Eighteen- and 19-year-old men with poor basic skills are three times as likely to be fathers as their counterparts with average basic skills.
- —Teens with poor basic skills are five times as likely as those with average basic skills to become mothers before age 16.
- Young women with poor basic skills are four times as likely as those with average basic skills to have more than one child while in their teens.
- —More than half of 15- to 18-year-olds with family incomes below the poverty line place in the bottom skills-level group. Poverty-level teenagers are four

- times more likely to have poor basic skills than those with family incomes above the poverty line.
- More than 50 per cent of black 15- to 18-year-olds and 40 per cent of Hispanic teenagers fall in the bottom skills group, compared with 13 per cent of white teenagers. Among adolescents who live in poverty, more than 40 per cent of whites, 50 per cent of Hispanics, and 60 per cent of blacks fall in the bottom skills group.

In developing strategies to prevent adolescent pregnancy, it is important to realize that these at-risk youngsters need more help in delaying or preventing pregnancy than do other adolescents.<sup>52</sup> Young people who have motivation and opportunity may simply need information in order to prevent pregnancy<sup>53</sup>—which may mean reinforcement of a decision to abstain from sexual activity during adolescence or the provision of reliable birth control information. But adolescents who face a probability of failure in school and at work are in jeopardy of becoming pregnant, and they need more than information, counseling, and birth control services.54 Schools can move effectively to reduce teenage pregnancy rates by developing academic and work-related skills and improving self-image among these at-risk students.55 Efforts to identify and help those at risk of early parenthood must begin well before these children reach puberty.56

Certain factors are strong indicators of at-risk students who need both motivation to delay pregnancy and information about how to prevent pregnancy. An adolescent who has some combination of the following characteristics needs special help.<sup>57</sup>

- —Adolescent's mother was an adolescent parent.
- —Adolescent is economically disadvantaged.
- —Adolescent is a minority-group member.
- —Adolescent belongs to a single-parent household.
- Adolescent lacks religious or other values learned at home.
- —Adolescent began early to date frequently.
- Adolescent has low educational aspirations and/or lacks basic skills.

<sup>43.</sup> Welfare and Teen Pregnancy, supra note 18, at pp. 3-9.

<sup>44.</sup> Singh, supra note 1, at p. 215.

<sup>45.</sup> Adolescent Pregnancy, supra note 5, at p. 3.

<sup>46.</sup> Preventing Adolescent Pregnancy, supra note 3, at p. 4.

<sup>47.</sup> Id.

<sup>48.</sup> Id.

<sup>49.</sup> Id.

<sup>50.</sup> Id. at p. 5.

<sup>51.</sup> Id. at pp. 4-5.

<sup>52.</sup> Preventing Children Having Children, supra note 4, at pp. 6-7.

<sup>53.</sup> Id. at p. 7.

<sup>54.</sup> See generally Adolescent Pregnancy, supra note 5.

<sup>55.</sup> See generally Preventing Adolescent Pregnancy, supra note 3.

<sup>56.</sup> Adolescent Pregnancy Prevention Clearinghouse, *Adolescent Pregnancy: What the States Are Saying* (Washington, D.C.: Children's Defense Fund, March 1986), p. 6.

<sup>57.</sup> Statement by Mary Vernon, Workshop at the 65th Social Services Institute, Raleigh, N.C. (October 30, 1986).

- -Adolescent's self-esteem is low.
- -Adolescent matured sexually early.
- -Adolescent lacks parental support.
- Adolescent needs peer acceptance or suffers peer pressure.
- Adolescent assumed adult responsibilities at an early age.
- -Adolescent has or had a pregnant older sister.
- —Adolescent's opportunities are limited.
- —Adolescent is retarded.
- Adolescent has been physically and/or sexually abused.
- —There are nine or more in adolescent's household, which is eligible for AFDC.
- Adolescent lacks access to general health services and information.

#### Strategies for preventing pregnancy

Even though schools may be staggering under the expectation that they deal with national ills ranging from alcohol and drug abuse to juvenile delinquency, a local system concerned about adolescent pregnancy should realize that success in its basic mission—development of basic skills—helps to prevent the problem of pregnancy.<sup>58</sup> Schools face a dilemma trying to educate low-income students with poor basic skills because these children also bring urgent nonacademic needs to school with them.<sup>59</sup> But despite very real budget and policy constraints, the needs of these at-risk students can be addressed without jeopardizing educational programs.<sup>60</sup> Possibilities include:<sup>61</sup>

- Developing more flexible learning environments that allow children entering school to experience success before they experience failure, and thus preserve their self-esteem.
- —Implementing procedures for identifying children who are falling behind in elementary and middle schools and for focusing expanded remedial and compensatory education programs on such children.
- —Strengthening of dropout-prevention activities at the high school level, including models that combine selfpaced remedial instruction, vocational preparation, and limited work experience.

- —Making efforts to involve parents and community groups in collaborative efforts that address the special needs of disadvantaged youths.
- —Re-examining school policies and curricula concerning sexuality and building community support for broader measures that include health education, family-life education, and life-planning and decisionmaking skills.
- —Formulating strategies for increasing college enrollments among economically disadvantaged students, including comprehensive counseling and guidance programs to make poor and minority-group youths more aware of postsecondary opportunities.
- —Reviewing unmet health needs within the student population and attempting to stimulate a communitywide examination of the most effective means to ensure access to health services for poor adolescents.
- Sponsoring opportunities for community service, such as cross-age tutoring programs within school or volunteer placements with community agencies to bolster students' sense of responsibility and self-worth.
- —Working with youth-serving organizations in the community to establish or expand recreational or social programs for poor and minority youth, in order to both bolster self-esteem and provide avenues for nonacademic achievement.
- —Establishing a comprehensive school-to-work transition program in cooperation with business leaders and youth employment agencies to provide summer jobs for disadvantaged youths and employment guarantees (when possible) for high school graduates.

As the discussion later in this article indicates, one strategy for prevention may be programs in sex education that include birth control information. Such information may help to prevent pregnancy for senior high school students who are sexually active; other efforts are probably necessary for younger students and may even succeed in postponing sexual involvement by older students. For example, Postponing Sexual Involvement (PSI), a program focused on preteens and early teenagers and used primarily in the eighth grade, helps adolescents develop skills to resist social and peer pressure to become sexually active. Its goal is to make young people aware of their option to say "no" and to teach them how to carry out that decision. 62 As noted earlier in this

<sup>58.</sup> See generally Preventing Adolescent Pregnancy, supra note 3.

<sup>59.</sup> Id., at p. 14.

<sup>60.</sup> Id.

<sup>61.</sup> Id. at pp. 14-15.

<sup>62.</sup> Adolescent Pregnancy Prevention Clearinghouse, *Model Programs: Preventing Pregnancy and Building Youth Self-Sufficiency* (Washington, D.C.; Children's Defense Fund, July 1986), p. 12.

article, the number of pregnancies and births to the under-fifteen population is increasing, partly because the increasing number of sexually active younger adolescents use birth control measures less effectively than older teenagers.<sup>63</sup> Thus a program that helps in postponing sexual involvement has real potential to affect the adolescent pregnancy problem. A recent study in Atlanta, where the program was developed, indicates that PSI reduced by approximately 65 per cent the number of eighth graders who became sexually active.<sup>64</sup> PSI appears to be effective; it is also less controversial than some other components of a sex education curriculum because it focuses on abstinence. Many school systems in North Carolina are already using the program, and others plan to establish or expand PSI.

#### Attitudes toward sex education

School systems that wish to take pregnancy-prevention measures beyond the schools' primary function of providing basic education skills appear to have general public support. A 1982 survey indicates that 82 per cent of the adult population supports sex education in the schools, up considerably since the 1960s.65 Another survey reveals that 70 per cent of adults approve of providing explicit information on birth control in sex education classes.66 But approval of sex education drops to 34 per cent if the instruction is offered without parental consent.<sup>67</sup> Despite cries from some quarters that sex education encourages sexual activity among adolescents, only 12 per cent of adults surveyed believed that this is true.<sup>68</sup> Evaluations of family-life instruction indicate that sex education has a positive effect on self-esteem and decision-making skills, both of which are related to responsible behavior.<sup>69</sup> Also, 70 per cent of parents whose children have participated in sex education

courses report that they now have better communication with their children.<sup>70</sup>

Few sex education programs have been evaluated to determine their long-term effects on students' knowledge, attitudes, and behavior. But a recent national study that focuses on the relationship between sex education and adolescent sexuality, use of contraceptives, and pregnancy rates indicates that (a) the decision to engage in sexual activity is not influenced by whether the adolescent had sex education in school, and (b) there is no association between sexual activity and courses that specifically cover contraception.<sup>71</sup> The study's most important finding is that among sexually active girls, those who have had sex education seem less likely than others to become pregnant. Among whites, girls who have not received sex education are 60 per cent more likely to become pregnant than those who have had the course. Among blacks, the figure is 70 per cent. Girls who had been instructed about contraception were more likely to use contraceptives the first time they had intercourse and to continue that use. This finding is important, because most young women do not use contraceptives for at least nine months after they begin sexual activity,<sup>72</sup> and half of all unintended pregnancies occur within the first six months after a girl becomes sexually active.73

In December 1986 a National Research Council panel of physicians, public health experts, scientists, and demographers recommended that contraceptives be easily and inexpensively available to teenagers in order to prevent adolescent pregnancy, which the Council termed a "serious national problem." One Council member also stated that "[n]on-recognition of the prevalence of adolescent sexuality is part of the trap we live in. . . ." Pregnancy rates are higher in America than in other developed countries, despite similar rates of sexual activity, because those other countries make contraceptives readily available and "take a more pragmatic view of teen-age sexuality."

<sup>63.</sup> Preventing Children Having Children, supra note 4, at p. 12.

<sup>64.</sup> Summary of Research Findings at Grady Memorial Hospital (Atlanta, Georgia), released January 21, 1987 (not for publication). A copy of the summary of the research finding, "Educational Program Helps Young Teens Say 'No' to Sex," is available in the Institute of Government library.

<sup>65.</sup> Asta Kenney and Terry Orr, "Sex Education: An Overview of Current Programs, Policies and Research," *Phi Delta Kappan* 65 (March 1984), 492, citing *General Social Surveys*, 1972-82: Cumulative Codebook (Chicago: National Opinion Research Center, 1982), p. 161.

<sup>66.</sup> Id.

<sup>67.</sup> Id. at p. 493.

<sup>68.</sup> *Id*.

<sup>69</sup> *Id.* at p. 495.

<sup>70.</sup> Id.

<sup>71.</sup> Id. at p. 494, citing Melvin Zelnik and Young J. Kim, "Sex Education and Its Association with Teenage Sexual Activity, Pregnancy, and Contraceptive Use," Family Planning Perspectives 14 (May/June 1982), 116.

<sup>72.</sup> Building Health Programs, supra note 11, at p. 8.

<sup>73.</sup> Adolescent Pregnancy, supra note 5, at p. 6.

<sup>74.</sup> Debra Viadero, "Wide Distribution of Contraceptives Advocated: Teen-Age Pregnancies Are the Target of Study by Research Council," *Education Week* 6 (December 17, 1986). 1.

<sup>75.</sup> Id. at p. 16.

<sup>76.</sup> Id.

Eighty-four per cent of students who have received sex education in schools and 88 per cent of those who have studied birth control considered the information worthwhile.77 Seventy-eight per cent of those who had received no sex education and 77 per cent who had received no birth control information felt that such instruction would have been helpful. In a poll conducted in late 1986,78 teenagers listed—in descending order parents, friends, school, and the news media as their source of information about pregnancy. Fifty-nine per cent of these students had received sex education at school, but only 39 per cent had attended classes that included birth control information. The study's sponsor, Planned Parenthood Federation of America, stated that the results showed "a clear need for easy availability of contraceptives for teenagers as well as more and better sex education." The results are as follows:

- —Fifty-seven per cent had had sexual intercourse by age 17:
- Twenty-nine per cent had had sexual intercourse by age 15;
- -Twenty per cent had had sexual intercourse by age 14;
- At every age level, more boys than girls had had sexual intercourse:
- —Among those who were sexually experienced, 56 per cent used no birth control the first time;
- Twenty-seven per cent still were not using a contraceptive;
- -A third used one all the time;
- —Fifteen per cent sometimes used one.

These findings support the National Research Council's recommendations published a week before the results of the poll.

Also, the answers to questions about why teenagers do not use birth control support earlier conclusions:

- -Thirty-nine per cent simply did not want to;
- Twenty-five per cent lacked knowledge of or access to contraceptive measures;
- —Twenty-four per cent were afraid to use them or were embarrassed to do so;
- -Twenty per cent did not expect to need a contraceptive or did not want to take time to use it;
- -Fourteen per cent were not worried about pregnancy.

In order to increase teenage use of birth control, the students recommend as follows:

- Tell teenagers where they can get birth control devices without anyone's finding out (75 per cent recommendation);
- Provide free birth control devices (78 per cent recommendation);
- Emphasize to teenagers that using birth control measures is the responsible thing to do (59 per cent).

# Federal and state authorities have indicated a willingness, indeed an insistence, that sex education policies be implemented at the local level.

Many adults suppose that most adolescents know about the easy availability of birth control measures and simply do not want to use them, whereas teenagers say that they need and want information.

Other studies suggest the following reasons why adolescents do not seek contraceptives or do not use them effectively and consistently:<sup>79</sup>

- —The side effects and dangers of birth control measures are not compared with the dangers of childbirth.
- —Adolescent thought mode is accurately characterized as "risk-taking." Adolescents do not realize the importance or urgency of pregnancy-prevention measures. Usually, the adolescent does not consciously decide not to use birth control. Either she cannot readily obtain contraceptives or she simply does not realize that pregnancy is a very real possibility for a female who engages in intercourse, even once.
- —Misinformation.
- —Fear that her family will find out (even though only 10 per cent of clinics require parental consent).
- —Does not expect to have sex.
- —Does not want to admit sexual activity.
- -Birth control devices cost too much.
- Television glorifies sex and constantly bombards adolescents with sexual content, yet responsible mes-

<sup>77.</sup> Kenney and Orr, supra note 65, at p. 492.

<sup>78. &</sup>quot;Most teens have sex by age 17, poll finds," News and Observer (Raleigh, N.C.), December 17, 1986, p. 4, col. A.

<sup>79.</sup> Tereszkiewicz and Henry, supra note 7, at p. 4.

sages about adolescent pregnancy and birth control are considered too controversial for television.

—Sexuality is not openly discussed.

#### The schools' mandate

In addition to statistical evidence that schools or school programs can affect adolescent pregnancy rates, the educational system has legal authority for developing educational policies to address the problem of adolescent pregnancy.

The statutes provide that by 1988 all North Carolina public school systems shall have developed a comprehensive health education program for kindergarten through the ninth grade.80 "'[C]omprehensive school health' includes the subject matter of mental and emotional health, drug and alcohol abuse prevention, nutrition, dental health, environmental health, family living, consumer health, disease control, growth and development, first aid and emergency care, and any like subject matter." Development and administration of the health program is the responsibility of each local school administrative unit, a school health education coordinator for each county, the Department of Public Instruction, and the State School Health Education Advisory Committee.82 "Each existing local school administrative unit is eligible to develop and submit a plan for a comprehensive school health education program which shall meet all standards established by the State Board of Education, and to apply for funds to execute such plans."83 The role that each administrative unit chooses to adopt in preventing adolescent pregnancy may depend on how it interprets the phrases "comprehensive school health education program" and "family living" as a part of that curriculum. The Department of Public Instruction (DPI) is to "supervise the development and operation of a statewide comprehensive school health education program including curriculum development, inservice training provisions and promotion of collegiate training, learning material review, and assessment of evaluations of local programs in the same manner as for other programs."84 The statute reflects a legislative intent (a) that DPI designate specific positions responsible for implementing the program, and (b) that the program be comprehensive.

A truly comprehensive school health program would have to deal with issues of adolescent sexuality and pregnancy prevention. A teenager's health is closely linked to his or her sexual practices, because sexual issues including pregnancy are—along with drugs and suicide—the primary health-related matters an adolescent must face.<sup>85</sup> It can be argued that a school system that purports to teach health to adolescents without dealing with the many problems related to sex is not fulfilling its duty to implement a "comprehensive school health education program."

The 1985 General Assembly authorized the Legislative Research Commission to study the teaching of adolescent sexuality in the public schools.<sup>86</sup> After one meeting, the group that was to do the study dissolved because it decided that local school boards were responsible for determining how they would deal with adolescent pregnancy and prevention of premature births.<sup>87</sup> The 1986 session of the General Assembly authorized a commission to study adolescent pregnancy and prevention of premature birth<sup>88</sup> in order to determine what private agencies, public agencies, and health departments are doing to cope with the problem.<sup>89</sup> In addition, that commission continues to follow developments within DPI.<sup>90</sup>

Thus, although the General Assembly has signaled its intent that pregnancy-prevention components be part of the public schools' curriculum, it has left the initiative in the hands of local school boards. The local board therefore has a responsibility as well as an opportunity to choose an approach and develop an enabling policy for its school system to use in dealing with adolescent pregnancy.

Besides authorizing the two study commissions to investigate issues related to adolescent pregnancy, over the 1985-86 legislative sessions the General Assembly appropriated \$2 million to the Department of Human

<sup>80.</sup> N.C. GEN. STAT. § 115C-81(e)(1) (Supp. 1985).

<sup>81.</sup> Id. § 115C-81(e)(2).

<sup>82.</sup> Id. § 115C-81(e)(3).

<sup>83.</sup> Id. § 115C-81(e)(4).

<sup>84.</sup> Id. § 115C-81(e)(5).

<sup>85.</sup> Building Health Programs, supra note 11, at pp. 5-7.

<sup>86.</sup> N.C. Sess. Laws 1985, Ch. 790.

<sup>87.</sup> Minutes of the Commission, supra note 16, remarks by Representative L. Jeralds, co-chairman of the Commission on Adolescent Pregnancy and Premature Births.

<sup>88.</sup> Studies and Reports Authorized by the 1986 Session of the North Carolina General Assembly, General Research Division, Legislative Service Office (August 4, 1986).

<sup>89.</sup> Minutes of the Commission, supra note 16, remarks by Representative L. Jeralds.

<sup>90.</sup> Id.

Resources (DHR) to be made available to local communities for adolescent pregnancy-prevention programs, and then another \$400,000 to fund programs that had not qualified under the initial DHR guidelines.<sup>91</sup> The following criteria were used originally to determine the projects to be funded:<sup>92</sup>

- (1) Projects which propose an innovative (new, unique) social, medical or community approach for the prevention of teen pregnancy/prematurity.
- (2) Projects which serve counties with statistically high incidences of pregnancy, premature births and infant mortality among adolescents, assuring representation of the range of socio-economic and major racial groups. (Use most recent 5-year aggregate data).
- (3) Projects which support school-based health clinics. School-based health clinics should not be developed solely for the purposes of this Section. These clinics may provide services other than those authorized under these grants, but such services must be paid for from other sources of funds. These clinics shall not provide any of the following services: abortion services, transportation to abortion services, contraceptives or prescriptions for contraceptives. Parental consent must be obtained before an adolescent can be deemed eligible to participate in clinic services. Additional parental consent for specific services should be obtained consistent with state and federal law.
- (4) Projects which have a consumer health education program geared to the family (parent and adolescent) which would also increase public awareness of the magnitude of the problem and need for education and community resources to prevent teen pregnancy and prematurity.
- (5) Projects which involve and identify the adolescent male. Additional consideration should be given to proposals which include in the educational component information on the developmental stages and the responsibilities of being a father.
- (6) Projects directed at prevention of prematurity in adolescents who do become pregnant. Such projects should include access to or provision of early prenatal care and education as to the causes of prematurity.
- (7) Projects which will promote parental involvement, obtain parental consent in all health care matters consistent with state/federal law, and enhance an open and honest parent/teen relationship.

- (8) Projects whose primary purpose is to promote abstinence from sexual activity until marriage.
- (9) Projects whose educational component includes the following, at the appropriate developmental levels:(a) growth,
  - (b) biological development and puberty,
  - (c) abstinence, and
  - (d) sexually transmitted disease.

The legislative funds were not to be used for any of the following purposes:93

- (1) Purchase of inpatient care;
- (2) Cash payments to direct recipients of health, educational or counseling services;
- (3) Purchase or improvement of land;
- (4) Purchase, construction, or permanent improvement (other than minor remodeling) of any building or other facility;
- (5) Purchase of major medical equipment;
- (6) Payment for abortion services;
- (7) Payment for transportation to abortion services; or
- (8) To provide contraceptives or prescriptions for contraceptives to adolescents on school property.

The money from both rounds of funding has been allocated to various community, school, or combined community and school programs. The second of the two legislative study commissions met on November 18, 1986, to hear progress reports from the funded projects. The report to the commission reflected the variety of approaches adopted by individual communities and/or school systems. These programs are summarized in *School Law Bulletin* (Spring 1987), published by the Institute of Government.

#### Conclusion

Even though—for various reasons—school officials may be understandably reluctant to assume further responsibility to deal with the health and social welfare of the nation's youth, increasing demands are being made at the federal and state levels for public school systems to take a more active role in combating the problem of adolescent pregnancy as well as other sex-related health problems. Much as responsible decision-makers may agree that the schools' role is to teach and that the schools should not subvert the family's role in child-

(continued on page 20)

<sup>91</sup> *Id* 

<sup>92. 10</sup> N.C. Admin. Code 08B .0707.

<sup>93.</sup> Id. at .0708.

<sup>94.</sup> Minutes of the Commission, supra note 16, remarks by Representative L. Jeralds.

# The 1987 General Assembly's Support for Public Education

#### Laurie Mesibov

orth Carolina's future depends on the strength of its public schools, because education is the means by which the state can improve its appeal to industry and individuals can improve their economic well-being. Members of the 1987 General Assembly all appeared to accept this statement. The need for support for public education was never questioned in the recent legislative session—the only disputes were over method of support and timing. When these differences had been resolved and this long session had adjourned, much had been achieved for public education in North Carolina.

Moneys for current expense were increased, with over \$2.5 billion allocated for elementary and secondary schools in each year of the 1987-89 biennium. Years 3 and 4 of the Basic Education Program (an eight-year effort to improve education by providing every student with a basic level of instructional programs and services) were fully funded with approximately \$260 million in expansion funds. Over the next two years, school systems will be able to expand their curriculums, offer 5.5 hours of instruction each day in grades K-8, reduce class size in grades 10-12; expand summer school programs; increase efforts to reduce the dropout rate; and hire over 3,000 additional teachers, assistant principals, counselors, and clerical assistants.

The General Assembly gave teachers a 5 per cent raise and provided \$25 million for continuation of the Career Development Pilot Program (a system of differen-

tiated pay for teachers) in preparation for possible statewide implementation of a career ladder in 1989-90. It encouraged experimentation in education through the Lead Teacher Program, and it increased funding for scholarships designed to attract the best and the brightest students to teaching.

**IMPORTANT AS THESE ACTIONS** were to North Carolina's continued leadership in school reform and support for education, the General Assembly's most significant legislation was the School Facilities Finance Act of 1987, Chapter 622 as amended by Chapter 813, which appropriates new state funds to help counties provide new and improved school buildings. The Act raises the corporate income tax from 6 to 7 per cent, reclaims the percentage that merchants have retained for collecting retail sales taxes, accelerates collection of withheld income taxes, and excludes inventories of retailers. wholesalers, and manufacturers (including some farm inventories) from the property tax base. Local units will be "reimbursed" by the state government for revenues lost as a result of the exclusion of business inventories from the tax base.

These changes in the tax laws are expected to generate a net increase of \$830 million in additional funds for school capital needs over ten years. These funds will support two new programs of state aid for construction and renewal of school facilities—the Public School Building Capital Fund, which will assist all counties, and the Critical School Facility Needs Fund, which will assist counties and school administrative units that have the most critical needs in relation to their resources.

In addition, counties must continue allocating 60 per cent of the half-cent sales tax approved in 1986

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Table 1. Estimates (in Millions) of Additional Revenue for Statewide Public School Facilities Financing As a Result of Legislation from 1983 through 1987

Year	Action	87-88	88-89	89-90	90-91	91-92	Next Five Years	Ten- Year total
1983	First ½% local							
	sales tax		<b></b>	# 10. <b>2</b>	<b>*</b> 40 <b>*</b>	A 10 =		
	Original tax	\$ 55.5	\$ 46.4	\$ 48.2	\$ 48.6	\$ 49.7	\$ 63.8	\$ 312.4
	Merchants' discount <sup>1</sup>		1.4	1.5	1.5	1.5	2.0	7.9
	SB 944 <sup>2</sup>		1.0	1.1	1.1	1.1	1.4	5.7
1986	Second ½% local sales tax							
	Original tax <sup>3</sup>	\$ 79.9	\$ 84.6	\$ 89.7	\$ 95.1	\$100.8	\$ 605.0	\$1,055.1
	Merchants' discount	Ψ,,,,,	2.6	2.8	2.9	3.1	18.6	30.1
	SB 9442 <sup>2</sup>		1.9	1.9	2.1	2.2	13.3	21.4
	36 74-2		1.)	1.7	2.1	2.2	13.3	21.7
1987	Public School Building							
	Capital Fund	\$ 81.1	\$ 58.7	\$ 45.4	\$ 49.8	\$ 54.6	\$ 359.5	\$ 649.1
	Critical School Facility							
	Needs Fund	95.9	10.0	10.0	10.0	10.0	50.0	185.9
	Basic Education Program <sup>4</sup>	31.1	65.1	68.3	71.7	75.3	437.1	748.7
	Total	\$343.5	\$272.0	\$268.9	\$282.4	\$298.4	\$1,547.8	\$3,013.4

Discrepancies may appear in totals because numbers have been rounded.

- 1. Impact of subjecting new revenue from elimination of merchants' discount to earmarking requirements.
- 2. Impact of subjecting new revenue from closing loophole on out-of-county delivery transactions to earmarking requirements.
- 3. Includes impact of 1987 legislation freezing earmarking of county share at 60 per cent.
- 4. Amount of freed-up local resources from moving to full state funding of school clerical personnel and vocational education.

Source: Legislators' Information Packet: 1983-87 Legislative Actions in Public School Facilities Financing, Fiscal Research Division, September 1987.

toward school capital needs for the first eleven fiscal years in which the tax is in effect. (Under the original provision for that tax, the percentage required to be dedicated for school construction would have decreased more rapidly.) The revenues available for school construction as a result of this change will bring the total amount of funds potentially available for school construction over the next ten years to \$3.2 billion. That figure also includes the additional revenues made available through (a) the School Facilities Finance Act of 1987, (b) the portion of revenues from the local sales tax approved in 1983 that must be used for school facilities, and (c) about \$740 million in funds that will be made available to local units as a result of the state's assumption of vocational education and secretarial expenses under the Basic Education Program.

The Public School Building Capital Fund (Article 38A, G.S. Chapter 115C) will provide funds to all county governments to help them meet their public

school capital needs. The Fund will be administered by the Office of State Budget and Management. Moneys in the Fund (which are expected to total \$95 million in 1987-88 and \$645 million over ten years) will be allocated to counties on the basis of average daily membership. Moneys must be used for capital outlay projects—including planning, construction, reconstruction, enlargement, improvement, repair, and renovation of public school buildings—and for the purchase of land for public school buildings. "Public school buildings" means facilities for individual schools that are used for instructional and related purposes—not centralized administration, maintenance, or similar facilities.

If a county finds that it does not need part of the funds allocated to it for these purposes, it may use the unspent funds to retire any county indebtedness incurred for public school facilities.

Moneys from the Fund must be matched on the basis of one dollar of local funds for every three dollars of state funds. Revenue from local sales and use

Table 2. Statewide Impact of Two Funds Established in 1987 (in Millions)

Fund	87-88	88-89	89-90	90-91	91-92	Next Five Years	Ten- Year Total
Public School Building Capital Fund	S 81.1	\$58.7	\$45.4	\$49.8	\$54.6	\$359.5	\$649.1
Critical School Facility Needs Fund	95.9	10.0	10.0	10.0	10.0	50.0	185.9
Total	\$177.0	\$68.7	\$55.4	\$59.8	\$64.6	\$409.5	\$835.0

Source: Legislators' Information Packet: 1983-87 Legislative Actions in Public School Facilities Financing, Fiscal Research Division, September 1987.

taxes that is earmarked for public school capital outlay purposes by G.S. 105-502, -494, or -487 may be used as matching funds. County revenues spent after July 1, 1986, for land acquisition, engineering fees, architectural fees, or other directly related costs for a public school capital project that was not completed by July 1, 1987, may also be counted as matching funds.

The Critical School Facility Needs Fund (Article 34A, G.S. Chapter 115C) will award grants to selected counties and school administrative units to help them meet particular facility needs. The Fund is expected to provide \$95.7 million in 1987-88 and a total of approximately \$185 million over ten years. The State Board of Education (SBE) will administer the Fund.

The Act creates the Commission on School Facility Needs. Although the Commission is located administratively in the Department of Public Education, it will exercise its powers independently of the SBE and Department of Public Instruction (DPI).

The Commission must make a preliminary report to the SBE and the General Assembly on the amount of critical school facility needs in each county before April 1, 1988; a final report is due by March 1, 1989. The Commission's determination must be based on the statewide school facility minimum standards adopted by the SBE and must include an assessment of which needs are critical.

The SBE must develop and adopt statewide school facility minimum standards. Interim standards have been adopted; the Commission will use them to make its preliminary report. Before June 1, 1988, the SBE must adopt statewide school facility minimum standards to define what constitutes adequate facilities, furniture, equipment, apparatus, and spaces. The SBE must also provide a process for justifying deviations from these standards. The Commission will use these standards to

make its final report. The statewide standards will apply to all school buildings constructed, reconstructed, enlarged, or improved after the standards are adopted, regardless of the source of funds for the project.

Grant applications to the Commission to meet a critical need in the school administrative unit must be made jointly by the board of education and the board of county commissioners if the school unit is located entirely within one county. If a school administrative unit is located in more than one county, the board of education will apply directly for a grant. The application must contain (1) information on how the critical needs for which funds are requested will be met, (2) a statement of how much state money is required for the project, (3) an analysis of the county's school facility needs, and (4) a long-range plan for meeting those needs. Grants may be made only for projects that meet the SBE's school facility standards.

Technical assistance in facility planning will be available from the SBE if a board of county commissioners or a board of education that is applying for a grant asks for help.

The Commission on School Facility Needs will make grants to those counties (or school units) that it determines to have the greatest critical school facility needs in relation to resources available to finance the facilities needed. This determination will be based on three criteria: (1) how critical the county's school facility needs are; (2) the county's ability to pay, as measured by (a) the county's per-pupil adjusted property tax base and (b) the county's per capita income; and (3) any critical nonschool needs that may have forced the county to divert its resources from school facility needs.

Local boards of education must submit their longrange plans for meeting school facility needs to the SBE by January 1, 1988, and every five years thereafter.

# The North Carolina Center for the Advancement of Teaching

#### Laurie Mesibov



Martha Dill and Dorothy Works

The author is an Institute faculty member who specializes in education law. She wishes to thank the NCCAT staff for their cooperation and for supplying much of the information in this article.

Come to western North Carolina to expand your horizons and stretch your mind. Explore new ideas and participate in a week-long intellectually exciting seminar. Take advantage of time for quiet moments of reflection and for lively conversations with colleagues who will become friends. Experience the natural beauty of the Great Smoky Mountains while you let someone else do the cooking. Renew your love of learning and return home with new enthusiasm and ideas for your work. Encourage others to share your good fortune.

This wonderful opportunity is available to you—if you are a career teacher in a North Carolina public school and are selected to attend the North Carolina Center for the Advancement of Teaching (NCCAT) in Cullowhee. Read about the Center and learn what two NCCAT alumni, Martha Dill and Dorothy Works, language arts teachers at Phillips Junior High School in Chapel Hill, have to say about it.

We may have good neighbors without good fences, but we cannot have good schools without good teachers. No matter what the curriculum, no matter how new the facility or textbooks, no matter who serves on the board of education, student learning and achievement depend on teachers. Every classroom in North Carolina should have a well-qualified, creative, and caring teacher, and most do. Some classrooms are led by superb teachers, teachers who are skilled at conveying information, who deepen students' understanding of the world, build on their natural curiosity, inspire them, and develop their love of learning. Such teachers deserve recognition, reward, and opportunities to renew their own delight in learning.

North Carolina has a unique way of seeing that they get it—not through an improved curriculum, better support services, smaller classes, or even differentiated pay, although each of these is part of the state's effort to improve public education. Rather, North Carolina has developed the North Carolina Center for the Advancement of Teaching (NCCAT). The Center, which began full-time programming in the fall of 1986, was established to provide year-round, in-residence learning and study opportunities for the state's outstanding career teachers. The Center's purpose, according to the General Assembly, is to

provide career teachers with opportunities to study advanced topics in the sciences, arts, and humanities and to engage in informed discourse, assisted by able mentors and outstanding leaders from all walks of life; and otherwise to offer opportunity for teachers to engage in scholarly pursuits, through a center devoted exclusively to the advancement of teaching as an art and as a profession.<sup>1</sup>

NCCAT represents an investment in some of our best teachers that will not only reward those individuals but also benefit their students and colleagues. In addition, perhaps their NCCAT experience will encourage these able teachers to remain in the teaching profession. The message to current and future teachers is clear: North Carolina appreciates you and wants to enrich your professional life.

NCCAT was created in 1985 as a unit of The University of North Carolina, supported by a legislative appropriation of \$500,000 in fiscal 1985-86 and \$2

million in fiscal 1986-87. It operates under the general auspices of The University of North Carolina Board of Governors, which established the NCCAT Board of Trustees with responsibility for governing and administering the program. The fifteen-member Board of Trustees is composed of three ex officio members (the President of The University of North Carolina, the State Superintendent of Public Instruction, and the Chancellor of Western Carolina University), two members appointed by the General Assembly recommended by the Lieutenant Governor; two members appointed by the General Assembly recommended by the Speaker of the House of Representatives; and eight members appointed by the Board of Governors, one from each of the state's eight educational regions. Board members serve fouryear terms and may serve two consecutive terms. The current chairman of the Board (and a faculty member at a recent NCCAT seminar) is Dr. J. Carlyle Sitterson, former Chancellor of The University of North Carolina at Chapel Hill and professor emeritus of history there.

The chief administrative officer of NCCAT is the Director, who is appointed by the Board of Trustees and serves at its pleasure. Dr. R. Bruce McPherson became the Center's first full-time director on September 1, 1986. He came to North Carolina from the University of Illinois at Chicago, where he had been on the faculty since 1980. He earned his doctorate in educational administration at the University of Chicago and has been a teacher, principal, associate superintendent, and superintendent of public schools in several states. His feelings about NCCAT are clear and his plans ambitious:

The opportunity to work with NCCAT has been a highlight of my career as a professional educator. I was attracted to North Carolina by this singular program, by the idea of helping the outstanding teachers that make the Center the very special place that it is. I have not been disappointed. In the next few years, NCCAT will expand in several ways. It will serve more teachers. It will experiment with differing program formats, including "scholar in residence" options for individual teacher inquiry for varying lengths of time. And the Center will become a vital link in the efforts of The University of North Carolina and the General Assembly to improve the quality of elementary and secondary education substantially throughout the state.<sup>2</sup>

<sup>1</sup> N.C. Sess. Laws 1985, Ch. 479, § 74.

<sup>2.</sup> Letter from Bruce McPherson to the author (June 12, 1987).



Architect's rendering of the new building that will house the North Carolina Center for the Advancement of Teaching at Cullowhee.

NCCAT's future does look bright, and there is already evidence of the high regard in which it is held. The Carolina Chapter of Phi Delta Kappa, an educational fraternity, presented its prestigious Educational Service Award to the Center this spring. The award is presented to an organization or person who has made a significant contribution to the teaching profession or to public education during the past year, and NCCAT's program was praised for treating teachers as thinkers, not as mere practitioners.<sup>3</sup>

NCCAT's offices, commons, and residential areas are all currently housed in Madison Hall, a renovated dormitory on the Western Carolina University campus in Cullowhee, while its new home is under construction. This \$7.4 million facility4 will be on a twenty-acre tract across the highway from the main entrance to Western Carolina. The Center and WCU enjoy a close cooperative relationship and have shared responsibility for the facility's design. NCCAT will have a 41,000square-foot core academic complex with seminar rooms, breakout areas, an auditorium, a learning resource center, a health and exercise room, dining facilities, and administrative offices. Two residential buildings will each contain 24 single rooms. The participants' needs and comfort have guided design decisions; in Dr. McPherson's words, "We want this building to belong in spirit to our teachers."5 Ground breaking is scheduled for fall 1987, and construction is expected to be completed in late 1989. Once these new facilities are complete, the Center will be able to operate at full strength, serving from 1,500 to 2,000 teachers each year.

#### Programs and personnel

The strength of NCCAT derives from its programs and personnel, not from its facilities. According to the Director and Center fellows, NCCAT offers teachers "a

renewal experience aimed at the heart and mind rather than pedagogical proficiency." Everything that happens there is designed to enable teachers to rediscover their personal and professional strengths. Each week, each seminar, each group and individual experience is different, but every week shares the common elements of personal refreshment, intellectual stimulation, and group cohesion. All programs are a carefully planned mixture of content, support, and aesthetic stimulation, and all are flexible enough to respond to individual and group concerns.

The instructional program focuses primarily on advanced study in academic disciplines, and a week-long seminar format provides the structure for the experience. Interdisciplinary seminar themes are selected by the NCCAT staff and have included the cosmos, the use of language, contemporary American art, perception of time, economics, modern dance, and public life in America. This emphasis on intellectual content distinguishes these seminars from the majority of current professional development programs that focus on the strategies and techniques of teaching.<sup>7</sup> Teachers are encouraged to participate in seminars that may not be directly related to their classroom responsibilities.

I am an English teacher, but I went to a seminar on scientific theories of the creation of the universe. I chose it because science fascinates me. It was wonderful to explore information in the field of physics. Intellectual stimulation is what I was hungry for.—MD

<sup>3.</sup> NCCAT News Release, April 1987.

<sup>4</sup> N.C. Sess. Laws 1985, Ch. 489, § 4.

<sup>5.</sup> NCCAT News Release, June 13, 1986.

Bruce McPherson, Jan Rinnander, and Anthony Rud, "To the Heart of the Mind: Renewal for North Carolina Teachers," p. 2 (April 25, 1987) (publication pending in *Educational Leadership*, manuscript available from NCCAT, Cullowhee, NC 28723).

<sup>7.</sup> R, Bruce McPherson and Kay S. Shapiro, "The NCCAT Experience" (1987) (unpublished manuscript available from NCCAT).

The first night we were there and getting our introduction to the Center, it was stressed to us that we were not at a workshop. This is not for you to take notes and go think, "How am I going to use this on my kids?"—DW

Each seminar has its own faculty. The four appointed Center Fellows—Drs. Jeri Fitzgerald, Shelley Olson, Anthony Rud, Jr., and Jon Rinnander—serve as resident faculty. They plan and conduct seminars, supervise independent study projects, participate in research, and help teachers make the most of their week at the Center. Fellows are joined in leading seminars by distinguished scholars from colleges and universities, business and political leaders, artists, performers, public school educators, and private consultants from across North Carolina and the nation.

The emphasis in the seminars is on informed debate and dialogue rather than more passive forms of learning. Long lectures have given way to active involvement by group members. Faculty members nurture freedom in discussion, and the group draws strength from the differing viewpoints among the participants.

I got to think and respond, and I didn't have to take notes, and it wasn't a lecture. It was a round table with 20, and we could just bounce ideas from the readings off each other. And if someone didn't agree, fine. He got to say why he didn't agree. He could go ahead and take a risk.—DW

Such a free and supportive environment seems to bring forth not only a better understanding of complex issues, but also a sense of joy in the challenge of new ideas

But seminars are not all discussion. A group might visit an artist's studio, Carl Sandburg's home, the American Dance Festival, a modern manufacturing plant, or the Tremont Environmental Educational Center. They might use scientific equipment, see films, and take advantage of unanticipated opportunities.

I'd never, ever heard the New York City Opera Company sing, never. But I went all the way up to Cullowhee and heard them perform *Madame Butterfly* because they just happened to be there the week that I was there. So the Center pur-

chased tickets for us to go. It was fantastic. I don't think it was planned that way; it just happened. And NCCAT is very generous.—DW

The sharing of authority over the nature and direction of learning between teacher-scholars and seminar faculty is another important characteristic of the NCCAT method. For example, at the end of each day the "Response to the Day" session allows participants to review and comment on the day's events and reconsider the schedule for the following day. Planned activities may be canceled or rescheduled to follow through on an idea that originated from the group. This flexibility makes the week more successful and also offers teachers a nonhierarchical model of group learning.8

It's structured, but a very free, easy sort of structure. For instance, we wanted to learn to clog because we were going to a restaurant where we could do mountain dancing. So they found a staff member to teach us, which meant we had to take a little bit of our discussion time to get an hour's worth of clogging.—DW

The NCCAT experience is not limited to the classroom. There is time for independent study, reflection, and friendly conversation; time for hiking or mountain biking; time for entertainment and fun.

One night after dinner we went out into the mountains and looked at the stars. I don't take time here [in Chapel Hill] to just step out at night and look at the stars. It was a wonderfully clear evening, and we looked at the stars, and while people were looking at the stars, they were doing their own reflecting on what happened that day—how they enjoyed a certain part, and wouldn't it have been better if we could have done something else a different way. Never did it come up, "Oh, I want my kids to do this." Instead, it was just the 12 of us who went to look at the stars, thinking "Oh, doesn't this make you feel good to be doing this?"—DW

<sup>8.</sup> McPherson, Rinnander, and Rud, supra note 6, at p. 12.

## Selected NCCAT Seminars for 1986-87

The Blue Ridge Experience: Human Occupation of Ancient
Mountains—Teachers explored the relationships between human beings and their environments through study and outdoor activity. Geologists, archaeologists, botanists, paleoecologists, geneticists, systems ecologists, historians, environmental managers, and musicians provided background leadership for the seminar, which included a weekend at the Tremont Environmental Education Center in Great Smoky Mountains National Park.

Pursuit of Happiness—Participants examined tensions within modern society that first appeared in the eighteenth century, when key notions of society, self, and education underwent significant changes. This session dealt with the connection between reason and imagination, self and community, and education and training. Besides reading works of Kant, Goethe, Rousseau, and Jefferson, participants studied Mozart's The Magic Flute and saw the Bergman film of this great opera.

Contemporary North Carolina
Art: Through the Eyes of an Artist—
Teachers studied various aspects of art making and art viewing with distinguished artists, teachers, and art professionals. Visits were made to the Green Hill Center for North Carolina Art, the North Carolina Museum of Art, and studios.

Time and Remembrance—This seminar examined both culturally imposed and psychologically generated perceptions of time. Readings and experiential exercises enabled teachers to discover opportunities for breaking out of the routine into the flow of creative thought. The group studied the concept of time in geology, the cyclical nature of ceremonial time in other cultures, the individual life cycle, and the use of time by poets and film makers. They attended a performance of the Cherokee pageant *Unto These Hills*.

To the Stars: Humans in the Cosmos—Teachers explored topics in science through hands-on activities, computer modeling, video tapes, discussions with astronomers, and field

experiences with the telescope. New theories about the past and future of the cosmos were discussed.

Pride and Teaching—Participants explored experiential and independent learning, brain and communication research, and capacities of teacher emotion to stimulate student learning. A follow-up session is planned so that teachers may discuss their personal and professional change efforts.

The Power of Metaphor: Uses of the Imagination—This session focused on how myth and symbol, both verbal and visual, play a significant role in the structuring of our perceptions. Participants studied twentieth-century art, music, and literature and discussed receptivity to language and image, basic human aspirations and drives, and psychological processes within themselves and their students.

Thinking for Learning—Starting with a broad overview of the renewed stress upon the importance of thinking for learning, this seminar focused on the internationally practiced program of Philosophy for Children.

A Geologist's View of Water Resources—This session examined issues related to basic water resources, including water flow measurement, ground water analysis, remote sensing-satellite means of "seeing" water on earth, and pollution problems related to matters as seemingly unrelated as highways and shellfish. Participants built inexpensive geological equipment to use with their students.

Scientists of the Mind: Psychology and Education—Teachers explored the reasons why education is such a complex phenomenon and, consequently, so difficult to understand. Psychologists who represent the major streams of thought about learning and teaching led discussions designed to demonstrate how differing assumptions about human nature affect both theory and research. Field experiences illustrated how theory and research do indeed affect classroom practices.

Learning to Listen to What Young Children Say—This special-interest

session for early childhood teachers focused on the natural intellectual development of the young child and whether current school programs support that development. The sessions on fantasy play, the child as a storyteller and dramatist, the intellectual strengths of the child, and finding the meanings of what children say sharpened each teacher's listening skills. A follow-up session is planned at which teachers will discuss experiences in their own classrooms and school communities.

Reading, Writing, and
Thinking—Regional writers explored
the links between their own experiences of their past and their writing and examined how their writing
has in turn shaped their thinking. The
group visited Thomas Wolfe's home in
Asheville, Carl Sandburg's home in
Flat Rock, and Jim Wayne Miller's
home in Leicester. Participants were
invited to write about and share their
own experiences.

Overcoming Barriers in America—Teachers examined the historical barriers to full participation by women, ethnic minorities, and handicapped persons.

Pursuit of Happiness: Charleston and the Spoleto Festival—This seminar—held in Charleston, South Carolina—focused on art, music, and literature of the eighteenth and nineteenth centuries. Participants visited plantations, museums, historical sites, and the Spoleto Festival.

Please Understand Me! Creativity, Leadership, and Change—This session explored leadership, creativity, and change from an interdisciplinary perspective. Drawing from the fields of history, literature, political science, organizational theory, and business, participants considered the elements of effective leadership, linkages between creativity and leadership, and the role that leadership plays in helping schools and other organizations adjust to change. Experiential exercises in the classroom and in physically challenging outdoor settings provided opportunities for leadership development and team building.

Such reflective experiences and the more structured seminars fit together as individuals become part of an enthusiastic and cohesive group.



Dr. Jon Rinnander, a Center fellow, discusses a point with Marilyn E. Routh of Eastern Randolph High School.

It was very clear that this was an overwhelming experience for many of the teachers. After the first night the group bonded, and the sharing of teaching and personal experiences was intense and rewarding. The Center staff does a magnificent job of planning so that can happen.—*MD* 

At the end of the week it's one of those sad leave-takings. I keep in touch with my buddy Shirley Jo. Our group did discuss having our own little alumni reunion. We had a theme song. We're going to have a newsletter. I guess different groups bond in different ways, and ours was really close.—DW

Enormous thoughtfulness is displayed by Center personnel who convey their respect for teachers and the renewal experience.

I was in awe when I first got off the plane and there was someone to pick up my bag and to put it in a car and drive me 50 miles without my worrying how many miles I would go, how much it would cost, when I would pay, and all that sort of thing. As soon as we stepped onto the campus, everyone made us feel at home. They told us, "This is Madison Hall. It's your home for a week."—DW

Teachers find flashlights, umbrellas, newspapers, and fruit awaiting them in their rooms. A refrigerator is stocked with ice cream for late-night snacks. All of Western Carolina's campus facilities are open to teachers.

Most of the time when teachers go to a meeting, they either pay for their own cups of instant coffee, or they provide it and clean it up. However, from the moment we were met at the airport, we were treated with tremendous respect. We were treated graciously. When teachers are treated in such a way, it enables them to treat others equally well. And I think that's of fundamental importance.—MD

The teachers even classify the food as excellent.

They fed us the most delicious food all week. We had a slogan—'At the Thinking, Writing, and Reading Seminar, everybody gains.'—DW

#### **Teacher-scholar selection process**

I wish that every teacher who really wants to, gets a turn to go. I brought back a handful of applications, and anyone who expressed an interest, I told them, "Here, go ahead and fill one out. Don't wait for the school system to nominate you."—DW

Consistent with the goals of rewarding, renewing, and retaining excellent teachers in North Carolina public schools. NCCAT activities are available to and designed for career teachers who are recognized as outstanding

educators. Participation is open to teachers who (l) are currently employed in a North Carolina public school with direct responsibility for classroom instruction; (2)



Elizabeth B. Fox of Stony Point Elementary School, Russell Harper of Moore Alternative School, and Mary J. Swainey of Orange High School sit in on a discussion session.

will have taught full-time in a North Carolina public school for at least three years before they participate in an NCCAT program; (3) have a demonstrated commitment to lifelong learning and scholarly pursuits; and (4) complete the application process.9 A teacher may demonstrate a commitment to learning through evidence of additional voluntary courses, teaching experiences outside of the public schools, performances, exhibits, presentations, honorary organizations, educational committees, professional organizations, publications, and other information about his or her lifelong learning and scholarly quests. References are required, as is permission to attend from one's principal. (Substitutes for participants are paid by the State Department of Public Instruction, which relieves local administrators of one possible problem in allowing a teacher to participate.) Any teacher may apply<sup>10</sup> on his or her own initiative or may be nominated by an administrator, colleague, parent, student, NCCAT alumna/us, or other interested person. All nominees are invited to submit applications.

The process for reviewing applications is still being worked out. The plan now being considered involves three stages of review. First, applications from the local education agency (LEA) are sent to a committee within that LEA. Each local committee has ten members (six teachers, the unit president of the majority professional association, a representative of the community at large, and two principals.) The local superintendent or his or her designee is an ex officio member.

After the local committees' review and ranking of eligible candidates, applications are forwarded to regional review committees, one for each of the state's eight educational districts. Each regional committee has twelve members (four teachers, one representative of the majority professional association in the region, one representative of a four-year college or university in the region, one representative of the community at large, three NCCAT alumni, and two administrators). The regional education center's director (or designee) is an ex officio member of the committee. The regional committees rank applications independently, using the same criteria as the local committees.

The committees' rankings are then submitted to a statewide review committee. This committee has fifteen members (two NCCAT trustees, eight NCCAT alumni, two representatives of a four-year college or university, one representative from The University of North Carolina General Administration, one representative from the State Department of Public Instruction, and the NCCAT Associate Director for Programming) appointed by the Chairman of the NCCAT Board of Trustees. The NCCAT Director, or his designee, is an ex officio member of the committee. After reviewing the regional committees' rankings, the statewide committee recommends potential participants and alternates.

NCCAT assigns each accepted applicant to a specific session of the program, taking into account the teacher's preference, geographical area, grade level, and discipline. Each seminar consists of a heterogeneous group of from 18 to 20 teachers, representative of different professional assignments and communities across

NCCAT Participant Selection Plan, Nov. 13, 1986 (available from NCCAT).

<sup>10.</sup> NCCAT Application Form 1987-88 (available from NCCAT and local board of education offices).

North Carolina. As special programs are developed, a separate review process will be established for them.

The NCCAT experience stretches minds and sharpens thinking skills in an atmosphere of respect and trust. Learning is active, experiential, and cooperative. Time for contemplation and unhurried responses is provided. Each participant is valued. Teachers take memories of this experience home with them—an experience that may be a catalyst for them to incorporate some elements of it into their own teaching.

I felt pampered the whole week. But in return, I had to give something back. I had to give a piece of my mind back, and I didn't mind doing it.—DW

If teachers in a school are enriched and curious, they're going to be better teachers. It just happens. Make them feel enriched and reward curiosity, and the rest of it follows.—MD

#### Adolescent Pregnancy (continued from page 9)

rearing functions, it is unreasonable and possibly irresponsible for those entrusted with directing policy in the education system to ignore the fact that the social fabric of American society is changing and that the current pregnancy rate for American adolescents indicates that a pressing problem exists. The problems generated by the "sexual revolution" are complex, but the goals of parents and the education system do not necessarily conflict when schools actively seek to become a part of the solution to those problems. Federal and state authorities have indicated a willingness, indeed an insistence, that policies be implemented at the local level.

In accepting that responsibility, local boards of education must assess the individual community's needs, because studies indicate that the "cure" must be tailored to the problem. By examining adolescent rates of pregnancy, abortion, and birth for its community, one local board may find that there is no problem of adolescent pregnancy. Elsewhere, the local board may find that many of its students are pregnant. But the number of pregnancies is not the only relevant factor when the appropriateness of sex education is being considered. Information on local and state pregnancy rates is readily available, but information on how many of the student body are sexually active is much harder to obtain. Adolescents who never appear in pregnancy statistics need to have accurate health information, including information about sexually related problems.

The policy developed may, and probably should, include a variety of strategies. Providing information about contraceptives or even opening a school-based clinic that refers students to community services, writes prescriptions, or provides contraceptives does not fore-

close an emphasis on abstinence or postponement. It is crucial to teach abstinence or postponement, regardless of the moral issue, because (a) adolescents who become sexually active later, rather than earlier, are more likely to delay pregnancy, and (b) sexual activity creates other health risks, including AIDS and venereal disease. Educating students about the socioeconomic consequences of early pregnancy both to themselves and to their children logically should accompany aggressive efforts to increase basic academic and work skills so that students will have an opportunity to succeed in life—and therefore will have a reason to avoid early pregnancy and the welfare cycle.

Although responses to the problem may vary, it is the local board of education's duty to develop an educational policy suited to the needs of its community. But the policy developed should not be simply a compromise generated by a hesitancy to deal with a controversial issue. To many observers, the possibility that the issue will not be squarely faced is the most serious problem created by leaving hard policy choices to the local level. In the local community, vocal objections from a small minority may seem insurmountable or may make the effort seem not worth the political cost. A local board must be willing to assess the needs of its students, involve parents, and make difficult educational choices that may be subject to criticism. Then parents who truly object to some parts of the program should be able to remove their children from those components. Education and prevention of adolescent pregnancy are essentially compatible, because those who learn the skills offered in the educational system are less at risk of early pregnancy. P

Those folks in city hall don't know what's going on down here. They just sit behind their desks and stay outta sight. . . . The personnel department is just another one of that bunch in city hall . . . . they don't care about us. [A public works employee]

The greatest problem with our personnel staff is that they don't realize whom they are supposed to serve. When they go out on a limb supporting employees instead of management, they are asking for trouble! [A city manager]

THESE QUOTATIONS are taken from interviews conducted with "clients" of two North Carolina municipal personnel departments—that is, with governmental users of personnel departments' services. They are reproduced here not because they are critical of personnel departments but because they reveal the way that personnel departments typically are evaluated. Each speaker evaluates his personnel department by comparing the quality of services it provides to two different client groups: management and employees.

The orientation of personnel departments to their various client groups has important consequences for the effectiveness of municipal government in North Carolina. These consequences promise to become even more critical over the next few years. With fewer federal dollars available and greater resistance among citizens to higher taxes, local governments must work with tighter budgets. In the midst of these constraints on resources, the public demand for high-quality municipal services intensifies. Thus local governments face a critical dilemma. They must provide higher-quality services, but with fewer resources. Inevitably, municipalities must use their existing human resources better in order to meet the increased public demands. The effective use of human resources is a primary task of public personnel departments.

Nevertheless, if the personnel department is perceived either as a management tool by employees or as an employee advocate by management, it cannot effectively develop the human resources throughout the organization. It is essential, if a public personnel department is to be effective, that it be *perceived* as fair (that is, it extends services evenhandedly) by all of its client groups.

Management
Tool or
Employee
Advocate?

Stephen K. Straus

Municipal
Personnel
Departments

The author is an Institute of Government faculty member whose field is personnel administration.

The first quotation above illustrates this point. Public works employees¹ saw the personnel department in their municipality as biased toward top management. Consequently, this personnel department will have difficulties in getting support for its programs from that group of workers. When it seeks to implement pay and classification studies, for example, it will not receive their full support and cooperation. These employees are suspicious of their personnel department. In their minds it is just another tool of management that does not act in their interests.

But in the second quotation, top management saw the personnel department as biased toward employees. Consequently, the department does not have top management's full support—the manager excludes it from participating in key decisions that affect the city's employees because he believes it to be an employee advocate that does not see management's point of view.

I recently studied the personnel department's orientation toward client groups in 24 North Carolina municipal personnel departments that are members of the North Carolina Organization of Municipal Personnel Officials (NCOMPO). The study was based on three data collection methods: (1) group interviews with 14 municipal personnel directors, (2) case studies of two municipalities, and (3) a mail survey returned by 1,855 clients of the 24 personnel departments.<sup>2</sup>

The findings of this study refute the common notion that personnel departments tend to be either management oriented or employee oriented. Instead, the service relationship between municipal personnel departments and their client groups is more complex.

This complexity is evident in two ways. First, the broad designations "management" and "employees" must be differentiated into five client groups with which the personnel department has important relationships. These groups have some conflicting demands for personnel service. Second, the client groups of personnel departments are both interactive and interdependent—a situation that requires personnel departments to serve all client groups evenly.

This article examines how personnel departments' relationships with their client groups and the interrelationship of those groups affect the personnel departments' service delivery.

#### The clients

To understand this relationship between North Carolina municipal personnel departments and their clients, we must begin with a basic fact of organizational life: personnel departments, like all public organizations, depend on resources. Like police, fire, or planning departments, they seek abundant resources in order to provide effective services. Nevertheless, a conventional conception of resources does not fully explain the client group pressures on personnel departments.

Conventionally, only tangible resources are considered important to public personnel departments. *Tangible* resources include budget allocations, staff, and capital assets. Obviously, a personnel department with substantial tangible resources has some potential for providing high-quality services. But without certain intangible resources, it cannot provide effective services despite its abundant tangible resources.

Intangible resources include such factors as support, participation, and motivation from client groups. Although these factors are somewhat nebulous, they are vital to the effective delivery of personnel services. For example, a personnel office that enjoys the budgetary and staff resources to develop a technically sophisticated performance-appraisal system may have difficulty getting the system accepted and implemented if it lacks client support throughout the organization. And if the city manager does not ask it to participate in strategic decision making, the department is severely constrained from providing effective services.

The study revealed that the NCOMPO personnel departments depend on client groups more differentiated than just management and employees. Five groups external to the personnel department have the resources required for effective personnel administration:<sup>3</sup> the council, the manager and staff, department heads,<sup>4</sup> supervisors, and employees. Thus the network that NCOMPO personnel departments depend on is a complex web of groups. This network includes the uppermiddle (department heads) and the lower-middle (su-

Almost all of the public works employees interviewed in this municipality shared the viewpoint of this employee.

<sup>2.</sup> The response rate for the mail survey was 72.5 per cent.

Client groups were identified in group interviews with NCOMPO personnel directors and in interviews with client groups in two North Carolina municipalities.

<sup>4</sup> The departments included in the study were police, fire, public works, finance, and planning. These departments were determined by the group interviews of personnel directors and client groups.

pervisor) levels of municipal organizations as well as top management and employees.<sup>5</sup>

How do the NCOMPO personnel departments acquire the resources they need from clients? They exchange their services for whatever resources the clients can provide (a process often termed the "norm of reciprocity" in sociology or anthropology).

While each client group holds valued resources, it also has certain expectations of service from its personnel department. For instance, the city manager's office may expect the personnel department to provide good advice on personnel matters, department heads and supervisors may expect well-qualified new employees, and employees may want challenging opportunities for promotion. The more effectively the personnel department meets the expectations of a client group, the more willingly that group will provide the tangible and intangible resources the personnel department needs. If the personnel department consistently meets a client group's expectations over the long term, it will develop a strong reputation for effectiveness with that group and consequently will receive greater resources from it.

To this point the task of personnel departments appears quite simple: provide effective services and in return receive abundant resources. That perception assumes that personnel departments function in a very simple environment in which the client groups' expectations are identical. In reality, these expectations may conflict. These conflicts stem from the different needs and different perspectives of the organization's various components. For instance, while top management may want fair salaries but a controlled budget, employees may want pay raises. While department heads may seek employees who have growth potential, supervisors may want people who can step right into a job regardless of their growth potential.

. . . All of which puts personnel departments in a dilemma. They must make service tradeoffs among client groups. If they provide programs that meet the expectations of one group, they risk alienating another group. When they alienate a critical client group, they may not receive the resources they need from that group. Personnel departments respond in two ways to this problem: (a) they are sensitive to the relative influence of their clients, and (b) they recognize that their clients are highly interactive and interdependent.

#### Clients' influence

Clients' influence is directly related to their control over the resources that the personnel department needs. Consequently, in North Carolina municipalities, managers have more control over the personnel departments than any other client groups. They have significant control over the tangible resources of personnel departments through the budget process. They also have control over critical intangible resources. For instance, the manager's office largely determines the personnel department's level of participation in strategic decision making. Moreover, the personnel department can better promote its programs to all its client groups when the manager vigorously promotes it with department heads, supervisors, and employees.

Department heads do not directly influence budgetary decisions involving the personnel office, but they do have some control over the personnel department's entry into their departments. For example, if a department head believes the personnel department is ineffective, she is not likely to encourage employees to attend personnel training programs.

Supervisors have formal control over fewer employees than do department heads. If a department head orders a supervisor to send employees to a training program, the supervisor is likely to comply. But if supervisors are given decision-making authority, they are not likely to encourage employees to cooperate with personnel programs that they think are ineffective.

Nonsupervisory employees have the least influence over personnel departments. Supervisors or department heads may require their employees to participate in personnel programs, but they do not rule their employees' hearts. If employees do not esteem their personnel department, they will not support its programs. Consequently, when a personnel department establishes new promotional policies designed to motivate employees, the employees may be disinclined to use them.

In summary, client groups can be ranked in terms of their influence over personnel departments, in terms of their control over tangible and intangible resources, as follows: (1) manager, (2) department heads, (3) supervisors, and (4) nonsupervisory employees.

<sup>5.</sup> The network also includes the governing board, but councils will not be included in this discussion. Although the findings regarding councils were consistent with those in the rest of this article, the response rate for council members was less than 25 per cent. Consequently, the findings for council members cannot be represented here with confidence.

This hierarchy of influence becomes apparent when the four categories of client groups rate the effectiveness of their personnel department in North Carolina municipalities. The average ratings (on a scale of 1 to 5) given their personnel department by the various client groups are as follows: 6 managers and staffs: 3.52; department heads: 3.19; supervisors: 2.86; nonsupervisory employees: 2.81.7 (For reasons pointed out in footnote 5, one of the five client groups—the council—is not included here.)

These ratings suggest that municipal personnel departments strive to provide services that meet the demands and expectations of their most influential client groups over those of their less influential client groups. Thus, at least at first glance, it appears that they are more oriented to top and upper-middle management than to employees or lower-middle management. This conclusion requires a closer look.

#### The client network

While real differences exist among their average ratings, clients' influence explains only a small percentage (2.2 per cent) of the variation in effectiveness ratings.

Table I. Fairness Ratings of North Carolina Municipal Personnel Departments by Client Groups. Scale: 1 to 5

Munici- pality	Managers	Dep't Heads	Super- visors	Employees
A	3,403	2.731	2.827	2.772
В	4.039	2.865	2.376	2.551
C	2.962	3.169	3.011	2.800
D	4.423	3.522	3.128	2.965
E	3.837	3.718	2.815	2.840
F	3.462	3.946	3.131	3.095
G	3.308	2.423	3.001	2.787
Н	2.500	2.462	2.444	2.615
1	4.000	2.487	2.205	2.164
J	3.231	3.392	3.238	2.766
K	3.731	3.626	3.043	3.088
L	4.048	3.231	2.852	2.761
M	3.481	2.962	3.034	2.870
N	3.615	3.526	3.319	2.740
O	N/A	2.750	2.870	2.958
P	3.692	3.551	2.716	2.957
Q	4.218	3.721	3.108	3.089
Ŕ	3.231	3.262	2.512	2.582
S	3.910	3.654	3.220	2.929
T	3.795	3.231	3.193	3.136
U	2.362	2.408	2.308	2.534
V	N/A	2.792	2.845	2.775
W	4.231	3.592	3.291	3.022
X	3.063	3.229	2.833	2.744
Average	3.523	3.191	2.864	2.813

Consequently, although the ratings of managers and department heads are the highest, all of the ratings are close. In short, the client groups evaluated their personnel departments similarly.

Table I demonstrates just how closely this consensus across client groups is maintained in particular North Carolina municipalities.<sup>10</sup> Most personnel departments that are rated as relatively effective by at least two client groups enjoy high ratings from all client groups. The reverse is also true. Two explanations for this consensus emerged from the NCOMPO studies: (1) the client groups are interdependent.

An interactive network. Client group members form impressions of their personnel department's effectiveness both directly and indirectly. Direct impressions

<sup>6.</sup> Twenty-seven activities were identified through group interviews with personnel directors and client-group representatives as the important activities performed by their personnel departments. These activities were then included in the mail survey questionnaire. Respondents rated the effectiveness of their personnel department in performing each activity on a scale of 1 to 5, with 1 representing "extremely ineffective" and 5 representing "extremely effective."

<sup>7.</sup> The differences in mean effectiveness ratings by supervisory and non-supervisory employees may be stronger than indicated above. Nonsupervisory employees include such positions as planners, police officers, firefighters, accountants, and sanitation and street laborers. The laborers rated their personnel departments as much more effective than did other nonsupervisory employees (3.10 to 2.75). These higher ratings probably result from one of two causes. First, the laborers may be more satisfied with their personnel departments than are other nonsupervisory employees. Or the ratings may reflect the weaker reading and writing skills of this group. Laborers with limited literacy may have tried to compensate for their discomfort with a questionnaire by giving high ratings to their personnel department. The latter possibility has been supported by several personnel directors who were interviewed after the study was completed. The inclusion of the laborers ratings raised the average for nonsupervisory employees from 2.75 to 2.81.

<sup>8.</sup> The probability that the difference in mean effectiveness scores is due to chance among these client groups is .000, except for the ratings by supervisors and nonsupervisory employees. When the sanitation and street laborers' ratings are included with the ratings by other nonsupervisory employees, the probability is 22 that the differences in mean effectiveness scores are due to chance. When the laborers' scores are excluded, the probability is .000.

<sup>9</sup> Correlation analysis (Tau B) was used to determine the variation in effectiveness ratings.

<sup>10.</sup> Each municipality is identified only by a letter in order to protect its anonymity.

are formed when the client deals firsthand with the personnel department—as, for example, when the manager asks for advice from the personnel director or staff. Department heads and supervisors directly judge the department's effectiveness when it introduces new programs such as performance appraisal or pay and classification studies at meetings of department heads or supervisors. Employees evaluate the personnel office when they receive training or apply for promotions.

Indirect impressions also influence clients' evaluations. Indirect impressions are formed when client groups share their evaluations of the personnel department with other groups. For instance, if the city manager is a strong advocate of the personnel department, he boosts the support of department heads and supervisors for the personnel department. On the other hand, if employees are openly dissatisfied with their personnel department, their concerns may rise up the chain of command through department heads to the manager's office. As a result, when the manager hears about the employees' dissatisfaction, he may become less pleased with the personnel department's performance.

The personnel director of a large municipality described the interactivity of his department's client network:

First, I have to develop rapport with the city manager. Then I must get the trust of department heads. I don't publicize to the city manager about what we do, but I know he hears from department heads . . . . Finally, I can't cultivate a relationship with all of our employees, but I pay attention to the police department surveys. I listen to the fire liaison committee . . . . These three groups (manager, department heads, and employees) work as a checks and balance system . . . . I ask the city manager to make it understood that if anyone does have a complaint, I want to hear about it face to face from the source . . . . The city council is also important in this checks and balance system. If the city manager is pleased with the personnel department, it is likely that this means that the personnel department has helped him to be successful with the council and with the public.

The indirect impressions formed in an interactive environment explain some of the consensus across client-group ratings of the NCOMPO personnel departments. A client group's direct impressions of its personnel department can be modified by indirect impressions. Thus, if employees rate the personnel office as ineffective but their supervisors maintain that it is effective, the employees may modify their evaluations.

Nevertheless, because of the inherent differences in client-group expectations, indirect evaluations do not sufficiently explain the consensus in ratings across client groups. One client group will not necessarily accept the evaluation of another, because the two groups' expectations of the personnel department may differ. To return to our previous example, employees will not fully accept their supervisors' higher evaluation when the employees perceive that the personnel department does not serve their particular expectations. For instance, if employees expect the personnel department to offer useful training opportunities but supervisors maintain that training is a waste of work time, the employees may differ with their supervisors' evaluations.

An interdependent network. A stronger explanation for the consensus is the interdependence of the client groups. All of the client groups on which the personnel department relies also depend on each other for effective performance. Managers or department heads cannot produce high-quality municipal services without the skills and motivation of supervisors and nonsupervisory employees. On the other hand, supervisors and employees are not motivated or supportive of municipal programs unless the manager and department heads provide adequate resources and working conditions.

The personnel department, perhaps more than any other municipal department, profoundly affects the interrelationship of these client groups. It can help managers and department heads provide high-quality services by establishing such programs as training or career counseling, which increase the skills and motivation of supervisors and employees. Moreover, it can help employees obtain adequate resources and working conditions—for example, by helping management develop effective performance and appraisal processes.

The norm of reciprocity is particularly important for understanding these interrelationships. Client groups regard the personnel department as effective to the extent that it helps them attain their role-related goals. But since client groups' expectations often conflict, a personnel department that particularly responds to the needs of one client group risks losing the resource support of other clients. In other words, the personnel department must be perceived as evenhanded in extending services to its client network in order to guarantee for itself adequate support from all of these groups.

THE RESULTS of this study are therefore not surprising. Personnel administrators understand the inherent

tensions they face from an interactive and interdependent client network and recognize that they can lose resource support from all client groups by alienating any one client group. Thus they strive to achieve fairness, and this is reflected in the close consensus in their departments' ratings by all client groups.

But fairness can be achieved actively or reactively. Personnel departments that are reactive strive to avoid alienating any one client group in order to receive at least minimal resources from all their client groups. These reactive personnel departments may be regarded as fair, but they do not effectively serve their clients. Typically, this type of department has a technical or procedural emphasis that may not discriminate among client groups but also does not enable them to develop fully their human resource potential.

On the other hand, personnel departments that are active recognize the interactive and interdependent nature of their client network and develop processes and programs that respond evenhandedly to client needs. They recognize that one of their major purposes is to provide services that foster productivity, motivation, and participation throughout the organization.

As this study has shown, North Carolina municipal personnel departments cannot be classified as either management tools or employee advocates. This state of affairs may seem praiseworthy, but it only reflects a basic working necessity for personnel departments. Recognizing the interdependent and interactive nature of their environment, these personnel offices strive to be fair. They equitably distribute their services across their client networks. But most of them tend to deal reactively with their clients. In order not to offend any one client group, they have avoided undertaking the more complex service demands of their client networks. This reactive tendency, not their fairness, is the largest problem facing North Carolina municipal personnel departments.

This reactiveness is not limited to North Carolina municipalities; it pervades public personnel administration nationally. In a forthcoming issue of *Popular Government*, I shall explore the tendency of North Carolina municipal personnel departments to be reactive rather than active toward their client networks. In the issue after that, I shall present a plan that the Institute of Government has developed to help personnel departments to become more active and effective.

# How a Local Government Can Upgrade Its Financial Reporting

### S. Grady Fullerton

ccurate, complete, and timely financial information is essential to accountability and sound fiscal management in both business and government. Public officials have a duty to demonstrate, through their financial reports, that they have accounted for all moneys received and have discharged their responsibilities faithfully. But a good financial report does more than demonstrate that officials have fulfilled their fiduciary responsibilities. The purpose of this article is to show how financial reports can be enhanced to provide financial and statistical information that can help local officials improve fiscal management and make better-informed decisions.

#### Three levels of reporting

North Carolina local government entities—including cities, counties, local school systems, and public authorities—can report financial information at one of three levels of complexity.

The Annual Audit Report. The minimum financial reporting required of local governments by state law is the annual audit report, which consists of (1) the combined financial statements for all funds and account groups, (2) the notes to the financial statements, and (3) the opinion of the independent certified public accountant. Annual audit reports, also known as General Purpose Financial Statements (GPFS), are usually prepared by the unit's independent certified public accoun-

tant, but technically they are the responsibility of the governmental unit.

The Enhanced Financial Report. This report contains, in addition to the annual audit report, a comprehensive letter of transmittal from the manager and the finance officer. This statement comments on the unit's financial position and operations for the past year and makes comparisons with the unit's present and past financial situations. Its purpose is to present a clearer picture of the unit's activities and accomplishments than traditional financial statements alone provide. The enhanced financial report offers an excellent opportunity for the unit of government to tell its story of change and progress both to the board and to citizens. It can summarize some of the accomplishments and milestones achieved during the past year, perhaps devoting a separate paragraph to each department's achievements. The comments should not be limited to finance-related achievements but rather should touch on the full range of services provided by the unit.

The Comprehensive Annual Financial Report (CAFR). This report, like the enhanced financial report, contains the annual audit report and the comprehensive letter of transmittal; in addition it contains (1) the combining statements and related schedules for all fund categories, and (2) statistical tables showing data for the previous ten years. The combining statements, which in North Carolina are normally included in the annual audit report, bring together data about each fund and account group.

These three levels of reporting are consistent with a concept known as the pyramid approach to financial reporting. That approach permits a great mass of accounting information to be summarized and presented

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in meaningful financial statements at a level of detail that meets the needs of different users.

At the top of the financial reporting pyramid is highly condensed summary information. That information would be presented in the comprehensive letter of transmittal for the annual audit report and in the overview section of that report or the CAFR. At the second level of the pyramid is the annual audit report. The accounting criteria for "full disclosure" are met by the combined financial statements, along with the notes to those statements that are contained in the annual audit report. At lower levels of the pyramid are the additional more detailed statements and schedules included in the Comprehensive Annual Financial Report—the combining statements and other relevant fund and account statements and schedules. The base of the pyramid is the mass of transactions data in the accounting system.

#### The audit and the auditor's role

There are three types of audits: financial statement audits, compliance audits, and performance audits.

The audit of financial statements seeks primarily to determine whether the statements have been prepared in conformity with generally accepted accounting principles. The financial statements include the balance sheet, related statements of revenues and expenditures, and a statement of changes in fund balance of all funds. In North Carolina, financial statement audits are performed by independent public accountants.

The purpose of a compliance audit is to determine whether funds have been spent in compliance with laws and regulations. An example of the compliance audit is the "single audit" required by Circular No. A-128 of the federal Office of Management and Budget. That circular requires that an independent audit be made of all units of government that receive federal grants totaling \$100,000 or more. Each grant awarded a unit of local government must be audited in order to ascertain that the moneys were spent only for the purposes stated in the grant and that an effective system of internal controls is in place.

The performance audit is a study of some specific unit of an organization in order to measure its operational performance. A department may be evaluated in terms of either its effectiveness—how well it meets its stated goals and responsibilities—or its efficiency—whether it uses to the best advantage the resources available to the department. Since the criteria for effective-

ness and efficiency are not so clearly established as are generally accepted accounting principles, the performance audit tends to require more subjective judgments than do audits of financial statements or compliance audits.

#### The independent public accountant

The independent public accountant's role in the financial audit is to give credibility to the unit's published financial statements—to provide assurance that they present the unit's financial position "fairly." This "attest" function is carried out in two distinct steps. First, the independent public accountant must carry out an examination, or audit, which provides the objective evidence that enables the auditors to express an informed opinion about the financial statements. Second, the accountant issues the auditors' report, which conveys to the users of the financial statements the auditors' opinion about the statements' fairness and dependability.

Because a complete, detailed review of each transaction is not feasible, auditors use sampling techniques—rather than verifying all transactions, they test selected transactions. Auditors and managers have come to accept the proposition that careful examination of relatively few transactions selected at random gives a reliable indication of the accuracy of other similar transactions.

The existing system of internal controls must be evaluated if statistical sampling techniques are to be used successfully. Auditors have found that by studying the unit's accounting systems and by considering the flow of accounting work and methods of verifying recorded data, they can determine the extent and types of tests needed for a satisfactory audit of the financial statements. The stronger the system of internal controls, they find, the less testing is required. Where the system of internal controls is weak, they must expand the scope and intensity of their tests.

The end product of a full financial audit is a report expressing the auditor's opinion on the unit's financial statements. The auditor's "standard report" (also called an "unqualified report") consists of three short paragraphs. The first paragraph concisely states the scope of the audit. The second briefly states the auditor's opinion derived from his examination. The third paragraph states that the examination was made for the purpose of forming an opinion on the combined financial statements taken as a whole. In North Carolina, the auditor's report will also contain the combining statements and several schedules.

Not all of the auditor's opinions are "clean." An opinion may be "qualified" because of a specific condition, such as the lack of auditable records of fixed assets. Or an auditor may have a "non-opinion" if for some

#### North Carolina Holders of a Certificate of Achievement for Excellence in Financial Statement Reporting

City of Durham City of Asheville City of Greensboro City of Cary City of Raleigh City of Wilmington Buncombe County Catawba County Guilford County Forsyth County Mecklenburg County Durham County Transylvania County New Hanover County Orange County Wake County Town of Chapel Hill City of Sanford City of Winston-Salem City of Newton Cabarrus County City of Charlotte Charlotte-Mecklenburg School System

reason his examination does not permit him to express an opinion—or even a "negative" opinion, which states that the financial statements do not present "fairly" the financial position of the unit. "Non-opinions" and "negative" opinions are not acceptable on a continuing basis by the Local Government Commission and therefore are rare in North Carolina.

The Local Government Commission requires the auditor to issue, in addition to the audit opinion, a "management letter" to the unit's governing body, with a copy to the Commission. In that letter, the auditor describes weaknesses in the existing systems of internal accounting and management controls and makes recommendations for improvement, citing areas where improvements can be made in the unit's internal operations. The governing body should recognize that these letters are not meant to be complimentary and at times seem rather "picky." The certified public accountant is required to report directly to elected officials any major weaknesses in internal controls and major audit exceptions. The management letter now lists the weaknesses and other audit exceptions in two categories—major and minor.

Elected officials, professional managers, the public, and particularly representatives of the news media should recognize that the audit opinion is the primary concern and that in even the best-run units there is usually room for improvement.

#### The annual audit report

The annual audit report, required by law and monitored by the Local Government Commission, is the report by the independent certified public accountant of his examination of the governmental unit's basic financial statements for one fiscal year. The report consists of three parts: the combined financial statements, notes to the financial statements, and the opinion.

The primary objective of the combined financial statements is to provide full disclosure of the relevant financial information without inundating the reader with too much detail. The statements include:

- (1) The combined balance sheet for all fund types and account groups;
- (2) The combined statements of revenues, expenditures, and changes in fund balance for all governmental fund types and expendable trust funds:
- (3) The combined statements of revenues, expenditures, and changes in fund balance (budget and actual) for general, special revenue, capital projects, and debt service funds;
- (4) The combined statements of revenues, expenditures, and changes in retained earnings for all proprietary funds and similar trust funds;
- (5) The combined statement of changes in financial position for all proprietary funds and similar trust funds.

The notes to the financial statements contain pertinent additional information so that the statements, taken in light of the circumstances under which they were made, are not misleading and meet the requirements of "full disclosure." The notes would include detailed comments about the following items:

- -Significant accounting policies;
- —Scope of the reporting entity;
- —The basis of accounting;
- -Investments:
- —Details of the property tax calendar;
- -Fixed assets and depreciation;
- —Compensated absences;
- -Budgets;
- -Accounting and measurement focus of each fund;
- -Retirement commitments:
- —Details of long-term debt;
- Other disclosures required by the Governmental Accounting Standards Board.

#### The enhanced financial report

The enhanced financial report contains all of the information in the annual audit report plus a comprehensive letter of transmittal. The comprehensive letter of transmittal, which is written by the finance officer and the manager, presents in narrative, tabular, and chart forms the highlights of the unit's financial activity for the past year and compares that activity with activity of prior years.

Many units of government that now issue only the auditor's report could significantly upgrade the quality of their annual financial reporting by adding a comprehensive letter of transmittal. Such a letter is very helpful to the readers of the annual financial statements and can be added with little additional work.

At a minimum, the comprehensive letter of transmittal should discuss the following topics:

- -Internal accounting controls;
- —Budgetary controls:
- -Services provided by the unit:
- -General governmental functions:
- —Debt administration:
- —Cash management;
- —Significant activities not readily evident in the financial section;
- -Significant local economic events:
- —Prospects for the future;
- —Independent audit:
- -Certificate of Achievement;
- -Acknowledgments.

Much of the information needed for the comprehensive letter of transmittal has already been gathered. For instance, in some units the manager issues an annual report that contains information needed in the letter of transmittal. That letter can fairly easily be produced by combining the manager's annual report with additional information gathered by the finance officer.

## The Comprehensive Annual Financial Report (CAFR)

An excellent way for finance officers and managers to provide a valuable service and to demonstrate their professional ability is to produce a Comprehensive Annual Financial Report, which provides a more extensive base of financial and statistical information than the annual audit report provides.

As noted earlier, the Comprehensive Annual Financial Report contains the audit report and the compre-

hensive letter of transmittal but adds the combining statements and a statistical section of information. In North Carolina, where the combining statements are normally included in the audit report, preparing a CAFR therefore requires only the addition of statistical information and the comprehensive letter of transmittal.

The statistical section presents comparative information for the previous ten years. This information is provided in a series of schedules, which might include:

- —General governmental expenditures by function;
- —General revenues by source;
- -Property tax levies and collections;
- —Assessed and estimated actual value of taxable property:
- —Property tax rates;
- Ratio of net general bonded debt to assessed value and net bonded debt per capita;
- —Computations of legal debt margin and overlapping debt;
- Ratio of annual debt service for general bonded debt to total general expenditures;
- -Revenue bond coverages;
- Property value, construction, bank deposits, and principal taxpayers;
- —Additional schedules of other relevant information, such as a schedule showing the purposes for each capital project fund.

Compiling the statistical data is usually considered to be the most time-consuming part of preparing a CAFR. In North Carolina, however, much of this information is often available from such sources as the "official statements" issued in connection with the unit's sale of general obligation bonds or from other units of government within a county.

#### The Certificate of Achievement

The Certificate of Achievement for Excellence in Financial Reporting Program, administered by the Government Finance Officers Association of the United States and Canada (GFOA), is the highest form of recognition a unit can achieve in governmental financial reporting. It represents a significant accomplishment by a unit of government, its professional management, its finance director and staff, and its independent certified public accountants. GFOA began the program in 1945 to emphasize the association's belief that every government should prepare and publish an easily readable and understandable comprehensive annual financial report

covering all of its entities, funds, and financial transactions during the year.

To be eligible for a Certificate of Achievement, the unit's annual report must be a Comprehensive Annual Financial Report. The award is made only after a detailed review of the CAFR by three independent reviewers, each of whom spends a minimum of eight hours on the report. The reviewers are professional accountants who have substantial training and experience in the governmental accounting field. They are carefully selected for their knowledge and expertise. Many are certified public accountants in public accounting firms. Others are the chief financial officers of units of local government, and some are college professors. All serve as volunteers without compensation.

Although the CAFR represents the highest level of financial reporting, a decision to publish a CAFR and to seek a Certificate of Achievement for Excellence in Financial Reporting should not be made lightly. Such a project may consume many hours of additional work in the first year for the finance officer in compiling the needed financial and statistical data. Also, additional work may be required by the independent certified public accountant, and that may increase the cost of the annual audit.

Nevertheless, the benefits from enhanced financial reporting are well worth the effort and expense. The completeness of the Comprehensive Annual Financial Report, with its financial statements, supporting schedules, statistical tables, and the required narrative explanations, helps to ensure that all fiscal information needed by officials, citizens, lay readers, and others interested in the financial affairs of a government is presented in a consistent and uniform manner.

Reports that qualify for a Certificate of Achievement also may become a valuable bond-marketing aid. They provide a way for market analysts, investors, potential investors, and others to compare the attractiveness of a government's securities with the merits of other in-

vestments. Credit-rating agencies view the Certificate of Achievement as a very positive step for the local unit that earns it.

Many governments do not receive a certificate on their first attempt. There is no stigma attached to a failure to earn a Certificate of Achievement on a first or even second try, since less than 2 per cent of local government units in the United States have met these standards.

The Certificate of Achievement must be earned each year. A report from a unit that has received a Certificate may be denied the award in a later year for any of several reasons. For example, the finance officer may not have responded appropriately to the special review committee's comments and suggestions for improvement in the previous report; or may have failed to keep abreast of the pronouncements from GASB (Governmental Accoiunting Standards Board); or may have omitted—intentionally or otherwise—required disclosures or schedules.

As of June 30, 1986, twenty-three units of local government in North Carolina had earned a Certificate of Achievement for Excellence in Financial Statement Reporting.

#### Summary

Financial reporting by North Carolina's units of local government ranks with the best in the United States at the first level of reporting—the annual audit report issued by the independent public accountant. As this article has shown, financial reports can be improved by taking three additional steps. First, a comprehensive letter of transmittal can be added to the annual audit report, thereby upgrading that report to an enhanced financial report. Second, selected schedules of statistical information can be added to the enhanced financial report, thereby upgrading it to a Comprehensive Annual Financial Report. Finally, a unit can seek the Certificate of Achievement.

# The Governors Center: Exploring a New Role for Governors

### Regina K. Brough

It's a new ball game for the governors of the fifty states. For nearly two generations the states played very junior partner to the federal government in the administration of social service programs. But over the past ten or so years, the federal government has essentially passed the ball to the states in that and other domestic areas. And it is the governors who now must administer this vast array of activities.

Governors are excited about their new responsibilities and their new freedom. At a recent conference Governor Lamar Alexander of Tennessee exclaimed that "[g]overnors have the best job in the country!" And his colleagues concur. Governor Tom Kean of New Jersey noted that "[t]he action isn't in Washington anymore—it's in the states." After taking part in a new program at Duke University, students, faculty, and other participants agree that the state capitols are "where it's at."

This article will describe Duke's new program, the Governors Center, and examine the governors' role as a chief executive officer (CEO), in many ways comparable with the CEO of a major corporation.

#### A new role for governors

From Franklin Roosevelt's time to the mid-1970s, the federal government was the primary source of funding and policy in the field of domestic social service structure. But ten or so years ago changes in philosophy, realization of financial limitations, and the pre-eminence of national security obligations—plus other factors—

marked the decline of the federal government's historical power to implement domestic policy. Major programs—particularly in social services—were left to the states to carry forward.

Inevitably there has been a change—in both breadth and depth—in the governor's role. A governor today wears many hats—he is the head of state, the commander in chief, the state's principal lobbyist, the premier budgeter, and the state's cheerleader. And the list goes on. The governor can play all of these roles or select any one as a personal priority or as required by necessity. For example, the frequency of gubernatorial foreign trade missions demonstrates how these leaders fashion new roles for themselves in responding to contemporary realities.

Recently, because of this tremendous shift in responsibility, the governor has been dubbed a public sector CEO.¹ Governors who had no managerial experience before they moved to the state house find themselves confronted with very many of the same problems as the powerful head of any large organization. The fifty governors lead public enterprises whose size and complexity rival that of the Fortune 500 corporations.²

Correspondingly, the public management function has grown. Except for the Presidency, governors occupy the public sector job most similar to that of a top corporate executive. "We are the chief executives of state government," Governor Alexander said. "We lead our

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<sup>1.</sup> Lamar Alexander and Robert D. Orr, "The Fifty Best Jobs in the Country," The Journal of State Government 59, No. 2 (July/August 1986), 53.

<sup>2.</sup> Judith H. Behn and Robert D. Behn, "Governing the State," *Capital Ideas* (November 1, 1986).

political parties, symbolize our state's best hopes for itself, and oversee the management of agencies, which usually are larger than any private industry in our state."<sup>3</sup>

# Private and public CEOs assess their jobs

Over the last couple of years, governors and corporate CEOs have met to discuss their comparable responsibilities. The corporate CEOs have traveled to National Governors' Association meetings in several locations, to meet their public counterparts. Comments from both groups reflect their thoughtful insight into their roles.

The two groups agree that it is necessary to develop a statement of mission in order to focus the organization's activities. Campaigns are important to corporate CEOs as well as to political CEOs. Once you have won the job, either by election or by a less public corporate competition, the second campaign—to get the job done—begins. At one conference William Sullivan, former CEO of Burroughs Wellcome, the pharmaceutical firm, said that after he had attained the top job, he had to let the organization know he was there. He had to spend time being a politician, running what he called "an internal campaign." Like most governors, Sullivan had no management experience before he became head of Burroughs Wellcome; he learned on the job.

Dr. Thomas Frist, CEO of the Hospital Corporation of America (HCA), observed that people like winners. After you win the election or win the CEO seat, he said, take advantage of the timing and "form your new organization." Frist believes that the CEO is the "guardian of the corporate culture" and the corporate communicator. Along with HCA's significant corporate presence in Tennessee go many public responsibilities. This physician turned manager-entreprenuer spends 50 per cent of his time on activities external to the corporation.

Robert Behn of Duke University, an observer at these sessions, noted four significant considerations in the work of the public and private CEOs:

(1) Process vs. outcome. Business focuses on outcomes; government is more concerned with process. Form-

- erly with the United States Information Agency and now president of The Communications Company, Robert Squire remarked that government has a "reverence for process rather than results."
- (2) Bureaucratic inertia. Peter Cohen, CEO of Shearson Lehman Brothers, Inc., observed that "major corporations have the same inertia as state governments." Yet many participants in the governors' conferences argued that government's bureaucracy is more resistant than the private structure. A state's bureaucrats can "fold their hands," said Governor John Sununu of New Hampshire, and wait for the next governor.
- (3) Management structure. A CEO carries out his policies and programs through the organizational structure of his business or state. But Governor Alexander of Tennessee noted that the "Byzantine" and inflexible management structures in government make it difficult to implement a new program quickly.
- (4) Personnel constraints. Corporate managers have more flexibility than governors in assigning people. James J. Blanchard of Michigan noted how difficult it is to motivate his state's 58,000 employees when he, as governor, appoints only 200.4

Behn observed that management problems and approaches in business and government mirror each other. Top executives in both sectors constantly worry about the related tasks of motivation and implementation—they devote much of their personal time to communications. When it comes to controlling and evaluating data, both types of CEOs confront the same built-in institutional biases.<sup>5</sup>

Moreover, some of the trends in the two sectors are the same. Both private and public organizations seek to do "more with less." Further, the legislative and judicial constraints plus journalistic scrutiny, which have always limited the public manager's flexibility, are beginning to affect private management as well.

In addition, some of the differences that once existed between business and government are beginning to blur. Several observers have noted that government executives must manage with shorter time horizons than do their business counterparts. And several of the government

<sup>3.</sup> The National Governors' Association (NGA) annual winter meeting, work session on "The Governor As CEO," Washington, DC, February 23, 1986.

<sup>4.</sup> Robert D. Behn and Regina K. Brough, "The Governor CEO," Capital Ideas (May 1, 1986), 4-5.

<sup>5.</sup> NGA winter meeting, February 1986.

<sup>6.</sup> NGA Seminar for Governors and CEOs, Stateline, Nevada, December 5-6, 1985.

nors commented on the problems of strategic planning, given the sensitivity of state revenues to economic conditions, the uncertainty of federal funding, and the vagaries of legislative decision making. But Frist noted that business planning also is now limited to shorter "time frames." "Ten years ago," he observed, "I could do a strategic plan . . . seven to ten years out. Five years ago, I could do it for about three or five years. This year [1985], as I'm finalizing our budget for next year, I cannot do a one-year budget. We're doing a quarter-by-quarter budget." Consequently, Frist explained, corporate CEOs frequently face public complaints similar to those their gubernatorial colleagues face. Stockholders' expectations are comparable with voters' expectations.

The governors learned that the job of a private CEO is becoming more public. Roger Shipke of General Electric Corporation observed that, as a private sector manager, he deals with six different publics: shareholders, employees, communities (where GE has plants), customers (who sell GE products), consumers (who use GE products), and vendors (who provide components and services to GE).

Governor Sununu reflected on the differences between public sector and private sector CEOs. The first and principal difference, he said, is the ratio of style to substance. According to Sununu, people who succeed in the public sector have an extremely high ratio of style to substance. Second, the public CEO has a difficult problem in the adversarial aspects of partisan politics. (Sununu, whose state has the largest legislature in the country and a term of office limited to two years, has a particular perspective on partisanship.) The third difference between public and private CEOs is the inertia that afflicts large bureaucracies-that is, the degree to which the organization is beset by problems of motivation. In Sununu's analysis, the private sector CEO has more power to bring about change than his gubernatorial counterpart does. Institutional inertia puts a damper on what a governor might achieve and thereby thwarts his ambitions. The private sector CEO, Sununu says, can move more decisively to interrupt organizational inertia. And finally, he notes, in the private sector institutional memory clusters at the top while in the public sector it clusters at the bottom. This phenomenon is explained largely by the frequency with which the occupants of top public positions change, so that program expertise tends to reside in the lower, "less political" ranks.

Charles Cobb, CEO of Arvida-Disney, believes that his public equivalent, the governor, is limited by his inability to let the world know when a goal has been achieved. Also, in the public sector there is no reward for risk taking. In contrast, in the private sector, attainment of a goal is widely celebrated, and risk taking can mean the difference between great success and failure.

At times the debates between the governors and the corporate CEOs have grown spirited and challenging. At a minimum, the participants in these meeting have learned that the distinctions between the groups blur and converge. Friendships have been formed and respect for one another's job heightened.

#### The Governors Center

The Governors Center at Duke University focuses on this new gubernatorial role—governors as public managers, as chief executive officers of extremely large organizations, whose policy decisions and managerial actions significantly affect the lives of millions of people.

The Governors Center is a part of Duke University's Institute of Policy Sciences and Public Affairs. Thus the Center's activities are integrated into the intellectual life of the Institute and the University. Faculty and students tangle with the problems of gubernatorial management and the issues of state government through Governors Center courses and in research. The Center's Gubernatorial Fellows Program brings a distinguished list of governors to the campus. In addition, the Center's executive education programs make the resources of the Institute's faculty directly available to public managers in state government.

The Governors Center was launched in 1979 with a grant from the Mary Reynolds Babcock Foundation. A collaborative effort by Duke University and the National Governors' Association, the Center is supported currently by corporate contributions, the National Governors' Association, and the University. It was incorporated as a research activity of the Institute in 1984 and began its first full academic program that year. Since then the Center has brought many governors to Duke and has conducted numerous seminars and discussions on gubernatorial leadership and management at locations on the Duke campus and around the country.

Gubernatorial Fellows Program. The flagship activity of the Governors Center is the Gubernatorial Fel-

<sup>7.</sup> Ibid.

lows Program, which brings outstanding governors to the Duke campus each year to discuss and analyze their managerial duties. Thus far, thirteen experienced governors in office at the time have spent two to three days each at Duke as a fellow. After addressing an audience of undergraduate and graduate public policy students on "Managing the States" (the program theme), the gubernatorial fellow adjourns to a meeting of corporate guests and faculty. The corporate guests typically include sponsors of the Governors' Center and invited citizens from the fellow's home state. At these sessions, governors and corporate executives meet and discuss their comparable responsibilities: establishing purposes, communicating a vision, selecting line managers, motivating employees, and molding organizational character.

After the session, all the participants join the public policy students for a dinner party at the University's guest house.

Over the next two days, the visiting fellow is immersed in a rigorous agenda of meetings with the public management faculty of the Institute, faculty members from around the University, and classes and seminars with the students.

The first gubernatorial fellow (in the fall of 1984) was Governor John Carlin of Kansas. Next came Governor Scott Matheson of Utah, followed by Governor Richard Thornburgh of Pennsylvania and Governor Charles Robb of Virginia in the spring of 1985. The fall semester program opened with Governor Bob Graham of Florida, followed by New Hampshire Governor John Sununu. Later that year, Governor Lamar Alexander of Tennessee and Governor Dick Lamm of Colorado spent several days each at Duke. The 1986-87 academic year opened with Richard W. Riley, Governor of South Carolina. Next came Governors Victor Atiyeh of Oregon, John Ashcroft of Missouri, Kay Orr of Nebraska, and Tom Kean of New Jersey.

A typical day for a fellow. "She's five miles out," squawked the Duke University Public Safety radio. And a few minutes later, all those expectantly standing on the Duke soccer field could see her: Helicopter One of the Commonwealth of Virginia. The aircraft landed amid the flashing blue lights of the Duke Public Safety cars, and out stepped the copilot, Lieutenant Colonel (U.S. Marine Corps Reserve) and Governor, Charles S. Robb.

Why was Duke's Public Safety force out en masse for the University's first gubernatorial fellow of 1985? Actually, the concern was not for the governor himself. Public Safety just wanted to be sure that while the governor was visiting the campus, no undergraduates painted a Duke blue devil over the Virginia state seal. Whimsy had to take a back seat to protocol.

In his address, Governor Robb said that today the immediate focus of state government must be on care-

The Governors Center focuses on a new gubernatorial role—governors as public managers, as chief executive officers of extremely large organizations, whose policy decisions and managerial actions significantly affect the lives of millions of people.

ful fiscal management. For Robb, careful fiscal management began with a comprehensive re-evaluation of the role and programs of state government. This endeavor was driven by three of his gubernatorial decisions: (1) level funding of existing programs to avoid a tax increase; (2) elimination of nonessential programs; and (3) reorganization of the remaining programs to reduce regulation, "to combine duplicate services, and to enable [the state] simply to do more with less."

A number of Duke trustees and the local news media were in the audience, curious about a prominent Democrat who at the time was rumored to have presidential aspirations.

Another visitor was Governor Dick Thornburgh of Pennsylvania. On the morning of March 28, 1979, his mind was focused on securing passage of his first budget. At a breakfast meeting, the newly elected Republican governor was trying to secure bipartisan support for his programs from a group of freshman Democratic legislators.

But at 7:50 a.m. a telephone call came from the state director of emergency management. There had been an accident at the Three-Mile Island nuclear power plant, just ten miles downstream from Harrisburg, Penn-

sylvania's capital. The governor later learned that the problem had actually begun at 4:00 a.m., when vital cooling water had started to escape through an open valve in the newer of two nuclear reactors at the plant. The reactor core had overheated, and the worst accident in the history of commercial nuclear power was well under way.

As a gubernatorial fellow, Governor Thornburgh talked about crisis management. He recounted the frightening events of the Three-Mile Island crisis and the public's fears of radioactive contamination and reactor meltdown. When the crisis had eased, Thornburgh recognized that he had learned many useful lessons from facing this nuclear emergency—lessons that he could generalize to the management of other unforeseen crises.

At the time of their visits, both Robb and Thornburgh were governors with high national visibility. But all gubernatorial fellows brought some unique and valuable dimension to the Program. And each was also an important resource for subsequent research undertaken by Center scholars.

Executive education at the center. Executive education activities are a top priority of the Governors Center in addition to the Gubernatorial Fellows Program. Each spring, fifty public managers from the southern states spend a week on the Duke campus, participating in the "Top State Managers" program in policy analysis.

The policy-analysis curriculum of Top State is designed to increase the analytical capacity of state governments and to provide the executive participants with the analytical training necessary for fast-track promotions. The program's objective is to train these managers to become intelligent, discerning consumers of policy analysis. In addition, the intimacy and intensity of the program—particularly the late-night sessions as each team of executive participants prepares its presentation for the next day's discussion—creates lasting friendships and forges professional relationships.

The Top State Program covers topics traditionally included in any policy analysis curriculum: research design; modeling and simulation; program evaluation; benefit-cost analysis; and decision analysis. In addition, special attention is devoted to computer programming; each participant spends every afternoon in the computer lab working out a policy problem on a minicomputer.

With a successful track record in executive education work, the Center expanded its program offerings in the spring of 1987 by adding "Strategic Leadership for Gubernatorial Executives." The curriculum of this

new program covered all the fundamental responsibilities of gubernatorial executives. These responsibilities were examined through a series of public-management teaching cases.

Each session was devoted to the study of a real problem facing a real executive in state government. The initial question was "What should the manager do?" From a discussion of this most basic of management questions, participants developed a set of principles about leadership and management and also developed an understanding of the conditions under which these principles would apply.

This year's class was drawn from a national sample. Participants came from Utah, Washington, Wyoming, Illinois, Massachusetts, Florida, Minnesota, and several other states. Unlike the Top State program, Strategic Leadership was designed for chiefs of staff, commissioners, agency secretaries, and department heads. These people had direct access to their governors and brought "combat wisdom" to the sessions.

Most of the faculty participants came from the Institute faculty. For the session on "The Relationship Between the Governor, His Staff, and His Line Managers in the Cabinet and Departments," however, the participants were delighted that their lecturer was Governor Tom Kean of New Jersey. Able to talk off the record about managing New Jersey, the governor fascinated and amused his audience with candid talk about his challenges.

John Isaacson, an executive recruiter from Boston who specializes in finding and placing government executives, spoke on agency "head hunting." And Peter Goldmark, former executive director of the New York/New Jersey Port Authority and now with the Times-Mirror Corporation, opened the week with a presentation on "The Dilemmas, Crises, and Opportunities of Being a Gubernatorial Executive."

The mix of Institute faculty and faculty from the outside seemed to please the participants, who strongly endorsed the program. In 1988 the Center will offer a full range of policy analysis and strategic leadership programs throughout the summer.

Gubernatorial chiefs of staff. The Governors' Center also provides a setting for chiefs of staff to meet biannually. In the fall of 1985, the chiefs of staff for several of the nation's governors arrived for the first chiefs-of-staff seminar. The seminar provided a forum for them to exchange ideas and share experiences. Because many of these top gubernatorial aides did not know each other,

the seminar was designed to help build a chiefs-of-staff network. It also sought to introduce participants to some new ideas about strategic management in state government—particularly ideas that relate to the governor's office and gubernatorial leadership. The most recent seminar was held in October 1987. Twenty-five states participated in the three-day program, which featured a return visit by former Virginia Governor Charles E. Robb, the keynote speaker.

#### Conclusion

As the chief executive officer of state government, the governor is responsible for getting the job done. Whether the task is running an office that renews license tags or negotiating a tax package with an industrial prospect, the ultimate responsibility lies with the governor. And taxpayers do not care whether their particular state constitution gives the governor the authority

commensurate with the degree of the governor's responsibility.8

Better management of state government is the Center's goal. Another part of the Center's work is locating excellence and publicizing it. By learning how successful governors win at their jobs and sharing these strategies with other interested parties, the Center serves an important education role as state government comes to the forefront. The Center's executive education opportunities for state executives are unique.

The Center plans to expand the variety of programs offered and to publish new books on gubernatorial management.



# New IOG Faculty Member

The Institute of Government has a new faculty member in the field of health law. Jeffrey S. Koeze joined the Institute faculty on September 1. He received a B.A. in English from the University of North Carolina at Chapel Hill, where he was a Morehead Scholar. In 1986 he took his law degree at the University of Virginia, and was a member of the *Virginia Law Review*. Last year he served as law clerk to United States District Court Judge Morey Sear in New Orleans.

Mr. Koeze's interests at the Institute include access to health care and long-term care.

<sup>8.</sup> Robert D. Behn, "Getting the Job Done: The Governors, Legal and Moral Authority," The *Journal of State Government* 59, no. 2 (July/August 1986), 54.

# Planning for Solid Waste Management in Mecklenburg County

# Gary R. Rassel

ecklenburg County has developed a twenty-year management plan to deal with all of its solid waste. The plan was developed pursuant to G.S. 130A-294, which authorizes designated jurisdictions to control and manage all solid waste within those jurisdictions. A draft of the plan, which was completed in 1986, is being reviewed by all municipalities in the county. Revisions are anticipated during 1987 and a new draft is expected to be completed by year's end.

Disposal of municipal solid waste is an enormous problem in the United States. Landfilling, the usual method of managing solid waste, has become increasingly difficult. Nationwide, more than 3,500 landfills have been closed since 1979. Nearly a quarter of the nation's major cities will run out of room for their garbage within five years. In New Jersey the number of landfills declined from 2,000 to 158 between 1965 and 1984. In Connecticut nearly all current landfills were expected to be filled by 1987. Rhode Island went from 44 operating landfills a few years ago to just nine in 1986.<sup>2</sup>

In response to landfilling problems, cities and counties are turning to recycling and waste-to-energy incineration. The appeal of recycling is in preventing waste from entering the waste stream (that is, the total amount of waste disposed of), thus reducing the need for other disposal fa-

cilities. Incineration is referred to as waste-to-energy technology because the heat produced by burning garbage can be used to produce steam and electricity. As many as 100 large plants, each able to burn 1,200 tons of waste per day or more, and 300 smaller units are expected to be built in the next fifteen years in the United States.<sup>3</sup> Development of waste-to-energy systems involves siting the plants, finding customers for the energy produced, guaranteeing sufficient quantity and quality of waste to be burned, and resolving political differences.

The efficient operation of resource-recovery facilities and compliance with their contracts rely on the guarantee of an adequate supply of waste. Through flow-control ordinances that regulate where trash haulers can tip their loads, governments can direct collected waste to these facilities. G.S. 130A-294 recognizes the importance of flow control to solid waste management. The statute empowers the governing body that has jurisdiction over the area affected by the solid waste management plan to adopt flow-control ordinances to apply to other governments and private haulers within the jurisdiction. It is necessary, then, that those affected by flow-control ordinances have a voice in approving the solid waste management plan.

#### Background

Mecklenburg County's population in 1986 was estimated at 451,800. In the county are seven incorporat-

The author is an assistant professor of political science at the University of North Carolina at Charlotte.

Terri Thompson and Mimi Bluestone, "Garbage: It Isn't the Other Guy's Problem Any More," Business Week (May 25, 1987), 150-51, 154.

<sup>2.</sup> Ken Anderberg, "Trash To Cash," American City and County 100 (1985),

<sup>3.</sup> Ibid.

<sup>4.</sup> N.C. GEN. STAT. § 130A-294 (1983).

ed areas: Charlotte (population 361,000) and six smaller towns-Matthews, Pineville, Mint Hill, Huntersville, Cornelius, and Davidson. It is expected that by 2005, county population will have increased by nearly 30 per cent, employment by 50 per cent, and the amount of solid waste generated by over 30 per cent.<sup>5</sup> In 1985 the county generated more than 600,000 tons of solid waste—or about 1,700 tons a day. It is estimated that the quantity of solid waste will increase to 694,000 tons by 1995.6 Over 75 per cent of the waste in 1985 was generated in Charlotte, most of it deposited in the county's three landfills. The county used approximately two-thirds of an acre per week for landfill in 1984.7 Two landfills closed in 1986, and the third, originally scheduled to close in 1987, has been expanded. Although this landfill is now slated to close in 1989, the county is again seeking to expand it. Currently about 50 per cent of the municipal solid waste in Mecklenburg County is disposed of in the one remaining landfill and nearly all the rest in a private landfill in neighboring Cabarrus County. A small amount of waste, about 1 per cent, is recycled through seven recycling centers and a pilot curbside program that serves 5,100 households.

Concern with Mecklenburg County's landfill problems is not new. In 1972 Charlotte and Mecklenburg County sponsored an area-wide solid waste study that called for long-term solutions to the problem. The study recommended that the two governments coordinate their waste collection and disposal activities. In 1975 Charlotte surveyed markets for recycled materials and energy from municipal solid waste. Other studies in 1978 and 1980 explored in greater detail three basic waste-management strategies: new landfills, a resource-recovery facility (incineration), and source-separation recycling.

To cut down on landfill use, the county is turning to recycling and incineration. In 1977, plans for waste-to-energy incineration facilities began and Mecklenburg County undertook a modest recycling program. Recycling centers were established at some high schools and at landfills. In 1982 a user fee was imposed on vehicles that brought waste to landfills. The fee is waived if the hauler

brings in a sufficient amount of separated recyclable materials. The county has hired a coordinator to plan and implement additional recycling programs.

In 1984 Charlotte and Mecklenburg County signed an agreement that made the county responsible for solid waste disposal. Charlotte collects solid waste within the city limits, but disposal is the county's responsibility. The commissioners supported the move since, by law, the county had to approve any landfills within its borders. This agreement also recognized that all disposal facilities should be operated by a single government body.

Finding ways to dispose of the county's garbage has become an urgent issue that may greatly affect the county budget. Because of state requirements for installation of such engineering devices as synthetic liners and leachate collection systems,9 the county estimates that a site for a new landfill may cost as much as \$150,000 per acre.

In the past, the need for more disposal facilities was met by simply clearing a new landfill. But now the decreasing amount of land available, soil conditions, environmental concerns, legal barriers, and mounting public opposition make the siting of new landfills very difficult. New permitting regulations required by state agencies have further restricted the process.<sup>10</sup>

### Developing the plan

As stated earlier, G.S. 130A-294 empowers the State Department of Human Resources (DHR) to establish a statewide solid waste management program and to designate a single governing unit to have authority over solid waste management in a specified area. The geographic areas to be subject to the respective solid waste management plans are to be designated by DHR upon receipt of a plan developed and approved by the governments in each area. DHR is also charged with authorizing units of local government to require by ordinance that all solid waste generated within the designated geographic area be placed in the waste stream and disposed of at permitted facilities.

Such a plan must include:

(1) Figures on the present and projected population for the area;

<sup>5.</sup> Mecklenburg County Department of Engineering, Mecklenburg County Solid Waste Management Plan, Charlotte, N.C., 1986, p. 2.

<sup>6.</sup> Mecklenburg County Department of Engineering, Draft Executive Summary of Mecklenburg County Solid Waste Management Plan, Charlotte, N.C., 1987.

<sup>7.</sup> Michael W. Derby, Resource Recovery Options for Mecklenburg County, North Carolina (Charlotte, N.C.: University of North Carolina at Charlotte, 1985).

<sup>8.</sup> Mecklenburg County Zoning Ordinances 3l24 and 3328; N.C. GEN. STAT. § 130A-294(a)(4).

<sup>9.</sup> Letter dated February 13, 1987, from William F. Meyer, Head of the Solid and Hazardous Waste Management Branch, Environmental Health Section, Division of Health Services, North Carolina Department of Human Resources, to the Mecklenburg County Department of Engineering.

<sup>10.</sup> Mecklenburg County Solid Waste Management Plan, 1986, pp. 1, 44.11. N.C. GEN, STAT. § 130A-294 (1983).

- (2) Data on the quantities of solid waste generated and estimated to be generated in the area;
- (3) Information on the availability of sanitary landfill sites and the environmental impact of continued landfilling of solid waste on surface and subsurface waters;
- (4) A statement of how the solid waste will be disposed of and what kind of energy or material will be produced from the waste.

Mecklenburg County took the lead in developing a comprehensive plan for the management and disposal of all solid waste within its boundaries. The plan must be reviewed and adopted by all municipalities in the county, considered in public hearings, adopted by the county commissioners, and submitted to DHR with subsequent annual updates. A citizens' advisory board was created to oversee the development of the plan and to advise the commissioners. The Mecklenburg County Solid Waste Management Advisory Board, activated in May 1984, has eighteen members, plus a chairperson appointed by the commissioners. Members include representatives of financial institutions, civic groups, the general public, a local university. Duke Power Company, two members from the Charlotte Clean City Committee, and two members representing the smaller towns in the county and their environs. There is no provision for Charlotte to appoint a member. At first the board was to be a city-county advisory board, but because of the interlocal agreement it became solely a county board. The county engineering department provides information and staff support.

In 1983 Mecklenburg County set a goal to be achieved by 1990. Given the projected amount of waste for 1990 and beyond, in order to extend the life of the new landfills to twenty years, the county is seeking to divert 1,200 tons per day from the landfills by 1990. Accordingly, waste materials are to be reused if possible, recycled if they cannot be reused, processed for resource or energy recovery if they cannot be directly recycled, and buried in a sanitary landfill only as a last resort.

sive timetable for increasing recycling programs. They felt that this timetable and their commitment to waste-to-energy facilities would be an efficient way to divert waste from landfills. County staff estimated how much waste could be managed by the various methods of waste control and researched the potential for implementing a resourcereclamation plan. In November 1984, the commissioners adopted the following goals to be met or exceeded by 1994:

- —Recycle 30 per cent of the county's solid waste;
- —Convert 40 per cent of the waste into energy for sale;
- —Reduce the amount of solid waste going to landfills from 99 per cent of the total to 30 per cent.

### Major components

The Mecklenburg County Solid Waste Management Plan details the activities necessary to accomplish these objectives, their costs, a financing plan, and a timetable for implementation. For these objectives to be met, the flow of waste must be properly managed, and all municipal governments, businesses, and residents of the county must comply with the plan's requirements. The original draft of the plan had four components intended to provide for managing the county's solid waste into the next century: landfills, recycling, waste-to-energy facilities, and waste transfer. The waste-transfer function has since been changed.

Landfills. Landfilling, the traditional method of solid waste disposal, is still the least expensive but will not remain so for long. But no matter how successful the alternatives, some degree of landfilling will still be required. Many items cannot be recycled or burned, and waste-to-energy facilities leave a residue of ash. County officials expect that by 1993 landfills will be used only to dispose of noncombustible and nonrecyclable material.

The Mecklenburg County zoning ordinance required that a special-use permit be obtained before a landfill is sited. DHR must have issued a permit for the landfill before operations may begin. It is projected that if the county continued to rely totally on landfills, a minimum of 2,100 acres would be needed over the next twenty years for excavation, required buffers, and access roads. At least twice the excavated acreage is needed to meet legal and technical requirements; without any alternatives to landfilling, the excavated acres of landfill required by the plan total 1,041. But if the county reaches its recycling and incineration goals, approximately 474 excavated acres will be needed for landfilling—for a total of about 950 acres.<sup>13</sup>

In 1986 three sites for new landfills were being considered; they totaled 1,370 acres. These sites would be adequate to meet landfill needs for the projected period and

<sup>12.</sup> Derby, supra note 7.

<sup>13.</sup> Mecklenburg County Solid Waste Management Plan, 1986, pp. 45-46.

were expected to be phased into operation as the existing landfills were closed. None has been opened, however, and continuing delays in the siting process have increased the seriousness of the solid-waste issue. The county is attempting to add 34 acres to its one existing landfill. If this

## Disposing of all the waste generated in Mecklenburg County requires over twothirds of an acre of landfill per week.

landfill is expanded, the county would have about four years before it ran out of landfill space.

The tipping fee at county landfills was increased to \$15 per ton in April 1987 to cover all costs. Estimates put that cost at \$50 per ton by 2005 if landfills remain the primary method of disposal and new state requirements are in effect. Alternative methods of waste management thus become economically attractive.

Major problems have been encountered in siting proposed landfills. In 1985, the General Assembly passed G.S. 130A-295.1, which is applied to counties with a population of at least 400,000. The legislation forbade permits for landfills within one mile of an incorporated city, town, or village with a population of 2,500 or more without the approval of the affected local unit. Although since ruled unconstitutional, this legislation for a time removed even more land from consideration.

In February 1987, Mecklenburg County received a conditional permit from the state for a landfill on a site bordering South Carolina. The conditions of the permit required that such additional engineering devices as synthetic liners and leachate collection systems be added to prevent any contamination of ground or surface water by the landfill. Such systems could increase the cost to \$150,000 or more an acre. The board of commissioners has voted to appeal this restriction. The additional systems are required, state health officials say, because they fear that contaminated ground water will pollute area wells. South Carolina has threatened to sue to stop the landfill.

**Recycling.** In fiscal year 1985-86, less than 1 per cent of the total waste stream was recycled, although recycling increased modestly in 1986-87. The recycling plan that was developed to meet the 30 per cent goal emphasized (a) information programs to increase awareness of the need to recycle, and (b) policies to provide incentives for recycling and for reducing waste generation. It also recommended increasing the number and types of services provided by the county in three phases from 1986 through 1994. The existing recycling operation will be expanded and new activities and policies implemented. New projects will include curbside collection programs, a sorting operation for selected recyclables at disposal sites, commercial and institutional waste-recovery services, a ban on the disposal of yard waste in county facilities, and mandatory source-separating ordinances for yard wastes. In the last phase, ordinances mandating participation in the residential and commercial wasterecycling programs and the banning of recyclable materials in county landfills are recommended. Estimates for the plan's recycling component range from \$50 per ton in the early stages to \$8 per ton (in 1985 dollars) once the goal of recycling 30 per cent of the waste is reached.

County officials had predicted that in order to reach the 30 per cent recycling goal by 1994, some recycling activities would need to be mandated. But two recent test projects in the city have been encouraging. In one project, citizen response to voluntary recycling was evaluated. In a second project, residents were asked to separate all recyclables from other garbage and place them in special containers provided by the county. Participation in test areas was high, and reaction to both projects indicated that many residents would take part if the programs were made permanent. County staff will use the information from these projects to find ways to increase voluntary recycling.

Waste to energy. A 1983 study by the county concluded that a waste-to-energy facility was both economically and technically feasible. That year voters approved \$13,520,000 in bonds to finance a facility that will process from 100 to 200 tons per day. In 1985 Mecklenburg County issued requests for bids to build and operate a 200-ton-per-day mass-burn facility that will generate both steam and electricity. This structure is planned for county property adjacent to the University

<sup>14.</sup> N.C. GEN. STAT. § 130A-295.1 (1985).

<sup>15.</sup> Gail Smith, "Official: Politics Had No Part In Landfill Ruling," *The Charlotte Observer*, February 21, 1987.

Regina Clark, "Curbside Recycling Proves Popular," The Charlotte Observer, June 11, 1986.

of North Carolina at Charlotte (UNCC) in the northeast part of the county. The plan calls for steam to be sold to UNCC and the electricity to be sold to Duke Power. Both unprocessed waste and ash residue will be buried at county landfills unless the waste can be used. This plant is scheduled to be operational by early 1989.

A second, larger facility is planned for 1991 for the southwest corner of the county. Voters have already approved the bonds to finance it. This structure will process at least 600 tons per day and can be expanded to handle 1,000 tons per day. It will also generate both steam and electric energy. The county has examined options—including privately owned, operated, and financed facilities—for additional waste-to-energy plants.

A key point in planning waste-to-energy operations is the adequacy and availability of landfill space to support them. The Mecklenburg County plan recognizes that landfill will be needed for any resource-recovery option to dispose of ash, any unprocessed material, and back-up for extended "downtime" periods (52 per cent of waste-to-energy facilities had unscheduled shutdowns in 1984<sup>17</sup>).

Although there are a variety of waste-to-energy technologies and although facilities can be of different sizes, smaller plants that use mass-burn technology seem to be the most successful.<sup>18</sup> The plan describes the various technologies evaluated by the county, listing the advantages and disadvantages of each. Mecklenburg County judged mass-burn to be the most acceptable technology for its plant. Financial experts also consider this technology to be the most reliable, which enabled the county to obtain a more favorable bond package than would have been available if other technologies had been chosen.<sup>19</sup> The only other waste-to-energy facility in North Carolina (in New Hanover County) uses mass-burn technology.<sup>20</sup>

Waste transfer. A waste-transfer and recycling station was originally included in the Solid Waste Management Plan. Recent negotiations with Charlotte are likely to result in a major change for this component. Transfer stations are used to provide waste-flow control for other facilities, like incinerators, that need a steady supply of waste to operate most efficiently. A transfer station could allow smaller collection trucks to make

shorter trips and reduce the amount of total travel on county roads and city streets. Waste would be transferred into larger trucks for transport to waste-to-energy facilities or landfill sites. Transfer stations can also serve as processing and distribution centers for recycled materials. Workers at the station can remove materials from the waste stream. One waste-transfer station planned for west Charlotte was originally scheduled to be operational in 1988.

# Delays in approving and accepting the plan

The Solid Waste Management Plan is designed to address the solid waste management needs of Mecklenburg County through 2005. If we assume the accuracy of data and projections, the solid waste could be taken care of by this plan during that period. Continual evaluation of programs and facilities and reassessment of existing and projected needs will be required. The annual report to DHR will provide a tool for plan review. Though all components of the plan are scheduled to be in place by 1995, recent political and legal problems may have put it off schedule. And the county must still plan for obtaining the landfill it will need after the year 2005.

Although a draft of the plan was completed in March 1986, the review process is still incomplete. Questions and objections have delayed each component. Charlotte officials questioned the goal of recycling 30 per cent of the solid waste. This is a high level of recycling, one that has seldom been tried. The current level of participation in Mecklenburg County illustrates a problem common to all recycling efforts. Even those recycling programs mandated by law achieve only about 50 per cent participation, and voluntary programs achieve less. If everything were recycled that could be, little would be left to landfill; but much more than 50 per cent participation would be required.

The first waste-to-energy facility was planned for county land near the UNCC campus on condition that the University buy the steam from the plant. In the summer of 1986, however, University officials expressed concern about the facility's size and appearance, about the University's need for the steam from the plant, and about the cost of the steam compared with the cost of other fuels.<sup>21</sup> De-

<sup>17.</sup> Anderberg, supra note 2.

Solid Waste Management Plan, 1986. See also Thompson and Bluestone, supra note 1.

<sup>19.</sup> Solid Waste Management Plan, 1986.

For an article describing mass-burning technology and resource recovery generally, see William A. Campbell, "Resource Recovery in North Carolina," *Popular Government* 52 (Summer 1986).

<sup>21.</sup> Gail Smith, "Negotiations with UNCC Faltering," The Charlotte Observer, July 21, 1986.

velopers and members of University Research Park, a hightechnology industrial park near the University, were also concerned about the facility's size and about traffic and aesthetic considerations.<sup>22</sup>

In July 1987, the Environmental Protection Agency proposed stricter rules for incinerators after an agency study found that emissions from these structures can cause cancer and other illnesses.<sup>23</sup> Equipment to meet the stricter rules and operating costs could add millions to the cost of the UNCC-area plant over its life. Commissioners said that because of cost, the county might consider scrapping the 235-ton-per-day plant in favor of one much larger. A larger facility could reduce the cost per ton of the pollution-control equipment and the cost of operating it. The chairman of the board of commissioners suggested that if this course is followed, the county might want to find a different site. It appears, however, that the plant will be constructed as scheduled. The county decided in March 1987 to build the incinerator, but in such a way that additional pollutioncontrol equipment could be provided later. Since the incinerator is under construction, county officials did not know whether it would be covered by the proposed new pollution-control rules. But these rules may compel a reassessment of the waste-to-energy part of the plan.

Black citizens objected to the placement of the transfer/recycling station close to their neighborhood. A neighborhood group attempted to block the proposed location by suing the board of commissioners. They claimed that the plant would violate their civil and constitutional rights and would be an unfair burden on the black community.<sup>24</sup> Since the transfer aspect of the station has been deleted from the plan, residents have muted their objections and the suit is likely to be withdrawn.

Public hearings were held and copies of the plan were provided to all towns and cities in the county in April and May of 1986. In April 1987, differences between Charlotte and Mecklenburg County called into question the success of major aspects of the plan. Although the plan was still under review by all towns in the county, the county—concerned that Charlotte had not given its reaction to

The city's main concern about the plan was cost. Under the long-range plan, the city would pay county-set disposal fees and dispose of waste only in county-designated facilities. The disposal costs include tipping fees at land-fills as well as at waste-to-energy facilities. City council members expressed concern about the cost for a system the city does not control. As the county attempts to rely more on user fees to recover costs, this concern could increase. City council members also raised the possibility of the city's disposing of its own garbage or asking the county to take over the entire waste management system—including collection.

City council members also indicated that Charlotte should have more input into the development of any county-wide system. For the county's part, contractors had warned of higher costs because of delays on the UNCC-area incinerator. County officials felt that the city did not recognize the urgency of the county's need to move ahead with the plan. For every month that the incinerator is delayed, more than half an acre at the landfill will be used for garbage that could have been burned.

If the plan is approved by all towns in the county, Mecklenburg County will be authorized, by adopting flow-control ordinances, to require these units to use only county-approved facilities. By agreeing to the plan, Charlotte would be subject to such ordinances. Currently much of Charlotte's waste is disposed of in a private land-fill in Cabarrus County. This space is limited, however, and the city does not have land on which to site a landfill. At first, the county was concerned that without solid waste from Charlotte, the UNCC-area incinerator would not have an adequate supply of garbage to operate and thus would not be built. But the county later said that it could find enough waste to run the plant and will build the incinerator whether or not Charlotte sends waste there.

In May 1987 the city council and the county commissioners met jointly to discuss solid-waste management and pursue a joint evaluation of several aspects of the plan. They appointed a city-county staff task force to review the plan and several alternative options. One of the initial agreements was to consider lowering the recycling goal to 15 per cent. The staff in its review omitted the transfer station from consideration and assumed that all future landfills must be lined. They also assumed that the market for

the plan—issued a deadline to the city. Commissioners threatened to delete the city from the plan, leaving Charlotte to dispose of its own garbage, if it had not decided whether to approve the plan by May 1987. The city council thereupon posed eleven questions to which the county responded in late April.

<sup>22.</sup> Kathleen Curry, "Garbage Plant Size a Surprise," The Charlotte Observer, June 22, 1986.

<sup>23.</sup> Gail Smith, "EPA Proposal Could Add Millions to Cost of County Trash Incinerator," *The Charlotte Observer*, February 4, 1987. Edward Sussman, "EPA to Require Pollution Controls for Incinerators," *The Wall Street Journal*, July 2, 1987, p. 29.

<sup>24.</sup> Gail Smith, "Garbage Proposal Draws Lawsuit," The Charlotte Observer, August 8, 1986.

steam energy would be unreliable. In June, the city council and the board of commissioners adopted the task force recommendations:

- (1) All three disposal options will continue to be included in the plan.
- (2) Recycling will be used to reduce the solid waste stream by 15 to 30 per cent.
- (3) A recycling and processing center will be built and operated by the county.
- (4) The use of private landfills will be considered.
- (5) Future decisions about transfer stations will be under Charlotte's direction and development.
- (6) Flow control will be an integral part of the plan.
- (7) Operation will be financed through revenues from recycling, energy sales, and tipping fees. An average cost of operation will be determined for all facilities, and disposal fees will be the same at all disposal sites.<sup>25</sup>

Collection costs other than those for recycled materials were not included in these considerations. The Solid Waste Management Advisory Board must now review these recommendations and decide whether to include them as part of the Solid Waste Management Plan. The county expects to have a revised draft of the plan ready by late fall.

### Avoiding a solid waste management crisis

The private landfill in Cabarrus County has provided a needed safety valve for Mecklenburg County. Without it, drastic action might have been needed in order to cope with the increasing production of solid waste. A revision of the solid waste plan is likely to include this landfill as a designated disposal facility. But even if the waste-to-energy facilities come on-line near the time scheduled, rapid progress needs to be made in recycling to offset the delays in acquiring new landfill space. However, if the need becomes apparent, residents may readily accept such requirements as mandatory recycling, high landfill fees, and banning of certain items from landfills.

It appears that the amount of solid waste produced will grow faster than the ability to obtain landfill space. The plan calls for the county to reduce the amount of waste landfilled to 30 per cent of the total by 1995. But if the amount increases and other measures are not taken, the percentage of waste to be landfilled will increase

to 35 per cent by 2005. The need for more landfill space beginning in 1996 will put tremendous pressure on the county. Although the plan shows the waste-to-energy capacity remaining constant from 1994 through 2005, it appears that waste-to-energy-facilities must be expanded or additional ones built, that recycling efforts must far exceed the 30 per cent goal, or that other alternatives must be found.

# The cost of landfill sites could rise to \$150,000 an acre.

Public acceptance of waste-disposal options will affect the success of long-range plans. Officials in New Hanover County have said that public participation was critical to the success of their project: "A local government should involve the public very early in the process and involve it to the greatest extent possible." Implementing a long-range plan for solid waste disposal for Mecklenburg County has taken longer than anticipated. Technical delays and legal, political, and economic issues have slowed the process. All the while, construction costs increase. Often overlooked in the decision to adopt a new technology or process are the costs of the political conflicts that can arise. Groups uncertain about the impact of a new facility will object or attempt to get guarantees against adverse effects.

Choosing waste-to-energy technology to solve solid waste disposal problems is particularly appealing. But such incineration will not dispose of all of a community's solid waste. Also, waste-to-energy facilities increasingly face public opposition because of concern over emissions. Other alternatives must be adopted as well. Recycling is perhaps the most flexible of the possible strategies. Recycling policies do not require as much lead time or capital investment. Even given the current low level of recycling, well-planned programs, ordinances, and economic incentives can quickly affect citizens' willingness to recycle. Data from the curbside test project in Charlotte, for example, show over 65 per cent participation. Political objections

(continued on page 57)

<sup>25. &</sup>quot;Solid Waste Disposal: Joint City-County Staff Report," Charlotte, N.C., June 1987.

<sup>26.</sup> Anderberg, supra note 2.

# The Fair Sentencing Act Have Its Effects Lasted?

## Stevens H. Clarke

he movement toward determinate sentencing legislation in North Carolina, as in other states, began with concern about disparity in sentencing and the perception that prisoners suffered from the uncertainty of parole. The drafting of the Fair Sentencing Act (FSA) was not based on any single penological principle. It was influenced not only by the desire to reduce official discretion in imposing sentences and in determining how much time was actually served in prison but also by rising concern about North Carolina's rapidly growing prison population and about associated increases in costs.

The FSA, enacted in 1979, became effective on July 1, 1981. Until then, North Carolina had a typical indeterminate sentencing law. Ranges of prison terms were wide for broadly defined crimes. No criteria for sentencing were set by statute, court decision, or court rules. The Parole Commission had discretion to release a prisoner during most of his prison term and could consider a very wide variety of criteria in making its decision.<sup>2</sup>

In the early 1970s, the North Carolina Bar Association, in two influential reports, criticized the dissimiliarity of prison sentences imposed in similar cases<sup>3</sup> and called for a study "not only of disparities in sentences, but of the entire problem of sentencing, the philosophy underlying it, and the procedures used in effecting it."<sup>4</sup> At the same time the state's rapidly increasing prison population caused growing concern, which was heightened by the release in 1974 of statistics showing that since 1971 North Carolina had had the highest per capita incarceration rate of any state.<sup>5</sup>

In 1983, this magazine carried a summary report on a study of the FSA.6 That study examined sentencing patterns in the first year (1981-82) after the FSA was in effect, comparing them with patterns during the previ-

was less. The Parole Commission could refuse to parole a prisoner if it believed that (1) there was a substantial risk that he would not conform to conditions of parole, (2) his release would unduly depreciate the seriousness of his crime or promote disrespect for the law, (3) his continued correctional treatment would improve his ability to lead a law-abiding life when released, or (4) there was a substantial risk that he would engage in further crime. *Id.* § 15A-1372 (1979). Thus the Parole Commission could consider the seriousness of the offender's crime, his future conduct after leaving prison, and the community reaction to his release, as well as his behavior in prison.

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<sup>1.</sup> For a more detailed treatment of this study, see Stevens H. Clarke, Felony Sentencing in North Carolina, 1976-1986: Effects of Presumptive Sentencing Legislation (Chapel Hill, N.C.: Institute of Government, The University of North Carolina, May 1987).

<sup>2.</sup> Before July 1, 1978, the Parole Commission had the discretion to release an inmate on parole after he served one-fourth of the minimum term of his sentence—or, if there was no minimum term, one-fourth of his maximum term. N.C. GEN. STAT. § 148-58 (1964, 1974, Cum. Supp. 1975); id. § 14-2 (Cum. Supp. 1974). After that date and before the FSA became effective, the Commission could parole the inmate after he served his minimum term (if any) or one-fifth of the statutory maximum term for his offense, whichever

<sup>3.</sup> North Carolina Bar Association, Penal System Study Committee, *Interim Report* (Raleigh, N.C., 1971), p. 14.

<sup>4.</sup> North Carolina Bar Association, Penal System Study Committee, Second Interim Report (Raleigh, N.C., 1972), p. 14.

<sup>5.</sup> See United States Department of Justice, Law Enforcement Assistance Administration, National Prisoner Statistics Bulletin, *Prisoners in State and Federal Institutions on December 31, 1975* (Washington, D.C.: U.S. Government Printing Office, 1976), pp. 5, 16. "Incarceration rate" is defined later in this article in the section on the growth of the state's prison population.

<sup>6.</sup> Stevens H. Clarke, "North Carolina's Fair Sentencing Act: What Have the Results Been?" *Popular Government* 49, no. 2 (Fall 1983), II.

ous two years. In the first year of the FSA, as a result of the Act's presumptive (i.e., standard) prison terms, sentences for felonies became shorter and varied much less than they had in the previous years. Also, estimates contained in that study suggested that the FSA would reduce both the amount of time actually served on a prison sentence of a given length and the variation in that time.

The 1983 article warned that it dealt only with the first-year effects of the FSA and that criminal justice officials' response to the legislation could change. Have the FSA's initial effects persisted? This question can now be answered with the help of North Carolina Department of Correction (DOC) data on thousands of felony sentences from 1976-77 through 1985-86, a period that began five years before the FSA went into effect and ended five years after it went into effect. Briefly, the FSA's effects on the length and variation of felony prison sentences apparently have "worn off," to a great extent, by the end of its fifth year; its effects on time actually served in prison, although potentially more durable, may be reduced by subsequent legislation.

## The Fair Sentencing Act of 1981

The FSA applies only to felonies—serious crimes punishable by maximum prison terms of three years or more. The central feature of the FSA is that it sets presumptive prison terms for felonies.<sup>7</sup> For example, the presumptive term for felonious breaking or entering (the most common single felony), for which the statutory maximum prison term is ten years, is three years.

The sentencing judge may impose the presumptive prison term without giving any reasons. Or he may impose another term (either less than the presumptive or greater than it, up to the statutory maximum for the offense), but only if he states in writing the aggravating or mitigating factors that led him to depart from the presumptive term. (The FSA lists 31 factors that the judge *must* consider, but he *may* consider other factors that are reasonably related to punishment.) There is an important exception to the requirement that nonpresumptive prison terms be justified by written findings: If the nonpresumptive term is pursuant to a plea bargain

regarding the sentence that the judge approves, he need not find aggravating or mitigating factors to justify it.8 (According to 1981-82 data.9 about a third of felony convictions involve judicially approved written plea bargains in which the prosecutor agrees to make a recommendation concerning the sentence.)

The FSA does not regulate the judge's discretion to impose probation (i.e., to suspend the prison sentence), which he may do without giving any reasons. In other words, although the judge must give written reasons for imposing a prison term shorter (or longer) than the presumptive term, he may suspend the term altogether without giving any reasons. (About 40 per cent of felony sentences involve probation with no active imprisonment.) The FSA also leaves the judge full discretion to impose consecutive or concurrent prison terms for multiple offenses—and also to grant committed youthful offender (CYO) status if the offender is under 25,10 thereby making him eligible for immediate discretionary parole.

FSA sought to increase consistency in sentencing by giving the defendant, but not the prosecution, the right of appellate review. If the prison sentence exceeds the applicable presumptive term, the defendant has the right to appeal unless the sentence was imposed pursuant to a judicially approved plea bargain. On appeal, the review of the sentence is limited to whether the aggravating and mitigating factors that the judge found were based on sufficient evidence and whether legal mistakes were made in the choice of a factor or in applying it to the case. The FSA does not require appellate courts to review felony sentences for proportionality—i.e., to consider whether the sentence is too severe, or too lenient, in proportion to the aggravating and mitigating factors found.

<sup>7.</sup> Most of the provisions of the FSA are in N.C. GEN, STAT. §§ 14-1.1 (1986); id. §§ 15A-1340.1 through -l340.7, -l351, -l355, -l380.1, -l380.2, -l442(5a), -l444(al) (1983); and id. § 148-13 (1985 Cunt. Supp.).

<sup>8.</sup> Id. § 15A-1340.4(a) (1983).

<sup>9.</sup> Stevens H. Clarke, Susan Turner Kurtz, et al., North Carolina's Determinate Sentencing Legislation: An Evaluation of the First Year's Experience (Chapel Hill, N.C.: Institute of Government, The University of North Carolina at Chapel Hill, 1983), Tables 2 and 10.

<sup>10.</sup> In imposing an active prison sentence, the sentencing judge may grant CYO status to the offender if (1) the defendant's offense is not punishable by death or mandatory life imprisonment; and (2) the defender is under 21 at the time of conviction, or is under 25 and not charged with a violent felony or a felony punishable by more than ten years of imprisonment. N.C. GEN. STAL § 148-49.14 (1985 Cum. Supp.).

<sup>11.</sup> Id. §§ 15A-1442(5a), -1444(a1) (1983).

<sup>12.</sup> In other words, the amount of weight assigned to various aggravating and mitigating factors is left up to the sentencing judge. See *id.* § 15A-1442(5a) (1983); State v. Ahearn, 307 N.C. 584, 597, 300 S.E.2d 689, 697 (1983); State v. Parker, 315 N.C. 249, 259-60, 337 S.E.2d 497 (1985).

The FSA eliminated discretionary parole of felons except for parole of CYOs, who are eligible for parole at any time after they enter prison.<sup>13</sup> In place of parole, the FSA provided for deductions from the sentence of good time and gain time at rates fixed by statute, subject to considerably less discretion than former law had allowed for parole. "Good time" is a deduction of one day of the prison term for each day spent in prison without major misconduct by the inmate. (Very little good time—probably less than 5 per cent—is actually forfeited for misconduct.) "Gain time" is a deduction of two, four, or six days per month, depending on the amount of the inmate's assigned work or program participation. (Also, "meritorious" gain time may be awarded in amounts up to 30 days for instances of exemplary conduct, overtime work, and work in emergency conditions or severe weather.) The FSA's good-time and gain-time provisions were simply a statutory codification of administrative practice under former law. However, by eliminating discretionary parole, the FSA made good time and gain time much more important than they had been. Under the FSA, good-time and gain-time decisions by prison staff, rather than the decisions of the Parole Commission, became the principal means of shortening prison time for felons who were not CYOs. Data currently available indicate that FSA good time and gain time together reduce the portion of the prison sentence actually served by 60 per cent or more.14

#### Data and methods

This study is restricted to persons convicted of felonies, because the FSA applies only to them. (Felons constitute 82 per cent of the state's prison population<sup>15</sup> and 27 per cent<sup>16</sup> of all supervised probationers.) The data

used in this study were taken from the DOC's computerized files on prisoners and supervised<sup>17</sup> probationers. Most felons—I estimate at least 90 per cent—receive sentences to either state prison or supervised probation.<sup>18</sup> In this article, I exclude the small percentage of felons who receive such sentences as unsupervised probation, fines, and jail sentences. The percentages shown are percentages of felons who were sentenced to prison or supervised probation.

The unit of analysis in the study is the "sentence cluster." If an offender received only one sentence, that is his sentence cluster. If he received two or more sentences in the same county within 30 days of each other, all those sentences constitute a cluster. In each cluster, if the offender received more than one active (i.e., unsuspended) prison sentence, I added consecutive prison terms (if any) and selected the longest of any concurrent terms in order to compute a total active prison sentence.19 If the sentence cluster involved more than one offense, I chose a "principal offense"—the one that resulted in the longest sentence—as the offense for the cluster. It should be kept in mind that when a total active sentence was counted in my statistics as the sentence for a particular offense, in many cases this total was imposed either for more than one instance of this offense or for that offense plus one or more other offenses.20

bation and Parole, *Probation Flow Report, April 1-30, 1987* (Raleigh, N.C., May 27, 1987). According to this source, on April 30, 1987, 61,404 persons were on supervised probation, of whom 16,443 (27 per cent) were felons.

<sup>13.</sup> N.C. GEN, STAT. § 148-49.15(a) (1985 Cum. Supp.).

<sup>14.</sup> A formula for estimating time served on a non-CYO FSA sentence has been developed by Kenneth Parker, Manager of Research and Planning of the North Carolina Department of Correction, Raleigh, N.C. This formula is stated and explained in Stevens H. Clarke, Service of North Carolina Prison and Jail Sentences: Parole Eligibility, Good Time, and Gain Time, ADMINISTRATION OF JUSTICE MEMORANDUM No. 84/01 (Chapel Hill, N.C.: Institute of Government. The University of North Carolina at Chapel Hill, 1984), pp. 5-6. Since that publication appeared. Mr. Parker has adjusted his formula on the basis of more recent information: those interested should consult him. Also see the section on time served in prison later in this article.

<sup>15.</sup> North Carolina Department of Correction, Statistical Abstract: January Through December 1986 (Raleigh, N.C., 1987), p. 27.

<sup>16.</sup> North Carolina Department of Correction, Division of Adult Pro-

<sup>17.</sup> A probationer is an offender subject to a jail or prison sentence that is suspended on certain conditions set by the sentencing judge. A supervised probationer is one whose conditions of probation include supervision by a probation officer, and an unsupervised probationer is one whose conditions do not include this condition. N.C. GEN. STAT. § 15A-1341(b) (1983).

<sup>18.</sup> This estimate is based on data collected from felony judgments in 1980, 1981, and 1982. See Clarke, *supra* note 1, p. 13.

<sup>19.</sup> Under the FSA, the felon receives a single prison term, which is the maximum time he may be kept in prison. Pre-FSA law authorized the judge to impose both a minimum prison term and a maximum prison term (although in most instances no minimum was imposed). Under the pre-FSA laws, prison terms had consequences different from consequences under the FSA—for example, they carried eligibility for discretionary parole. But then, as now, the maximum term was the maximum time the offender could be kept in prison. For my statistics on pre-FSA sentences, 1 used the maximum prison term. (For details and legal sources, see Clarke, *supra* note 14.)

<sup>20.</sup> For example, suppose an offender was convicted of common law robbery, for which he received a five-year term, plus possession of drugs, for which he received a two-year term that was to be served consecutively to the five-year term. For statistical purposes, his principal offense was common law robbery (because he received his longest sentence for that offense); his total active sentence was seven years (five plus two).

Some felon prison inmates—about a fourth, according to the DOC data—had more than one sentence cluster, which made it nearly impossible to determine how long they served on each cluster. I therefore limited my analysis of time actually served in prison to inmates with a single sentence cluster.

The data on probation sentences used in the study were collected only through 1984-85. Consequently, analyses concerning the prison/probation decision do not go beyond that year.

Some statistical terms used in this article may be unfamiliar. The *mean* of a set of values is the average. The *median* is the mid-point of the range (50th percentile). The 25th percentile is the value such that 25 per cent of the values in the set are less than or equal to it and another 75 per cent are greater than or equal to it. (The 10th, 75th, and 90th percentiles are comparably defined.)

I used regression models in the study. Regression models measure the statistical association between each of a number of factors and an outcome while the other factors are held constant. (The outcomes I analyzed included the length of the active sentence imposed, the probability of receiving an active sentence, and the time actually served in prison.) In a regression model, the statistical associations are measured independently of each other—that is, the association of each factor with the outcome is estimated independently of the associations of all other factors in the model.

# The effects of the FSA on felony sentences

Types of sentences. Prison sentences include (I) split sentences (formally known as "special probation"), which require the offender to serve up to six months in prison as a condition of probation and then to be supervised by a probation officer;<sup>21</sup> (2) CYO sentences, which make the offender immediately eligible for discretionary parole; and (3) regular prison sentences. (Offenders with CYO and regular prison sentences earn good time and gain time as explained above.) I include in the "probation" category any sentence to supervised probation except a split sentence.

The use of various types of sentences was not expected to change as a result of the FSA, because the

Act left unchanged the judge's discretion to impose probation (i.e., suspend the sentence) and confer CYO status. In fact, there was little change except in the first year of the FSA. The proportions of all felons who received various types of sentences are shown in Figure 1. (Sentences imposed in 1981-82 and later years that were subject to pre-FSA law are excluded from Figure 1.) The proportion of felons who received probation was 36 per cent in 1976-77. It increased in the next year to 40 per cent and remained in the 39-40 per cent range for the next three years. In 1981-82, the first year after the FSA went into effect, the proportion who received probation decreased to 32 per cent but then returned to its former level (39-40 per cent) through 1984-85.22 Could the FSA have caused this temporary decrease in probation? Perhaps it did—not as a result of its express provisions, which did not change the judge's discretion to impose probation, but as a psychological effect. In the first year of the FSA, judges may have tended to treat the FSA's presumptive term as the General Assembly's recommendation for an active term.

During the years from 1976-77 through 1984-85, the use of split sentences increased somewhat, from 4 per cent of all felony sentences in 1976-77 to nearly 6 per cent in 1984-85. CYO sentences declined (from 11 per cent to 7 per cent) during the period, although they may now increase because of 1983 legislation increasing the age limit from 21 to 25 for such sentences.<sup>23</sup> Regular prison sentences remained in the 47-51 per cent range throughout the period.

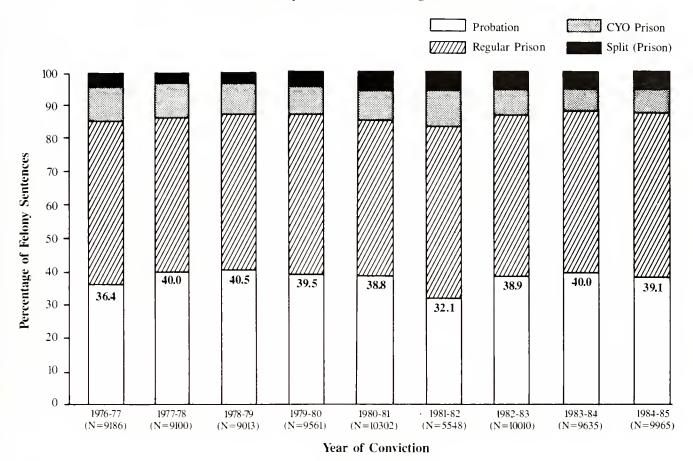
Length and variation of active prison sentences. Comparing the five years before the FSA (1976-1981) with the five years after the FSA indicates that the FSA has reduced both the length of and the variation in active felony prison sentences. This change almost certainly occurred because the presumptive terms set by the FSA for most offenses were shorter than the typical sentences imposed before the FSA. But these effects of the FSA seem to have "worn off" in the five years since the Act went into effect: felony sentences have gradually lengthened, and the range of variation has gradually widened. By 1985-86, the length and variation of sentences appeared to be returning to their pre-FSA levels.

<sup>21.</sup> N.C. GEN. STAT. § 15A-1351(a) (1983).

<sup>22.</sup> This pattern of change in the proportion that received probation was confirmed by a regression model of the type described in the next section.

<sup>23.</sup> N.C. Sess. Laws 1983, Ch. 531, § 3, codified in N.C. GEN. STAT. § 148-49.14 (1985 Cum. Supp.).

Figure 1. Proportion of Various Types of Sentences\* Imposed for Felonies, by Year, 1976-77 through 1984-85



\*Excludes sentences of unsupervised probation, split sentence (special probation) involving jail, and jail, estimated at less than 10 per cent of all felony sentences. Also excludes non-FSA sentences imposed after 1980-81.

I base these statistical conclusions on two sources. One source is the graphs of sentence length and variation, explained below, that were prepared for all felonies and also for each of the nineteen most common single felonies. The other source is a regression model (explained below), which confirmed the initial shortening of sentences after the FSA took effect, as well as the weakening of this effect as time passed.

The changes in length of sentences after the FSA went into effect are illustrated in Figures 2, 3, and 4. In these graphs, split sentences are excluded, and life sentences are treated as 600 months. The mean total active sentence length each year is shown as a black star and the median sentence length as a black rectangle. The 25th percentile is depicted as a white triangle and the 75th percentile as a black triangle. The 10th per-

centile (bottom line of the graphs) is shown as a white circle, and the 90th percentile (top line of the graphs) is shown as a black circle. The white central portion of the graph is the interquartile range—the range between the 25th and 75th percentiles, or the "middle 50 per cent" of the range. (Figure 3 contains just the mean and median values from Figure 2.)

The mean total active sentence for all felons (Figures 2 and 3) was 108 months in the five years before the FSA. In 1981-82, it dropped to 78 months for sentences imposed subject to the FSA. (Figures 2 and 3 exclude sentences under the pre-FSA law that were imposed in 1981-82 and later years.) For the five years 1981-82 through 1985-86, the mean sentence imposed under the FSA was 91 months—16 per cent shorter than the mean during the previous five years. The median sentence was

Figure 2. All Felonies: Distribution of Total Active Maximum Prison Sentence, 1976-77 to 1985-86 (excludes non-FSA sentences imposed in 1981-82 and later years)

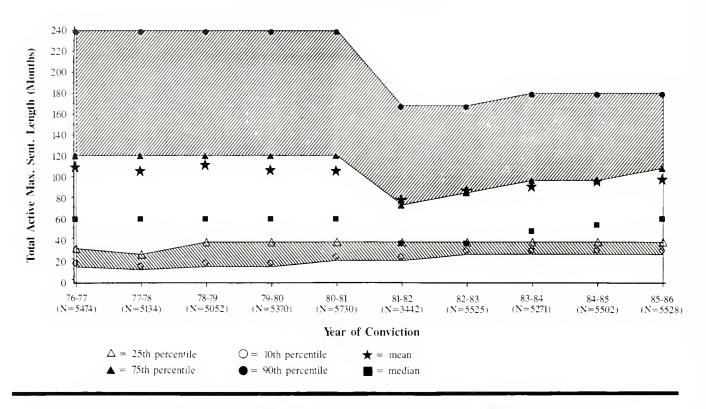
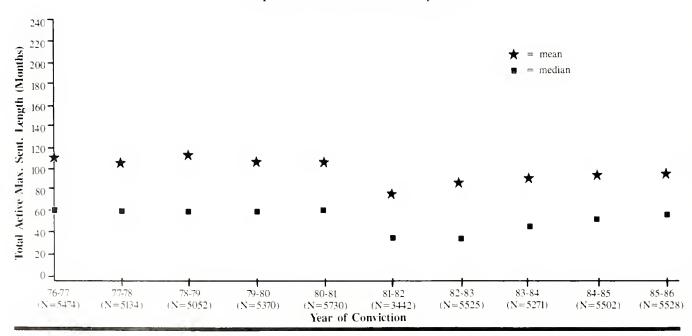


Figure 3. All Felonies: Mean and Median of Total Active Maximum Prison Sentence, 1976-77 to 1985-86 (excludes non-FSA sentences imposed in 1981-82 and later years)



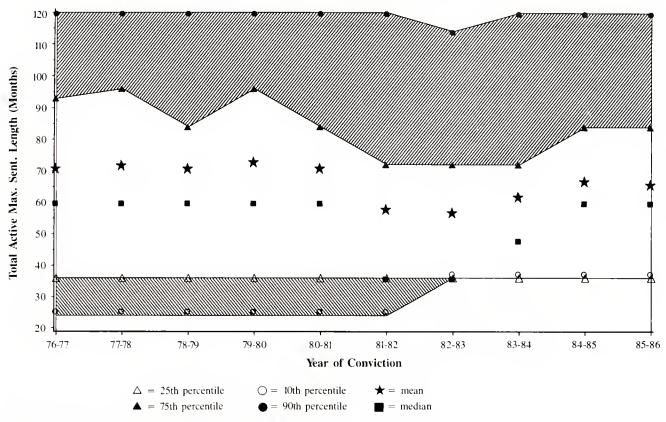


Figure 4. Felonious Breaking or Entering: Distribution of Total Active Maximum Sentence, 1976-77 to 1985-86

BROKEN LINE = 1981 FSA PRESUMPTIVE SENTENCE OF 36 MONTHS

48 months in the five post-FSA years—20 per cent shorter than the median in the five previous years (60 months).<sup>24</sup> But the median and mean sentence length gradually increased during the five post-FSA years. The mean increased from 78 to 98 months during those years, and the median increased from 36 to 60 months. Still, the net effect of the first five years of the FSA was to reduce the mean and median sentence length compared with sentence length in the previous five years.

The variation in sentence lengths decreased sharply in the FSA's first year but then increased. This can

As an example of a single offense, we can consider felonious breaking or entering, the most common felony (see Figure 4). The presumptive prison term for this offense is 36 months. Both the mean and median sen-

be seen in Figure 2 as the narrowing of the interquartile range (the inner white portion of the graph) in 1981-82. Thereafter the interquartile range widened, increasing from 36 months in 1981-82 to 72 in 1985-86, moving in the direction of its pre-FSA value (84 months).<sup>25</sup>

<sup>24.</sup> One sharp-eyed reviewer of an earlier draft of this article was curious about the fact that certain percentiles of sentence length—such as the pre-FSA median, 75th percentile, and 90th percentile—remained constant at such values as 60 months, 120 months, and 240 months. The reason is that judges are inclined to impose prison sentences in integral numbers of years, especially numbers divisible by five—for example, five years, ten years, and twenty years. In any distribution of felony sentence lengths that I have examined, sentences are heavily concentrated at such points.

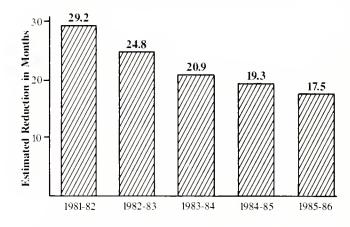
<sup>25.</sup> The same pattern of change in variation was observed in the standard deviation of sentence length. The standard deviation is a common measure of dispersion of values around the mean. It is defined as the square root of the following: the sum of squared deviations (differences) of each sentence from the mean, divided by the sample size minus one. In the five years preceding the FSA, the standard deviation of sentence length for all felons was between 143 and 167 months. It dropped to 112 in 1981-82 but then gradually increased, reaching 156 by 1985-86.

tence length for felonious breaking or entering dropped from previous levels when the FSA went into effect. (The data understate the post-FSA reduction in sentences for breaking or entering, because they include sentences in 1981-82 and later years that were still subject to the pre-FSA law as well as those subject to the FSA.) After its initial decrease, the mean increased by 1985-86 nearly to its pre-FSA level. The median sentence length dropped to the presumptive—36 months—in the FSA's first two years but then increased to its pre-FSA levels. The interquartile range narrowed in 1981-82, compared with the range in previous years, but widened in 1984-85.

The shortening of sentence lengths after the FSA went into effect could possibly have been caused not by the FSA but by other factors that might have shifted in strength or frequency after the FSA went into effect, such as the average age of felons being sentenced or their criminal histories. To test this possibility, I developed regression models of the total sentence length on the basis of data from the ten-year period 1976-77 through 1985-86. The models, limited to the 19 most common felonies, controlled for several variables that could have changed after the FSA went into effect. 27

The models confirm the trends observed in Figures 2 and 3: Sentence length decreased significantly<sup>28</sup> and substantially after the FSA went into effect, when variables that could have changed at the same time were held constant. The models also indicated that the effects of the FSA on sentence length gradually diminished after 1981-82 (see Figure 5). The FSA was associated with a 29-month reduction in felony sentences in its first year compared with sentence lengths in the previous five years (1976-81). The Act was associated with a 25-month reduction in its second year (compared with the five pre-FSA years), a 21-month reduction in its third year, a 19-month reduction in its fourth year, and an 18-month reduction in its fifth year. These estimates of the FSA's effects were made independently of the effects of other variables included in the model.

Figure 5. Estimated<sup>1</sup> Reduction of Felony Sentences<sup>2</sup> by FSA, Comparing FSA Sentences Imposed Each Year with Felony Sentences Imposed in Five Years Before FSA (1976-77 through 1980-81)



<sup>&</sup>lt;sup>1</sup>Estimated from regression model (N=29, 376; R<sup>2</sup>=.58).

## Adherence to FSA presumptive prison terms.

Since the FSA went into effect, there have been more sentences longer than the applicable presumptive term than sentences shorter than the presumptive term (see Figure 6). The primary reason why so many sentences have exceeded the presumptive is that the FSA allows more variation above the presumptive than below it. The presumptive term for most felonies is 30 per cent of the statutory maximum. For example, consider the largest felony class, Class H, which includes such offenses as larceny and breaking or entering. The presumptive term for Class H felonies is three years and the statutory maximum term is ten years. The range below the presumptive (zero to three years) is less than half the range above the presumptive (three to ten years).<sup>29</sup>

The percentage of sentences longer than the FSA presumptive has gradually increased, from 35 in 1981-82 to 53 in 1985-86 (Figure 6). This increase is consistent with the general lengthening of sentences that, as already explained, began a year or two after the FSA took effect. At the same time, the percentage of sentences

<sup>26.</sup> Data concerning sentences subject to the pre-FSA law that were imposed in 1981-82 and later years, after the FSA became effective, were excluded from the models.

<sup>27.</sup> These variables included the type of offense; the total number of offenses for which the total active sentence was imposed; the number of prior convictions that resulted in imprisonment; the defendant's age, race, and sex; and whether the sentencing court was in an urban area.

<sup>28.</sup> A difference or a result in a statistical analysis is treated as significant in my study if the probability that it occurred as an accidental result of sampling is less than .05. If this probability is at least .05 but less than .10, the result is considered marginally significant.

<sup>&</sup>lt;sup>2</sup>Includes active prison sentences for 19 most common felonies. Excludes split sentences and sentences over 600 months.

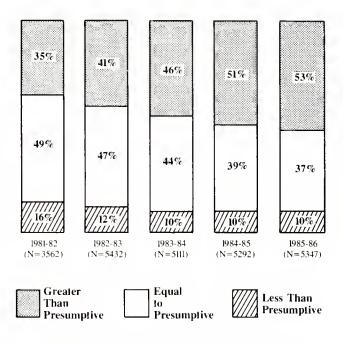
<sup>29.</sup> Another, although less important, reason why so many sentences were greater than the presumptive is that, as the section on data and methods explained, the sum of all the offender's sentences was used if he received two or more consecutive sentences.

equal to the presumptive decreased from 49 to 37. This trend suggests that judges have felt increasingly less constrained to adhere to presumptive terms. The reasons for this decline in judicial adherence to presumptives are discussed at the end of this article.

Predictability<sup>30</sup> of active sentence length. Sentence length became more predictable, in a statistical sense, after the FSA went into effect, although probably only temporarily. To compare predictability of sentences before and after the FSA, I formed regression models using pre-FSA and FSA data and compared the 95 per cent confidence intervals for the pre-FSA and FSA models. (The 95 per cent confidence interval is the range around the predicted sentence into which 95 per cent of actual sentences will fall.) This interval dropped sharply. In the pre-FSA model, 95 per cent of the sentences were within 147 months of the predicted sentence, and in the FSA model, 95 per cent were within 108 months of the predicted sentence. Furthermore, the accuracy of the model increased greatly when the FSA presumptives were added.31

Statistical predictions of sentences made after the FSA became effective were still not very accurate. This does not mean that sentences have been arbitrary or capricious; it means only that I could not predict sentences very well on the basis of data in the DOC's files. While these data include important factors like type of offense and number of previous convictions that resulted in imprisonment, they do not include a variety of other factors that judges consider, such as whether the defendant had prior convictions that did not result in imprisonment or the degree of injury or property loss caused by the crime. Better data would probably permit more accurate prediction. But even with better data, prediction would probably be more accurate under the FSA than under previous law.

Figure 6. Most Felonies:\* Percentage of Total Active Maximum Sentences That Were Less Than, Equal to, and Greater Than FSA Presumptive Prison Term, 1981-82 through 1985-86



<sup>\*</sup>Excludes: Sentences for being habitual felon, drug trafficking, and Class A felony, felony sentences not subject to FSA, and split sentences.

### Time actually served in prison

How did the FSA affect the actual service of time in prison? The available data indicate that actual time served became shorter, varied less, and more accurately predictable under the FSA. These results should be considered tentative until time served on FSA sentences longer than four years can be measured.

My analysis of time served was limited to sentences of four years or less by non-CYO felons<sup>32</sup> admitted to prison from 1973-74 to 1981-82.<sup>33</sup> The fraction of the total

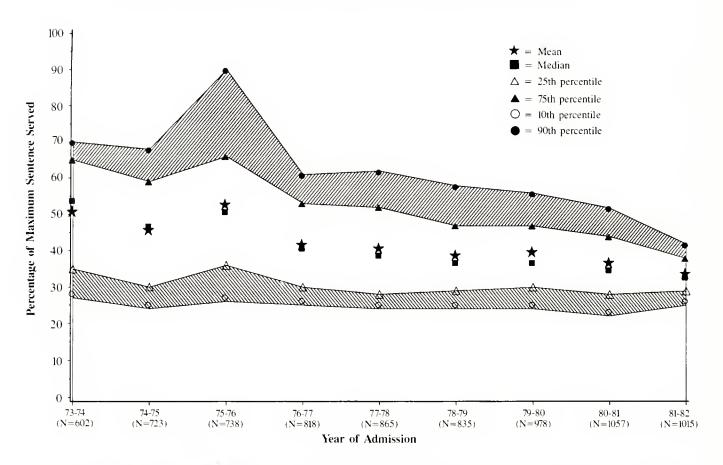
<sup>30.</sup> In this article, when I speak of "prediction," a better term might be called "post-diction": applying a formula or method of prediction to a set of data regarding some past event to see what it would have predicted if it had been applied when the event occurred.

<sup>31.</sup> For example, a regression model of pre-FSA sentence length without the FSA presumptive term explained 28 per cent of the total variance in sentence length, while a model of post-FSA sentence length including all the variables in the first model plus the presumptive term explained 59 per cent of the variance. Pre-FSA and post-FSA models, each incorporating the same variables including the presumptive term, were significantly different, indicating that the various factors included in the models operated somewhat differently before and after the FSA.

<sup>32.1</sup> excluded CYOs because the FSA did not change the law regarding them (they remained eligible for discretionary parole). I also excluded offenders with split sentences (special probation), offenders who had more than one cluster of sentences, and offenders sentenced under pre-FSA law in 1981-82 and later years.

<sup>33.</sup> I did this to avoid considering offenders who still could have been in prison when the data files were read (June 30, 1986); otherwise, the data would have been biased. (Prisoners sentenced during the first year of the FSA, if they had sentences longer than four years, might not have been released from prison by June 30, 1986.) Also, I wanted to compare amounts of time served on pre-FSA and FSA sentences of the same length.

Figure 7. Distribution of Percentage of Maximum Sentence Actually Served Before First Release, by Year of Admission, 1973-74 to 1981-82 (excludes misdemeanants and excludes felons with sentences over 48 months, split sentences, CYO sentences, and multiple sentence clusters)



maximum sentence actually served before first release dropped after the FSA took effect. The mean fraction served was 37 per cent for offenders admitted to prison in 1980-81 and 34 per cent<sup>34</sup> for those admitted under the FSA in 1981-82. Evidently, good time and gain time under the FSA shortened the service of prison sentences more than discretionary parole under the pre-FSA law had done.

But the fraction of the sentence served might have decreased for 1981-82 admissions even without the FSA, because it had already been declining for eight years—from an average of 51 per cent for those admitted in

I developed a regression model<sup>35</sup> of time actually served, including as explanatory variables the length of the sentence imposed, whether the offender was sentenced under the FSA or previous law, and other factors like the offender's age, race, sex, type of offense, and previous convictions that resulted in imprisonment.

<sup>1973-74</sup> to 37 per cent for those admitted in 1980-81. Why? One likely explanation is that the parole process accelerated as an indirect response to the rapid growth of the prison population in that period.

<sup>34</sup> For time served on FSA sentences over four years, a better rough estimate is 40 per cent. See the material on Kenneth Parker's estimating formula in Clarke, *supra* note 14

<sup>35.</sup> The model was based on data for all non-CYO FSA prisoners in 1981-82 with sentences up to four years (N=1018) plus data for a random sample of prisoners with sentences of up to four years admitted in 1973-74 through 1980-81 (N=1070). (Offenders with split sentences or more than one sentence cluster were excluded from sampling.)

This model confirmed that time served on non-CYO felony sentences of up to four years decreased (by about 10.4 per cent) in the first year after the FSA took effect compared with time served on similar sentences imposed during the previous eight years.

The variation in the fraction of the sentence served also decreased markedly after the FSA went into effect. As Figure 7 shows, both the interquartile range (inner white portion of the graph) and the range from the 10th to the 90th percentile narrowed in 1981-82. But here again, the change was consistent with a previous trend. Perhaps even before the FSA, the parole decision-making process was becoming more routine or mechanical, in response to the continuing growth in prison population.

The statistical predictability of time served in prison increased after the FSA became effective. In a pre-FSA model of time served, 95 per cent of the actual times served were within 8.6 months of the predicted time; in a post-FSA model, 95 per cent of the actual times served were within 3.7 months of the predicted time.

How did the FSA reduce the variation in actual time served on sentences? It considerably narrowed the discretion of correctional officials with regard to time served. As we saw earlier, before the FSA became effective, the Parole Commission had broad authority to release felons and could consider a wide variety of criteria in exercising it.<sup>36</sup> After the FSA became effective, the Commission lost its discretion to release felons, except for those who were CYOs. The FSA replaced this broad discretion with a system of good time and gain time, awarded at rates fixed by statute and only on the basis of the offender's behavior in prison.

Will the FSA's apparent effect on the time served in prison and the variation in time served lessen over time, as its effects on sentence length apparently have done? The various explanations for the "wearing off" of the FSA's effects on sentencing, discussed in the concluding section of this article, apply to the behavior of judges and attorneys, not to the behavior of correctional officials. The FSA's routinization of the sentence-shortening process through statutory good time and gain time may well last until the laws are changed. But those laws have already been modified in small ways. As the concluding section explains, the General Assembly, faced with a steadily growing prison population, has passed several measures since the FSA took effect that

have slightly increased correctional officials' discretion to release inmates early.

#### The FSA's effects on racial disparity

There is some statistical evidence of a small relationship in pre-FSA days between race and length of sentence-sometimes favoring white offenders, and sometimes favoring black offenders.<sup>37</sup> The statistical results, in my opinion, are inconclusive. In any event, if blacks did in fact suffer a disadvantage in sentence length, it seems to have decreased or disappeared after the FSA became effective. One reason why the FSA may have reduced or eliminated racial disparity in sentencing is that the Act reduced the overall variation in length of felony prison terms, thereby eliminating whatever impact race, or race-related social characteristics, may have had before the FSA. But if this explanation is correct, the effects of the FSA on racial disparity may not last, because—as explained above—variation in length of active sentence seems to be returning to its pre-FSA level.

What about racial disparity in regard to time served in prison? With respect to non-CYO felony sentences up to four years, a regression model indicated that in pre-FSA days blacks served an estimated 8 per cent longer than whites, when variables other than race are controlled for. The model further indicated that after the FSA went into effect, this disparity virtually disappeared. Why? Perhaps the social and economic disadvantages of black prisoners were more detrimental to them in the pre-FSA parole process than they were in the earning of good time and gain time under the FSA.

# The FSA's effect on the state's prison population

During the 1970s, North Carolina's prison population was a matter of great concern. This concern was one main reason why the General Assembly, in 1974, created the Commission on Correctional Programs, which drafted what eventually became the FSA. North Carolina's prison population was then, and still is, very large compared with the prison populations of most states, but its growth seems to have slowed considerably in the 1980s. *The FSA, because it has reduced felony sentences and time served in prison—at least for a few* 

<sup>37.</sup> For the details of this analysis, see Section IV.C of Clarke, *supra* note 1.

years—has undoubtedly contributed to the slowing of prison population growth in the 1980s. But its effects may be short-lived if the length of felony sentences continues to increase.

Bulletins published by the Bureau of Justice Statistics (BJS) in the United States Department of Justice indicate that from 1980 to 1986, the total of "sentenced prisoners" grew more slowly in North Carolina than in all but two states. (BJS defines "sentenced prisoners" as "prisoners serving sentences of more than one year in state prisons.") While the number of sentenced prisoners in the custody of all states and the District of Columbia increased by 66 per cent from 1980 to 1986 and the number of sentenced prisoners in custody in southern states increased by 47 per cent, the number in North Carolina's custody increased by 15 per cent less than one-fourth as fast as the all-states total.38 During the same period, the incarceration rate (the number of sentenced prisoners serving sentences of more than one year in state prison per 100,000 state residents) increased by 55 per cent in all states combined, by 32 per cent in all southern states combined, and by only 6 per cent in North Carolina. In other words, from 1980 to 1986, North Carolina's incarceration rate increased about one-tenth as fast as the rate for all states combined.

The increase in North Carolina's incarceration rate has slowed in the 1980s. In 1975, when the United States Department of Justice began to publish its data, North Carolina had the highest incarceration rate of any state (not counting the District of Columbia). From 1975 to 1980, the rate in North Carolina went from 210 to 244 (an increase of 16 per cent). From 1980 to 1986, it continued to increase, but at a greatly reduced rate—6 per cent (from 244 to 254).

But there is no cause for complacency about prison overcrowding in North Carolina. The state's incarceration rate is still very high—the twelfth highest among the states (not counting the District of Columbia).<sup>39</sup> Fed-

eral lawsuits alleging unconstitutional overcrowding are still pending. The state government is struggling to speed prison construction with already-appropriated funds to avoid a federal court takeover of the prison system. The General Assembly in 1987 enacted a bill<sup>40</sup> to limit temporarily the state's prison population to 17,460, and continued to be concerned about the costs of imprisonment and interested in alternative forms of criminal punishment.<sup>41</sup> And the FSA's effect on the situation seems to have been only temporary.<sup>42</sup>

# Why did the FSA's effects on sentencing decrease?

This article deals mainly with sentencing statistics. I treat the statistics on prison sentences as *indicators* of the degree of judicial adherence to the norms (presumptive terms) set by the FSA. I do not mean to imply that the means, medians, and so on are *synonymous* with judicial adherence to the FSA presumptives. Nor do I mean that judges violated the provisions of the FSA. I assume that judges generally had legally adequate reasons for imposing longer and more widely varying sentences in the third, fourth, and fifth years of the FSA and that they made the requisite findings of aggravating circumstances.

The length and variation of sentences in the five years before the FSA can be regarded as indicators of what the General Assembly wanted to change when it passed the Act. The legislature in effect decided that sentences varied too widely without a reasonable basis for the differences. It also wanted to forestall a further increase in the prison population—even on the short term—as a result of the FSA. Therefore, it set standard sentences, and set them lower than the typical sentences that had been imposed formerly. And sentence length and variation did decrease after the FSA—for a couple of years. Then they moved back toward their previous levels.

There are several possible explanations for the apparent weakening of the FSA's early effects on sentence length and variation. One possible explanation—

<sup>38.</sup> See the following reports and bulletins published by the United States Department of Justice, Bureau of Justice Statistics (Washington, D.C.: Government Printing Office): Prisoners in State and Federal Institutions on December 31, 1975 (1977); Prisoners in State and Federal Institutions on December 31, 1976 (1978); Prisoners in State and Federal Institutions on December 31, 1979 (1981); Prisoners in State and Federal Institutions on December 31, 1980 (1982); Prisoners in State and Federal Institutions on December 31, 1981 (1983); Prisoners in State and Federal Institutions on December 31, 1983 (1986); Prisoners in 1980 (1981); Prisoners in 1981 (1982); Prisoners in 1982 (1983); Prisoners in 1983 (1984); Prisoners in 1984 (1985); Prisoners in 1985 (1986); Prisoners in 1986 (1987).

<sup>39</sup> United States Department of Justice, Bureau of Justice Statistics, Prisoners in 1986 (Washington, D.C.: U.S. Government Printing Office, 1987).

<sup>40.</sup> N.C. Sess. Laws 1987, Ch. 7.

<sup>41.</sup> See Clarke, "Sentencing and State Corrections," in Joseph S. Ferrell, ed., *North Carolina Legislation 1987* (Chapel Hill, N.C.: Institute of Government, The University of North Carolina at Chapel Hill, 1987).

<sup>42.</sup> An entire recent issue of *North Carolina Insight* [Vol. 9, no. 3 (March 1987)] was devoted to the subject of prison overcrowding in North Carolina and attempts to control it.

probably the best—is that judges, prosecutors, and defense attorneys have learned how to use the FSA after several years of experience and appellate decisions on the correctness of aggravating and mitigating factors. Judges discovered that although their sentencing discretion had been narrowed somewhat by the FSA, it was broader than they first thought. Another explanation is that the FSA's appellate-review provisions, which its architects hoped would increase consistency in sentencing, did not authorize review of whether sentences are proportionate to whatever aggravating and mitigating circumstances the trial judge found. After the North Carolina Supreme Court recognized the limited scope of sentence appeal in 1983,43 judges discovered that the weight they assigned to the aggravating and mitigating circumstances they found would not be second-guessed on appeal.

A third possible explanation of the "wearing off" of the FSA's effects on sentencing is that some judges have been displeased with the FSA's good-time and gain-time provisions, which together result in a "discount" of 60 per cent or more of the sentence.<sup>44</sup> Some judges

also have been unhappy with post-FSA legislation<sup>45</sup> (enacted to help relieve prison overcrowding) that increased the discretion of correctional officials to release prisoners sooner. This adverse judicial reaction may have led some judges to compensate for the expected reduction of prison terms by imposing longer sentences.

## Waste Management (continued from page 44)

to recycling are not likely to be as great as objections to waste-to-energy facilities. But the long-term success of recycling depends highly on the market for recycled goods. And it also requires citizens to change their way of doing things—they must learn not to simply throw all trash away.

Mecklenburg County will need to rely on incineration to manage solid waste over the long run. Current conditions make it unlikely that adequate landfill will be available to dispose of all of the county's waste for very long. Aggressive recycling policies are important but are unlikely to take care of more than about 30 to 35 per cent of the total waste.

Although waste-to-energy technology has been well tested elsewhere, Mecklenburg County needs to get a waste-to-energy facility operating in order to evaluate its

effect on the solid waste situation. Some time may be necessary to work out any problems in the process and to run necessary tests. Finding out how the first plant works before plans are completed for the next one will benefit the county.

The North Carolina solid waste management program will encourage more communities to turn solid waste management over to a single governing body and to develop comprehensive plans for this purpose. For some places, landfills may be sufficient. For many others, however, landfills will not, by themselves, be an adequate strategy, and other options like recycling and incineration will be necessary. Mecklenburg County's experience with this process may be useful to other communities, as solid waste management issues become more serious across the state.

<sup>43.</sup> State v. Ahearn, 307 N.C. 584, 300 S.E.2d 689 (1983).

<sup>44.</sup> Chase B. Saunders, "Sentence Length in North Carolina: Anybody's Guess" (unpublished monograph written in 1984 by a superior court judge in North Carolina's 26th Judicial District).

<sup>45.</sup> For example, in 1983 and 1984, the General Assembly enacted measures that allow the Parole Commission to parole offenders earlier than their normal release dates in two situations: (a) when the Secretary of Correction finds that prisons are seriously overcrowded ("emergency parole"); and (b) when, in the Commission's discretion, the offender is released to work off the balance of his prison term by performing supervised community service ("community service parole"). N.C. GEN. STAT. § 15A-1380.2(h); id. § 148-4.1 (Cum. Supp. 1985). These measures were strengthened in the 1985, 1986, and 1987 sessions; see id. § 15A-1380.2(h); id. § 148-4.1 (Interim Supp. 1986). A prison-population "cap" bill-in effect, a parole speed-up-was enacted in 1987 (N.C. Sess. Laws 1987, Ch. 7). It is unclear what effect this may have on sentence length. For a discussion of measures enacted in the 1983-87 period, see the following articles by Stevens H. Clarke: "Sentencing and State Corrections," in Ann L. Sawyer, ed., North Carolina Legislation 1983 (Chapel Hill, N.C.: Institute of Government, The University of North Carolina at Chapel Hill, 1983), p. 238; "Sentencing and State Corrections," in Robert P. Joyce, ed., North Carolina Legislation 1985 (Chapel Hill, N.C.: Institute of Government, The University of North Carolina at Chapel Hill, 1985), p. 247; "Criminal Justice and Corrections," in Joseph S. Ferrell, ed., North Carolina Legislation 1986, (Chapel Hill, N.C.: Institute of Government, The University of North Carolina at Chapel Hill, 1986). p. 21; Stevens H. Clarke, "Sentencing and State Corrections," in Joseph S. Ferrell, ed., North Carolina Legislation 1987 (Chapel Hill, N.C.: Institute of Government, The University of North Carolina at Chapel Hill, 1987).



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