Popular Government

Published by the Institute of Government / The University of North Carolina at Chapel Hill

Summer 1982

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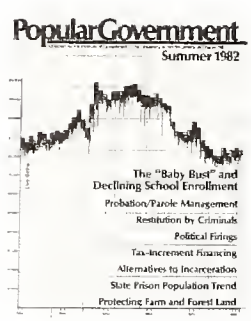

Popular Government

Vol. 48/No. 1 **Summer 1982**

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Cover Illustration: C. Angela Mohr. **Maps and charts** by Ted Clark. **Photos** by Catherine Carter.

POPULAR GOVERNMENT (ISSN 0032-4515) is published four times a year (summer, fall, winter, spring) by the Institute of Government, Knapp Building 059A. The University of North Carolina at Chapel Hill, Chapel Hill, N.C. 27514. Subscription: per year $6.00. Second-class postage paid at Chapel Hill, N.C.

Recent Developments in North Carolina's Prison Population

Stevens H. Clarke and William P. Pope

Anyone who has ever seen news coverage of a prison story on television and glimpsed the tiny, primitive cells and the overwhelming press of people that characterize some state prisons is well aware that overcrowding of prisons is a very widespread problem. On December 31, 1981, 369,009 inmates were confined in state and federal prisons across the nation—an increase of 12 per cent since the end of 1980.[1] From 1977 to 1981, the total national prison population increased by 23 per cent; since 1969, when the current uptrend began, it rose by 81 per cent.[2] The courts have ordered many states to relieve prison overcrowding and improve conditions, and the increasing population will probably contribute to continued litigation over prison conditions.

In North Carolina the problem is of special concern: among the 50 states, North Carolina now has the fifth highest population of prison inmates who are serving sentences of over one year.[3] And incarceration is becoming more expensive. The present estimated cost for maintaining a prisoner in a state prison is at least $8,500 per year. It now costs $54,000 to build just one cell, and the cost is expected to continue to rise.[4]

But despite the increasing attention prisons have received from the media, little information has been published on either the rise in North Carolina's prison population or possible reasons for it. This article will explore these topics and also examine predictions of the future prison population in this state.

During the past fifty years the national prison population has fluctuated considerably. A graph of the total sentenced prisoners in state and federal institutions since 1925 resembles a gently rising mountain range that features progressively higher peaks with intermittent drops (see Figure 1). The first major increase in prison population coincided with the Depression years and ended abruptly with the outbreak of World War II. At the height of this rise—between 1936 and 1939—state prison population across the nation jumped 7.8 per cent a year. The drop that followed was the fastest in the whole period, since 1925. The last significant decrease in prison population took place between 1962 and 1967, followed by a slow increase (1969-72), which then accelerated (1973-80). The present trend is the third period of sustained growth since national figures became available in 1925. It is also the most dramatic in the history of United States prisons.

The current growth period in prison population continues to be dominated by the South. This is illustrated by the incarceration rate—the number of prisoners serving sentences longer than one year per 100,000 general population. In 1950, for example, the incarceration rate for the South was 114—22 per cent greater than the average for the other three regions. By 1960 the South's rate had become 33 per cent higher than the other regions' average rate; it became 41 per cent higher by 1970 and 93 per cent higher in 1978.[5]

North Carolina typifies this trend. *According to the latest figures available (1981),[6] North Carolina's incarceration rate of 250 is the third highest in the nation,* exceeded only by the rates of South Carolina and Nevada (both 253). The national rate was 154 and the rate for the South as a whole was 202. (Figure 2 shows comparative rates in 1979; North Carolina's rate then was only 240 but still the highest of any state.) In addition, North Carolina ranks fifth in the nation in total state prison population, with 15,791 inmates in state prisons at the end of 1981. This figure represents an increase of 65 per cent from 1970, when the state's prison population was 9,770.

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1. U.S. Department of Justice, Bureau of Justice Statistics, *Prisoners in 1981* (Washington, D.C., 1981). This total includes 28,133 federal prisoners and 340,876 state prisoners, but not sentenced prisoners who are serving time in local jails.

2. *Ibid.*; United States Department of Justice, *Prisoners in 1980* (Washington, D.C., 1981) Bureau of Justice Statistics.

3. U.S. Department of Justice, *op. cit. supra* note 1.

4. N.C. Department of Correction, *Research Bulletin* (Raleigh, N.C., December 10, 1981). In its expansion request to the 1981 N.C. General Assembly, the Department of Correction requested $27 million to construct a 500-bed medium-custody, single-cell prison at a cost of $54,000 per bed. With a projected inflation of 1 per cent per month, the Department expects a similar unit requested for the 1983-85 biennium to cost $69,000 per cell.

5. U.S. Department of Justice, National Institute of Justice, *American Prisons and Jails*, Vol. II: *Population Trends and Projections (Washington, D.C., 1980), 17-21.*

6. U.S. Department of Justice, *op. cit. supra* note 1.

Why did North Carolina's prison population increase?

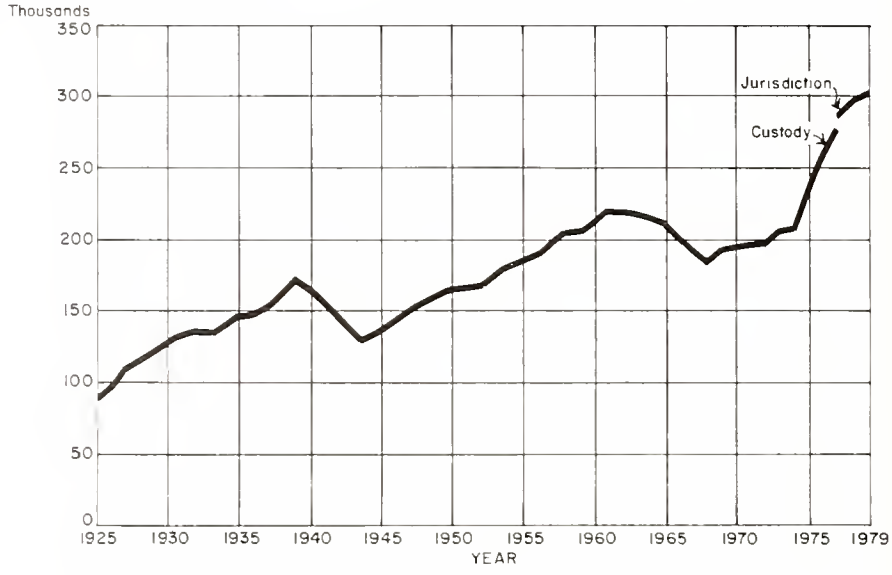
Figure 3 shows the end-of-year North Carolina state prison population from 1971 to 1980. The total number of prisoners—felons plus misdemeanants—rose fairly steadily from 9,814 to 15,479. (Felons are prisoners sentenced for serious crimes usually punishable by more than two years of imprisonment; misdemeanants are prisoners sentenced for lesser crimes called misdemeanors, which are punishable by not more than two years of imprisonment.) The most obvious cause of the total increase is the increase in the *felon* population, as the solid black line in Figure 3 shows. The felon population rose more rapidly than the total population. The distance between the two lines represents each year's misdemeanant population, which declined.*

The total admissions to North Carolina's prisons from 1971 to 1980 is shown by the top dotted line in Figure 4. (The bulk of total admissions were newly sentenced prisoners, but they also include offenders whose probation or parole was revoked and captured fugitives.) The admissions remained fairly stable during this period and even declined slightly. Two opposing trends contributed to this stability: admissions of misdemeanants dropped sharply from 1971 to 1978 (although they turned up during 1979 and 1980), while admissions of felons increased at about the same rate at which misdemeanants declined. At the beginning of the 1971-80 decade, the ratio of misdemeanant admissions to felon admissions was 2.65 to 1, but by the end of that era it was only .81 to 1. While the trends for admissions of felons and misdemeanants may seem to have canceled each other, in fact they did not. Admissions of felons have a stronger effect on the prison population than admissions of misdemeanants do, because felons spend longer time in prison. In 1980, the mean active maximum prison sentence imposed on felons was 9.1 years; for misdemeanants it was only 1.5 years. Consequently, the drop in admissions of misdemeanants during the 1970s was more than compensated for

* Figures 3 through 6 are ratio-scale graphs; i.e., they show vertical changes on a logarithmic scale so that the amount of vertical difference between any two points on the graph is proportional to the percentage difference between them rather than the absolute difference.

Figure 1

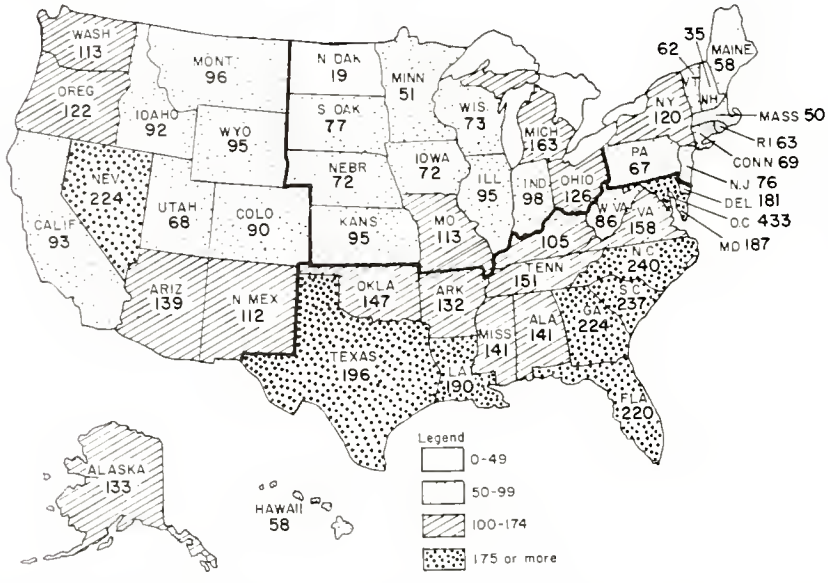
Number of Sentenced State and Federal Prisoners at Year's End, 1925-79



Source: *Prisoners in State and Federal Institutions on December 31, 1979*, Bureau of Justice Statistics, United States Department of Justice, 1980.

Figure 2

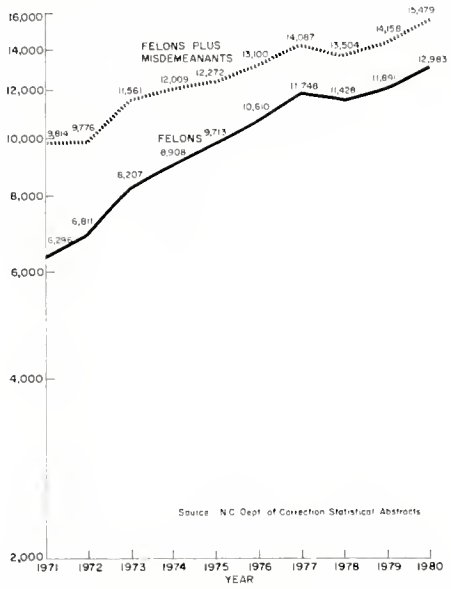
Number of Sentenced State and Federal Prisoners per 100,000 U.S. Population, by State, 1979



Source: *Prisoners in State and Federal Institutions on December 31, 1979*, Bureau of Justice Statistics, United States Department of Justice, 1980.

Figure 3

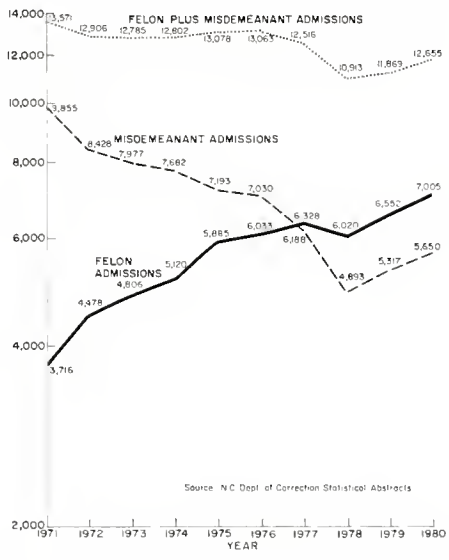
North Carolina Prison Population at End of Year
(Ratio-Scale Graph)



Source: N.C. Department of Correction Statistical Abstracts

Figure 4

Total North Carolina Prison Admissions
of Felons and Misdemeanants by Year, 1971-80
(Ratio-Scale Graph)



Source: N.C. Department of Correction Statistical Abstracts

by increased felon admissions, and the prison population increased.

Why have admissions of felons increased so rapidly? One apparent reason is that arrests for serious crimes have soared, especially between 1973 and 1975. Figure 5 illustrates the increase in arrests for the offenses of burglary, breaking or entering, larceny, and receiving and possessing stolen goods – a category of crimes that accounted for 34 per cent of new admissions (prisoners newly sentenced) to North Carolina's prisons in 1980.[8] After dropping in the early 1970s, the number of arrests for such crimes rose rapidly from 1973 to 1975, increasing by a factor of four; it then decreased somewhat by 1977 and climbed again from 1977 to 1980. Prison sentences for these offenses also increased sharply from 1973 to 1980, but not nearly so fast as arrests; arrests climbed by about 300 per cent from 1973 to 1980, while prison sentences increased by about 80 per cent (see Figure 6). From 1971 to 1980, arrests for assaults and drug offenses showed a rapid increase similar to the trend in arrests for burglary, larceny, etc., but prison sentences for these offenses did not follow the same trend. Sentences for felonious assault increased but not nearly so fast as arrests did; prison sentences for drug offenses (both felonies and misdemeanors) declined sharply after 1976 but went up again in 1980.

Have prison admissions increased in the 1970s because courts were getting tougher on criminal suspects? Apparently not. The comparison of trends in arrests and prison sentences, as we have just seen, suggests that courts in the 1970s were actually becoming more lenient in terms of the proportion of arrested suspects they sent to prison, even though in absolute terms prison sentences were increasing each year. If the proportion of suspects sentenced to prison was in fact declining, this may have occurred either because the courts found it difficult to keep up with the increasing workload presented by the deluge of new arrests (especially from 1973 to 1975), or because they wished not to add to the burgeoning prison population – or both. The apparent restraint by the criminal courts in imposing prison sentences has had an effect on the composition of the prison population, as the next section explains.

8. N.C. Department of Correction, *Statistical Abstract 1980* (Raleigh, N.C.: 1981).

The changing composition of the prison population

The percentage of the prison population who were serving sentences for more serious crimes increased during the 1970s, and the percentage who were serving time for less serious crimes decreased. The composition of the prison population shifted toward a greater concentration of felons, as Figure 3 shows, and also toward a heavier concentration of *violent* felons. As Table 1 indicates, from 1971 to 1980 the proportion of prison inmates sentenced for felonies against property increased by 21.6 per cent, but the proportion who were sentenced for felonies involving personal violence rose by 48.1 per cent—more than twice as fast. (The proportion sentenced for drug felonies also increased rapidly but is still quite small.) Meanwhile, the proportion who were serving time for assault misdemeanors went down by 35.0 per cent and the proportion who were serving time for misdemeanors against property decreased by 38.3 per cent. The proportion who were serving sentences for what are considered the least serious crimes (traffic violations, nonsupport, and the like) dropped by 63.3 per cent. The result of these changes is that the proportion of prisoners who were convicted of violent felonies was 42.5 per cent at the end of 1980 (and has probably increased since then if the earlier trend has continued), while the proportion convicted of the least serious crimes was only 8.7 per cent. *The entire prison population has thus shifted toward the serious end of the crime spectrum.* This may mean that today's average prisoner—particularly the average felon—is more violent and difficult for prison staff to manage than the average inmate of ten years ago.

Predicting the prison population

We have noted that one probable factor in the growth of North Carolina's prison population is increased arrests. Increased arrests may be due to the increase in reported crime during the 1970s and also perhaps to improvements in police manpower and efficiency. But going beyond simply comparing prison trends with other trends, we must acknowledge that the growth of the prison population is a complex and poorly understood phenomenon.

Figure 5

Arrests for Burglary, Breaking or Entering, Larceny, and Possession and Receiving of Stolen Goods in North Carolina by Year, 1971-80, As Reported by the FBI Uniform Crime Reports (Ratio-Scale Graph)

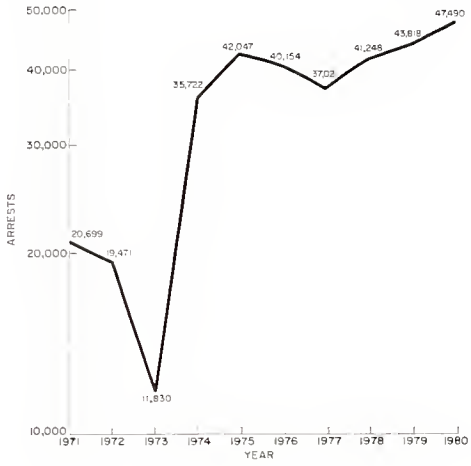
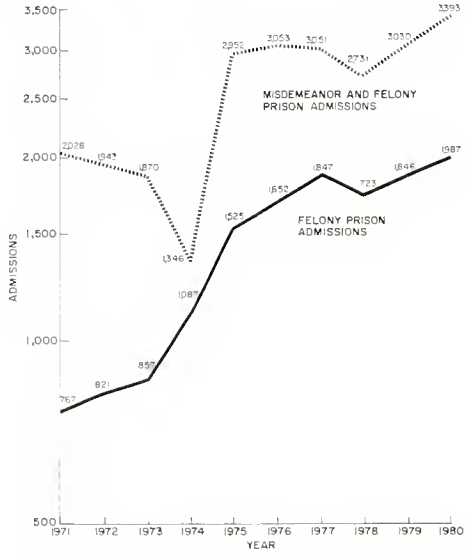


Figure 6

Prison Sentences for Burglary, Breaking or Entering, Larceny, Possession and Receiving of Stolen Goods, Felonies, and Felonies Plus Misdemeanors in North Carolina by Year, 1971-80, as Reported by the N.C. Department of Correction (Ratio-Scale Graph)



Predicting the prison population, like all predictions, is difficult. Experts disagree about which prediction method is best—and even whether there *is* any reliable method.

One approach is to use trends in the age, sex, and race composition of the general population. Much has been written about the "baby boom"—the rapid spurt in the birth rate after World War II—and its consequences in many areas, like the overcrowding of public schools and colleges during the 1960s and 1970s. The passing of the "boom" is now manifested in a sharp drop in school enrollment (see the article by Charles D. Liner elsewhere in this issue). This same phenomenon may occur in prison "enrollments." Arrest statistics indicate that members (especially males) of the 15-24 age group are much more likely to commit serious crimes than older or younger people.[9] This age group is also overrepresented in prison when its numbers are compared with the size of the general population. (In North Carolina in 1980, about 46 per cent of all the felons newly sentenced to prison were males between 15 and 24 years of age, but males in this age group constituted only 10 per cent of the state's total population that year.[10]) Population forecasts indicate that the state's male population in this age group—both white and nonwhite—will peak and begin to fall by 1990.[11] The same trend is predicted in Pennsylvania, and researchers at Carnegie-Mellon University predict a decrease in Pennsylvania's prison population by 1990.[12] So perhaps the passing of the baby boom will alleviate North Carolina's prison population problem.

But in a recent U.S. Department of Justice report, Abt Associates, Inc., a firm of professional consultants, was skeptical of the use of general population trends to predict prison population.[13] In a review of various prediction methods, the consultants said that (a) changes in prison population in the past decade across the nation have been "too rapid and abrupt to fit any simple function of the demographic distribution,"[14] and (b) the incarceration rates of various age groups are too unstable over time for reliable prediction.

These consultants were also skeptical of trying to predict prison population from "leading indicators" like crime or unemployment rates. They found no significant correlation between either reported crime or unemployment and the prison population nationally. (Even if such correlations existed, the consultants say, they would not have been helpful in predicting future prison population trends because it is difficult to forecast crime and unemployment.)

The North Carolina Department of Correction has not used the various methods reviewed by the consultants just quoted (like the consultants, the Department's research staff found these methods unfruitful). Instead, the Department has followed trends and projected—over short periods of a few years—the size of various groups categorized by length of their prison term in the prison population. It has derived its forecasts from these projections of sentence-length groups, using the current population and average time served for each group, along with projections of admissions and proportion of sentence served before release.

The North Carolina Department of Correction's current prison population forecast (see Table 2) calls for a continued steady increase, at a somewhat slower rate than the 1970s, to a level of 21,000 inmates in the 1987-88 fiscal year.[15]

9. Stevens H. Clarke, *Materials on Felony Sentencing in 1979* (Chapel Hill, N.C.: Institute of Government, The University of North Carolina at Chapel Hill, 1981).

10. N.C. Department of Correction, *Statistical Abstract 1980* (Raleigh, N.C.: 1981) (this calculation assumes that all female felons admitted to prison were between 15 and 24 years of age, so the figure shown in the text slightly underestimates the percentage of males admitted); N.C. Office of State Budget and Management, *North Carolina Population Projections* (Raleigh, N.C., 1978); N.C. Office of State Budget and Management, *Update: North Carolina Population Projections* (Raleigh, N.C., 1981).

11. N.C. Office of State Budget and Management, *op. cit. supra* note 10.

12. Alfred Blumstein, Jacqueline Cohen, and Harold D. Miller, "Demographically Disaggregated Projections of Prison Populations" (Pittsburgh, Pa.: Urban Systems Institute, Carnegie-Mellon University, 1978).

13. U.S. Department of Justice, *op. cit. supra* note 5.

14. *Id.* at p. 47.

15. These projections by the Department of Correction take into account the expected effects of North Carolina's new Fair Sentencing Act (N.C. GEN. STAT. Ch. 14, Art. 1; *id.* Ch. 15A, Arts. 81A, 85A). This act applies to felonies committed on or after July 1, 1981. It groups felonies into categories and assigns to each category a presumptive or "standard" prison term. It abolishes parole for felons (except for committed youthful offenders, felons sentenced to life terms, and felons whose crimes were committed before July 1, 1981), but felon inmates receive one day off their prison terms for each day of good behavior.

Table 1

Composition of North Carolina Prison Population at Year's End by Type of Offense: 1971 and 1980 Compared

	Proportion in 1971	Proportion in 1980	Percentage Increase (+) or Decrease (—) in Proportion
Violent felonies (murder, manslaughter, robbery, assault, rape, kidnapping)	28.7%	42.5%	48.1%
Misdemeanor assault	4.0%	2.6%	-35.0%
Felonies against property (larceny, breaking or entering, burglary, burning, forgery)	27.8%	33.8%	21.6%
Misdemeanors against property (larceny breaking or entering, worthless checks)	12.8%	7.9%	-38.3%
Drug felonies	3.0%	4.5%	50.0%
Other offenses (traffic violations, nonsupport, etc.)	23.7%	8.7%	-63.3%
Total	100.0%	100.0%	—

Source: N.C. Department of Correction, *Statistical Abstract 1971* and *Statistical Abstract 1980* (Raleigh, N.C.)

Table 2

Prison Population Forecasts through 1988

Fiscal Year	Average Population
1981-82	16,095
1982-83	16,725
1983-84	17,575
1984-85	18,475
1985-86	19,500
1986-87	20,400
1987-88	21,000

Source: N.C. Department of Correction

The link between prison population and prison capacity

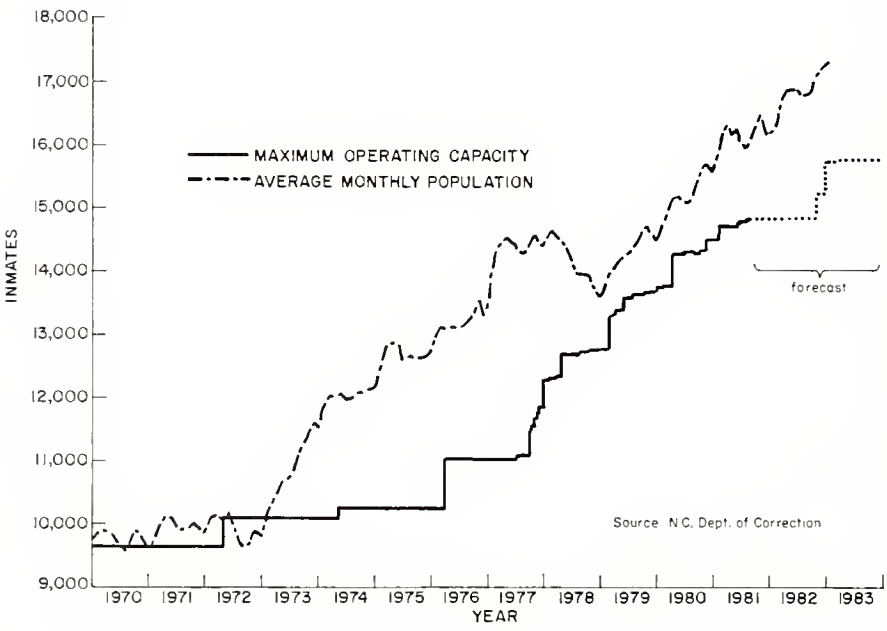
In North Carolina, as in many other states, the prison population has long exceeded the capacity of the prison system. (Prison capacity is an administrative concept; it is essentially the number of prisoners the prison system can hold calculated on the basis of the amount of space per prisoner and ratio of staff to prisoners that the prison administration regards as adequate for security and treatment programs.) *The state has been playing a catch-up game during the 1970s; as prison population has increased, prison capacity has expanded with new construction, but then prison population has risen again.* (See Table 3 and Figure 7.) In 1970 the average prison population exceeded the prison capacity by only 164. By 1981 capacity had increased by almost 5,000 (from 9,606 to 14,538), but prison population had also increased (from 9,770 to 16,095) and still exceeded capacity (by 1,557). During the next six years, the population is expected to increase by about 5,000 from its 1981 level (see Table 2), and a prison construction program is planned that will add at least three 500-cell units.

The U.S. Justice Department report mentioned earlier found only one variable helpful in predicting future prison population: capacity of the prison system.[16] The consultants determined from their statistical analysis that prison population and capacity are associated—not because increased prison population caused growth in prison capacity (i.e., construction of more prison space) but because increased

16. U.S. Department of Justice, *op. cit. supra* note 5, at 53.

Figure 7

North Carolina Prison Capacity Compared with Inmate Population



Source: N.C. Department of Correction

Table 3

N.C. Prison Capacity and Inmate Population, 1970-84

Year	Initial Max. Operating Capacity	Average Annual Population
1970	9,606	9,678
1971	9,606	9,899
1972	9,606	9,931
1973	10,066	10,792
1974	10,066	11,935
1975	10,216	12,582
1976	10,216*	13,124
1977	10,980	14,332
1978	12,271	14,189
1979	12,739	14,240
1980	13,732	15,150
1981	14,498	16,095
1982	14,810	16,845**
1983	14,764***	
1984	15,752***	

*Capacity data before March 20, 1976, are somewhat less reliable than later data

**Projected population

***Scheduled construction includes Central Prison replacement, new units in Greene and Montgomery counties, and additions at Rowan and North Carolina Correctional centers for Women.

Source: N.C. Department of Correction

prison capacity caused growth in prison population.

The Justice Department consultants' finding that prison population growth does not cause prison construction may or may not be valid,[17] but it is contrary to common sense. North Carolina legislators who approved large expenditures for prison construction during the 1970s did not *want* to encourage an increase in the prison population—they probably felt that they were compelled to build more prison space just to contain the burgeoning population. (As Figure 7 shows, the prison population has continued to grow faster than prison capacity despite continued construction during the 1970s.)

What the Justice Department consultants seem to be saying is that legislators who increase prison capacity may be adding to the future population without intending to, simply by making more room for the population to expand. To put it another way, a refusal by the legislature to build new prisons would effectively limit the prison population. If prisons reach a certain level of overcrowding and prison capacity is not expanded, the criminal courts may sentence smaller proportions of offenders to prison. (This may already have occurred in North Carolina during the 1970s, as previously explained.) Or a federal court may hold that the prison is unconstitutionally overcrowded and forbid any further increase in the population. (This has not yet happened in North Carolina.) Or the parole board may parole prisoners sooner to limit the population (but the parole "safety valve" is limited in North Carolina by the recent adoption of the Fair Sentencing Act, which prohibits parole for most prisoners sentenced for felonies committed on or after July 1, 1981). On the other hand, if the legislature does build new prison space, the chances are good that the space will be used.

Should North Carolina stop building prisons?

Declaring a moratorium on new prison construction appears to be one way to control the prison population. But—assuming that the increase in the prison population continues (whatever may be causing it)—the moratorium would be only a temporary solution. It would be no substitute for a well-conceived policy regarding the future use of imprisonment. To develop such a policy, it would be essential not only to consider the costs of imprisonment and alternatives to it but also to consider whether, or to what extent, imprisonment helps to control crime by deterring potential offenders and by restraining convicted offenders. With government revenues as uncertain as they now are, proposed prison construction as well as alternatives to it should be more closely examined by the legislature and other concerned groups. Analysis of costs and benefits should apply to prisons just as much as to education, highways, and other state government programs.

17. In a recent reanalysis of the Justice Department consultants' data, Alfred Blumstein and other researchers at Carnegie-Mellon University say that the consultants' conclusion that expanding prison capacity increases prison population was incorrect, because of computational errors and also because their analysis included Florida and Ohio data that reflected very unusual circumstances in those states. See *Criminal Justice Newsletter* 13, no. 8, (April 26, 1982), 3.

Alternatives to Incarceration in North Carolina

Willis P. Whichard

A child once asked President Kennedy how he got to be a war hero. He replied: "It was completely involuntary. They sank my ship."

My involvement with the Citizens' Commission on Alternatives to Incarceration is not quite that thoroughly involitional, but neither is it by design. It happened circuitously in 1978 while I was a member of the General Assembly and sat on a committee that was discussing alternatives to incarceration. The topic caught my attention, and soon thereafter I brought up the subject in an address to a Presbyterian convocation on criminal justice. Within a few days I was asked to endorse a funding request for a study of the idea. The funds were granted, and the executive director and a board member of a sponsoring foundation asked me to chair the commission that would conduct the study. I suppose the moral is that a Baptist engaged in missionary outreach to Presbyterians risks a long wilderness journey.

Why do we have a Citizens' Commission on Alternatives to Incarceration in North Carolina? With criminality at least perceived to be a greater problem than ever before, would we not be better advised to lock up more people rather than less, and to throw away the cell keys for more of those whom we do confine? Is it not time for a harsher approach to the problem of crime rather than one that could be viewed as more lenient?

I am as concerned as any other citizen about my personal safety and the security of my small holdings of property. I suppose that if I thought the problem would be solved thereby, I would answer the foregoing questions in the affirmative. But I am not so persuaded. The problem of crime has been with us at least since the murder of Abel by Cain. Barring some extraordinary intervention by God into human history, it will remain so. All of us have, on some occasion, been guilty of offenses for which we could have been criminally punished. The late North Carolina Supreme Court Chief Justice R. Hunt Parker used to say: "There are two classes of people in the world—the caught and the uncaught." And Shakespeare irreverently stated: "The jury, passing on the prisoner's life, may in the sworn twelve have a thief or two guiltier than him they try."[1]

Not only am I not persuaded that harsher penalties are the solution—I am, on the contrary, convinced that they may be part of the problem. The United States leads the western world in its rate of incarceration.[2] In the entire world only the Soviet Union and South Africa, countries notorious for oppressive regimes, incarcerate at a higher rate.[3] Within the United States, North Carolina incarcerates in its state prisons at the third highest rate of any state, exceeded only by South Carolina and Nevada.[4]

North Carolina is also among the poorest states,[5] and thus is among those that can least afford the economic consequences of excessive incarceration. It costs at least $8,500 per year to house a single prison inmate in North Carolina.[6] That figure does not include the cost of cons-

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1. *Measure for Measure*, Act II, Scene 1, line 19.
2. American Foundation, Inc., *Just the Facts* (1980).
3. *Ibid.*
4. United States Department of Justice, Bureau of Justice Statistics, *Prisoners at in 1981* (1981).
5. North Carolina ranked forty-fourth of all the states in median family income in 1975 according to the United States Bureau of the Census. *Statistical Abstracts of the United States 1980.*
6. North Carolina Department of Correction, *Research Bulletin* (December 10, 1981).

tructing prison units, now approximately $54,000 per cell.[7] Nor does it include the hidden costs of the lost taxes the inmate would otherwise pay or his inability to make restitution to the victim or to support his family. At a time when government at all levels is under severe fiscal constraints, the Department of Correction's budget has multiplied many times over in the last decade, and there is no prospect for change if we continue to incarcerate at current or accelerated rates. (See the article on recent trends in the prison population, by Stevens Clarke and William Pope, elsewhere in this issue.)

This money would be well spent if North Carolina were provably a better and safer place to live because of the state's incarceration policy. That simply has not been established, however. It is true that North Carolina has a relatively low crime rate, ranking among the lowest fifteen states in terms of reported crime.[8] It would be easy to assume that we have a low crime rate because we imprison so many people. But the evidence will not support that assumption. Pennsylvania and West Virginia have low crime rates much like North Carolina's. Yet they put substantially fewer people in prison. A North Carolinian is, for example, over three times more likely to be in prison than a Pennsylvanian. Further, states with much higher crime rates, such as Arizona and Florida, incarcerate almost as many people as North Carolina—but despite much higher crimes rates, not *quite* as many. There is, then, no provable correlation between rate of incarceration and rate of crime.[9]

Not only can we not establish that extensive use of incarceration reduces the crime rate, but also it is at least arguable that the converse is true. A study in the early 1970s indicated that 70 per cent of men released from North Carolina prisons were convicted of a new crime within a follow-up period averaging three years, and 32 per cent received new prison sentences.[10] Once a person goes to prison, the odds are that he will commit another crime when he gets out. Few inmates are rehabilitated through the ministrations of our prison system.[11] Studies in Florida showed that prisoners released early because of the United States Supreme Court's decision in *Gideon v. Wainwright* had a much lower rate of recidivism than did those who got the "benefit" of their full term in that state's penal facilities.[12] A case can be made that we incarcerate many a petty thief and ultimately release a professional one. An inmate in one of our correctional facilities recently said to me: "This place doesn't rehabilitate you. There's no way it can. All it does is make you like a mad dog, so that what you want to do when you get out is bite somebody." Judge Jack Day of the Ohio Court of Appeals recently said: "People sent to prison too often come out as monsters. Since approximately half of those we send to prison are very young, they come out as young monsters. And young monsters are the worst kind, because they live longer."[13]

The indictment of those who call our prisons "schools of crime" may be accurate. The fact that the United States has both the highest rate of incarceration per capita in the western world and the highest crime rate would at least suggest that increased imprisonment and longer prison sentences do not necessarily deter crime.

If incarceration is not the answer, then, what is? What are the alternatives? I know of none for the more serious crimes of violence. Some people *have* to be separated from society—sometimes for long periods, and sometimes for life—for their own safety, or more importantly, for the safety of others. The prison system is an appropriate resource for people who through physical violence substantially harm other people and for people who prove time after time that they cannot leave the property of others alone. Perhaps some more enlightened age will find a better solution, but none is apparent to me or to the Citizens' Commission on Alternatives to Incarceration.

But violent offenders constitute only a small minority of those whom we incarcerate. In 1980, 76 per cent of the persons admitted to our state prisons were admitted for crimes that did not involve physical violence or physical harm to other people.[14] It is for these offenders that the Citizens' Commission on Alternatives to Incarceration seeks a better way.

While the work of the Commission is incomplete, the following are some of the options being considered:

Victim restitution. Restitution is payment by the offender to the victim of his crime for property loss or damage and

7. In its expansion request to the 1981 North Carolina General Assembly, the Department of Correction requested $27 million to construct one new 500-bed prison unit at a cost of $54,000 per bed.

8. Federal Bureau of Investigation, *Crime in the United States: Uniform Crime Reports 1980* (Washington, D.C.: U.S. Government Printing Office, 1981).

9. William G. Nagel, "On Behalf of a Moratorium on Prison Construction," *Crime and Delinquency* (April, 1977).

10. "Prisoners Who Return to Crime: North Carolina's Recidivism Rate," *Popular Government*, 43, no. 1 (Summer 1977), 36-40 (summary of study by Ann D. Witte and Peter Schmidt). A later unpublished study by the North Carolina Department of Correction of inmates released during the first half of 1975 indicated that 29 per cent returned to prison within three years (conversation with Glenn G. Williams, Research Director, North Carolina Department of Correction, May 1982).

11. *See* Lee Sechrest et al., eds., *The Rehabilitation of Criminal Offenders: Problems and Prospects* (Washington, D.C.: National Academy of Sciences, 1979), pp. 27 et seq.

12. Charles J. Eichman, "The Impact of the *Gideon* Decision Upon Crime and Sentencing in Florida: Study of Recidivism and Sociocultural Change" (Florida Division of Corrections, 1966).

13. Unpublished remarks to Intermediate Appellate Judges Seminar, New York University School of Law, July 1981.

14. North Carolina Department of Correction, *Statistical Abstracts 1980*; unpublished calculations by the staff of the Citizens' Commission on Alternatives to Incarceration. Nonviolent categories include auto theft, breaking and entering, burnings, miscellaneous sex crimes, forgery, narcotic and drug offenses, worthless checks, abandonment and nonsupport, traffic violations, drunk and disorderly conduct, driving under the influence, burglary, and others. Violent crimes include murder, manslaughter, robbery, assault, rape, sexual assault, and kidnapping and abduction.

personal injury. Restitution is not a new remedy. It is at least as old as Leviticus 6:2-5, which states:

> An offering is to be made if anyone sins against the Lord by refusing to return what a fellow Israelite has left as a deposit or by stealing something from him or by cheating him or by lying about something that has been lost and swearing that he did not find it. When a man sins in any of these ways, *he must repay whatever he got by dishonest means*. On the day *he is found guilty, he must repay the owner in full* . . . .[15]

It is common now for courts to make financial restitution a condition of a suspended sentence, or of continuing prayer for judgment, or of placing an offender on probation. (See the article by William Trumbull elsewhere in this issue of *Popular Government*, which describes restitution as it is now used in North Carolina.) Restitution has not been institutionalized as an alternative to incarceration, however, and too often the offender is incarcerated to his own detriment as well as the victim's and the taxpayer's.

The financial restitution alternative is not without problems. There is a danger that it will simply provide a means for relatively affluent persons to escape prosecution—that it will, in effect, let some people buy their way out of prison, while others cannot.[16] The same problem exists, however, with the current practices mentioned above, as well as with the use of fines as punishment. A $50 fine would be a disaster to some, while to others it would be no worse than a sneeze. The challenge is to find an appropriate means of punishment for the offender and aid for his victim, and to do it in a manner equitable to both.

A sentence of restitution as an alternative to prison should not be viewed as an "easy out." Georgia and Mississippi have established a system of halfway houses to which the offender under a restitution sentence must return at the end of his workday. The offender's schedule is rigidly controlled. His pay can be diverted into channels beyond his control—to repayment of the victim, compensation of the state, support for his family, and establishment of a capital reserve that will help keep him from being impelled back toward crime by his post-release poverty.

Community service restitution. Restitution may be made not only to the victim but also to society. A criminal act, while an offense against the victim, is an offense against society as well. Both suffer loss: the victim is violated in his person or property, and public safety and security are diminished. We long have spoken of the offender's "debt to society." So long as punishment and imprisonment are considered synonymous, however, neither the victim nor society is compensated. On the contrary, both then incur the additional heavy costs of imprisonment.

Instead of being sent to prison, offenders can be required to work for an appropriate period, at either modest pay or none at all, in various areas of public need. Community service orders have been employed in England with considerable success. California is now operating some fifty community service alternatives programs, and this alternative is not unknown in North Carolina. As a practicing attorney I was sometimes able to enter—on behalf of youthful clients—a deferred prosecution arrangement under which charges were dropped upon successful completion of designated forms of community service. A few years ago a prominent North Carolina superior court judge sentenced a dentist convicted of Medicaid fraud to work without pay for a designated number of hours per week in the state's prisons. The taxpayers were the victims of his criminality, and restitution was made to them by this form of uncompensated service.

Expanded use of probation. It is well known that probation-parole officers in North Carolina carry an excessive caseload. Historically, increasing the number of probation officers has been followed by an increase in the number of probationers. While it cannot be proved that fewer people went to prison as a result of the increase in probation-parole staff, that seems entirely probable. If so, it is likely that people have gone to prison who would have been placed on probation had there been more probation officers. With additional probation officers, more extensive pre-sentence reports could be prepared, which in turn could result in greater use of probation as an alternative to incarceration.

Deferred sentencing. Offenders assigned this alternative plead guilty to their charge and undergo a pre-sentence investigation. The court then defers sentencing for a period of time during which the offender is referred to service agencies—for example, mental health or alcohol and drug treatment facilities. If the offender's response is positive, the court may then continue prayer for judgment, suspend sentence, or impose probation, with the stipulation that the offender continue to participate in rehabilitative programs.

Expanded use of suspended sentencing. As noted above, suspension of a fixed sentence for a specified period, subject to the offender's compliance with behavioral guidelines, is not a new remedy. Expanded use of this remedy could significantly reduce the rate of incarceration, however; and the prospect of activation of the sentence should serve as an incentive to compliance with the conditions imposed.

Expanded use of fines. A fine is a typical penalty for many crimes, but fines could be more widely used in place of imprisonment for nonviolent offenses. The amount of the fine should be based on the offender's ability to pay as well as the seriousness of the offense. Any other approach results in inevitable discrimination on the basis of economic status.

Alcohol and drug treatment. Abuse of alcohol and other drugs is known to be associated with criminality. Incarceration serves temporarily to remove the abuser-offender from society. Because drug abuse is widespread in our prisons, however, incarceration often merely exacerbates the abuser-offender's problem. Alcohol and drug

15. *Good News Bible*.

16. But see William Trumbull's article elsewhere in this issue; his study found no evidence that lower-income defendants were discriminated against in this respect.

abusers should be assigned to institutions specifically designed to deal with their unique problems. Many such programs, both residential and nonresidential, have been developed across the country.

For drug profiteers, by contrast, imprisonment is by no means too harsh a remedy.

Weekend or holiday sentences. In cases in which long-term continuous imprisonment would wreck an offender's employment or family, a sentence to be served on weekends, holidays, or other times that do not disrupt the offender's responsibilities could be imposed. Present law[17] permits this type of sentence, known as "special probation" or a "split sentence."

These, then, are some alternatives under consideration. They do not exhaust all possibilities for reducing the rate of incarceration in North Carolina. Consideration should also be given to greater use of pre-sentence reports; to shorter sentences; to commissions to review, before a presumptive (i.e., standard) sentence is completed, those sentences that exceed the presumptive sentence set by law for the crime; to community corrections programs, which have proved more rehabilitative than prisons; to exit alternatives that would expedite removal from the penal system of those who no longer need to be there for the protection of society or for appropriate punishment; to expanded use of halfway houses; and to expanded use of settlement (arbitration) centers designed to prevent disputes from going to court and disputants from going to prison. An approach known as "client-specific planning"—a concerted effort to present to the trial judge complete and accurate information regarding each offender, combined with possible dispositions designed to balance the offender's needs with such judicial concerns as community protection and rehabilitation—should be more widely used. Standards recommending that the least drastic sentencing alternative consistent with public safety be imposed have been issued by both the American Bar Association and the National Advisory Committee on Criminal Justice Standards and Goals (the National Advisory Committee's recommendation was limited to "nondangerous" offenders).[18] A thorough presentation of options to this approach for each offender would greatly aid the trial courts and should result in fewer and shorter sentences of incarceration.

Imprisonment became the primary means of punishment in this country only about 125 years ago. It was introduced in colonial Pennsylvania by the religious group known as Quakers as a humane alternative to older patterns of harsh physical punishment for nearly all crimes.[19] The first American prison was established in 1790 in Philadelphia, when the Walnut Street jail was converted into a series of solitary cells where offenders were kept in silent confinement.[20] The theory was that they would become "penitents," confessing their crimes before God and thereby gaining a spiritual rehabilitation. Hence the name "penitentiary"—a place for penitents. There was little evidence that this treatment produced any rehabilitation. Yet the idea caught on, and by 1850 nearly all the states had adopted similar laws.[21] The concept of imprisonment as a principal form of punishment has since been exported from the United States to almost all western nations.

As early as 1741 all counties in North Carolina were required to have two buildings—a courthouse and a jail. But jails were places to await trial or execution, not to serve sentences. Through the eighteenth and the first half of the nineteenth centuries, punishment for crime in this state was local and communal. Criminal sanctions included public humiliation, corporal punishment, and fines. Confinement was almost never used. Although a bill to construct a state penitentiary was first proposed in North Carolina in 1791, one year after the Quakers opened the first penitentiary in Philadelphia, confinement as a punishment was not a common or popular notion here. North Carolina was one of only three states that did not erect a central state prison facility before the War Between the States. The present prison system had its origin in the Constitution of 1868, which mandated construction of a "Central Prison" in Raleigh to house persons sentenced to more than one year of imprisonment, for whom the pre-war punishment would probably have been corporal or capital.[22] From that small beginning we have moved to a system that today warehouses over 16,000 human beings—up from 9,600 only eleven years ago.

Today, however, a reassessment of the efficacy of this remedy has commenced. North Carolina is a leader in this reassessment, but it is not alone. A Tennessee Commission on Criminal Justice was formed recently for this purpose. The Governor of Florida has corresponded with me on two occasions, indicating that Florida has the same problems as ours and requesting a copy of the North Carolina Citizens' Commission's proposed solutions. The problem of overcrowded and ineffectual prisons is national in scope; and thoughtful, concerned leaders throughout the country are seeking new approaches.

(continued on page 16)

17. N.C. GEN. STAT. § 15A-1351.

18. National Advisory Commission on Criminal Justice Standards and Goals, *Corrections*, Standard 5.2, (Washington, D.C.: U.S. Government Printing Office, 1973), pp. 150-51; American Bar Association, *Standards Relating to the Administration of Criminal Justice*, 2d ed., Standard 18-2.2, (New York: Little, Brown, and Co., 1980), pp. 18-57.

19. "Is There a Better Way? A Perspective on American Prisons," *Light* (September 1981), published by the Christian Life Commission of the Southern Baptist Convention.

20. William G. Nagel in remarks presented to the North Carolina legislature in March 1981.

21. *Ibid.*

22. See Albert Coates, "Punishment for Crime in North Carolina," *North Carolina Law Review* 17 (1939), 205-32.

Supervising Probation and Parole: A New Management System

Richard R. McMahon, Al Sigmon, and Jack Lemons

If you are a probation or parole officer, charged with helping a rather large group of convicted offenders on probation or parole stay out of further trouble with the law, how do you know which ones need your attention the most? Where do you spend your time to best advantage, considering your heavy caseload, and where do you find specialized help for your probationers or parolees who need it?

In view of the heavy caseloads of probation/parole officers and the likelihood that they will increase, these questions loom very large for people in the correction field—in terms of simply handling the volume of cases, but more important, in terms of protecting society and being truly helpful to the individuals with whom the probation/parole officers work.

As a result, in April 1979 the Division of Adult Probation and Parole began to seek ways of making its service both more responsive to increasing demand and more effective. As a result of the review and the planning that began that spring, a new system for classifying probationers and parolees has been developed that enables probation/parole officers to assess each offender's needs and the risk that he may commit another crime and to direct their attention in proportion to that need or risk. This article describes how the system works.

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First some background. *Probation* is a sentence imposed on an offender for a criminal conviction in which a prison term is set by the court but is suspended subject to certain conditions for a period of time—for example, the condition that the offender not commit any new crimes or that he remain employed. If one of the conditions is that the probationer submit to supervision by a Department of Correction probation/parole officer, then the probation is "supervised"; otherwise it is "unsupervised." (This article deals only with supervised probation.) *Parole* is the release from state prison of a criminal offender (the parolee) before he has served his full prison term, subject to certain conditions set by the Parole Commission, including supervision by a probation/parole officer. Probation and parole are essentially trial periods in which the offender is given an opportunity to show that he can adjust to free society without committing further crimes. The probationer or parolee, besides complying with other conditions of his probation or parole, must attend regular meetings with the probation/parole officer and permit the officer to visit him (or her) at his home or place of work. If the probationer violates any of the conditions of his probation, the court may revoke his probation and activate his suspended prison term—in other words, send him to prison. If the parolee violates any of the conditions of parole, the Parole Commission may revoke his parole and send him back to prison to finish serving his term.

The Division of Adult Probation and Parole is responsible for carrying out pre-parole investigations as requested by the Parole Commission and pre-sentence investigations as required by all criminal courts in North Carolina. It also supervises probationers and parolees. As of January 1, 1982, there were 39,206 probationers and 7,470 parolees—a total of 46,676 offenders—being supervised by only 471 probation/parole officers, and it appears that the ratio of offenders to officers will increase.

Three years ago, in light of this situation, the Division's director appointed a planning committee to analyze the inherent problems and recommend changes that would address those problems. The committee found, essentially, that the Division's existing system of classifying offenders and the existing information system did not provide a basis for allocating time and other resources rationally or for making sound decisions in managing caseloads. What was needed was a system that would classify the clients (the probationers and parolees) according to their needs and strengths, the risk that they would commit further crimes, and their behavior and attitudes. With this information, decisions could be made about how much supervision and what services a given client would need, and the probation/parole officer's caseload and schedule could be adjusted accordingly. This analysis led to a new system for classifying offenders, providing them with services, and managing caseloads.

The planning committee recommended that a thirteen-member task force be appointed from all levels of staff from all regions of the state—experienced and knowledgeable people who could critically evaluate any proposals for change. The task force took its assignment and responsibility very seriously. First it was given a

short training period in case management and a large amount of resource materials. Then over the next two years it developed one of the two instruments that were eventually adopted for classifying clients (to be explained later), and also it developed policies for supervision that were consistent with the classification system. In addition, it tested the classification instruments and helped to design a pilot project to evaluate the system before it was adopted statewide. Specifically, during the two-year planning period, the task force and the planning committee recommended and the Division approved major changes in the following areas:

(1) Offender classification. The Division established a system of classifying offenders on the basis of their needs and the risks they present to the community.

(2) Supervision requirements. The Division set standards regarding contacts between probation/parole officers and the offenders they supervise—including contacts at the client's home and place of work as well as at the Division's local office—appropriate to the offender's classification.

(3) Data collection. The Division developed a management information system that incorporated the information on classification of offenders.

(4) Specialized tasks for officers. The Division adopted the principle that control and assistance were distinct purposes of supervision and specified the differences in the activities that officers would need to undertake in supervising "high risk" offenders who need control as opposed to "high need" offenders who need only help with personal problems.

By October 1980 the new system was ready for testing in a six-month pilot program. After evaluating the field experience and making minor modifications in the system, the Division adopted it statewide in August 1981. This new approach is based on a fundamental concept that nevertheless had not been part of the previous system.

The case management system

The effectiveness of probation/parole service depends primarily on the officer. The purposes of supervision are to (1) minimize the risk that the offender will commit new crimes; (2) detect and report violations of conditions of probation or parole; and (3) help the offender with problems that make it difficult for him to stay out of trouble. Each officer is responsible for supervising from 60 to 90 cases. In addition to supervision, he or she must also attend court sessions, make pre-sentence and pre-parole investigations, prepare written reports of violations, complete a variety of reports and forms related to each offender, and follow up the various referrals to other community agencies that he has arranged. Time studies show that probation/parole officers have, on the average, 25 per cent of their time available for personal contact with their clients.

Because of the limited time available for direct supervision, it is imperative that the probation/parole officer allocate his time so that the clients who need the most attention from him actually receive the most. But unless he himself did considerable background investigation, the officer formerly did not know which clients these were. Lacking a systematic approach to classification, the Division required that all probationers and parolees receive maximum supervision during their first six months of probation or parole. This policy was meant to assure that the most difficult cases would receive at least *some* special attention, but it also meant that equal attention was given to the least difficult, low-risk cases. In view of the officers' high caseloads, this policy guaranteed only that all offenders would receive a certain amount of attention. Often this amount was insufficient for effective supervision of the more difficult clients. To keep up with the workload, many cases were placed in lower levels of supervision after the first six months, sometimes without regard to either the risk that the offender would fall into criminal activity or the problems that he was experiencing. This practice by no means reflected the commitment or concern of the probation/parole officers; it was simply necessary if they were to meet the constant demands being made on their time and energy.

The planning committee's first priority was to develop a classification system that would enable the officer to devote his time and skills to the offenders who were most likely to commit a new crime or otherwise violate conditions of probation or parole or were having problems that the officer could help to solve. To achieve more systematic classification, the Division adopted two classification instruments. The first was designed to predict "risk"—the likelihood that an offender would violate the conditions that applied to him. The second was designed to identify "needs"—the number and types of the offender's problems.

The risk-prediction instrument. The risk-prediction instrument is composed of ten items that have been found to predict probation/parole violation.[1] They include criminal history, alcohol use, job and home stability, drug use, attitude, age at first conviction, and previous revocations of probation or parole. Each item is reasonably verifiable. An eleventh item—prior convictions of assaultive offenses—was added to assure that assaultive offenders would receive close attention during their period of supervision. On each of these items, reliable information is readily available to the officer. The scores on the risk-prediction instrument can range from 0 to 49. The officer completes the instrument during the first 15 days of supervision and then, on the basis of the offender's score, places him in a risk level—("high risk," score of 20, or above; "medium risk," score of 11 to 19; or "low risk," score of 10 or less).

The needs inventory. The second instrument—a "needs inventory"—was designed to determine the number and types of the offender's problems that may be related to his ability to function in a law-abiding way. The needs inventory identifies specific problems. On the basis of established guidelines, it provides a score for each type of problem. The total score on the needs inventory gives the officer an idea of the seriousness of each type of problem and how much attention the offender will need in supervision. The problem areas (determined by the task force to be the most important in supervising offenders) covered by the inventory include job status, employability, intelligence, family stability, health, educational level, financial situation, and emotional stability. Scores on the inventory fall into three categories: "high need," 36 and over; "medium need," 16 to 35; and "low need," 15 or below.

1. *State and County Probation Systems in Crisis* (Washington, D.C.: U.S. General Accounting Office, 1976).

TWO PROBATIONERS

John H. Doe, age 21. School dropout, unemployed at present. John was convicted of larceny of $500 in merchandise from an auto parts store. He had been drinking heavily before he committed the crime. John was placed on probation as a juvenile for stealing a bicycle. He was convicted of misdemeanor larceny at age 16 and received a six-month suspended sentence. Two years ago, John was convicted of simple assault and larceny for which he was placed on probation for two years. He violated probation and served six months in prison. John has no special job skills and has worked as a part-time laborer since he dropped out of school at age 16. He was placed on probation for his most recent crime and was ordered by the court to pay restitution and court costs of $625. The needs inventory administered by John's probation officer indicated that he had a "medium" degree of need.

Peter P. Jones, age 21, convicted of felony possession of illegal drugs. No previous criminal history except minor traffic violations. Peter comes from an upper middle-class background and is in his third year of college. His father is a successful business executive. His mother has been active in community affairs. The probation officer's needs inventory revealed that Peter has serious emotional problems and school problems and is in considerable conflict with his family.

Under the former system of probation supervision, both John and Peter would have been first placed in maximum supervision. Later, although they might have received different handling by probation officers, there was no system to guarantee that they would. Under the new case management system, John would be placed in "high risk" supervision because of his criminal record. The main objective of his supervision will be to keep him out of further trouble with the law, although his need for treatment will also receive attention. Peter, on the other hand, is not a "high risk" case, but because of his personal and family problems he will be placed in "selective" supervision. The objective in his case will be to see that he receives counseling or some other treatment to help him deal with his drug dependency and family and academic problems.

To provide a classification approach that reflects the relative difficulty of supervising each probationer and parolee, the risk and need scores were combined in the classification system. Thus the classification reflects both the offender's need for control (risk) and his need for help. There are nine possible combinations of risk and need scores, as Table 1 shows.

Levels of supervision. The planning committee recommended major changes in the Division's supervision requirements. As noted previously, under the old system each new case was placed in a maximum level of supervision for six months. Regardless of how much help the offender needed in avoiding failure ("failure" in this context means revocation of probation or parole, committing a new crime even when this does not result in revocation, or absconding), he received the same level of supervision as everyone else. Supervision in the old system tended to be too lenient for the high-risk cases and too demanding for lower-risk cases. Under the new system, each offender is placed (by reference to Table 1) in a grade of supervision that is consistent with his risk and need scores on the two classification documents. This enables the probation parole officer immediately to focus his attention on the more risky and difficult cases.

The task force established four supervision levels that correspond to the classification system: "High Risk," "Selective," "Intermediate," and "Special" (see Table 1).

In all levels of supervision, a home visit and a face-to-face contact are required within the first 30 days of supervision. These contacts help the officer assess any factors that might require that the individ-

Table 1
Probation Parole Classification Table

	High Risk 20+	Medium Risk 11-19	Low Risk 0-10
High Need 36+	High Risk	Selective	Selective
Medium Need 16-35	High Risk	Intermediate	Intermediate
Low Need 0-15	High Risk	Intermediate	Special

ual be placed in a more intense supervision grade than the classification system suggests is necessary.

"High risk" supervision requirements recognize that offenders so identified are at higher risk of failure than offenders in other classifications. If the offender is classified as high risk, the officer must meet him face to face at least once every two weeks. Each month he must verify that the client is working and make contact with appropriate agencies or individuals—such as the local police department—to determine whether the offender has engaged in any criminal activity. Home visits are required in the first month of supervision and whenever the client changes residence. Depending on the high-risk offender's degree of need, as shown by the needs inventory, the officer will try to find appropriate treatment or service for him.

"Selective" supervision requirements are established for all offenders who show a high need for assistance. The officer must meet such an offender in face-to-face contact every 30 days for the first three months and at least once every 90 days thereafter, and must check whether he is employed every 30 days. The officer must either provide or try to find in the community treatment or service appropriate to the offender's needs, unless specific treatment has already been ordered by the court. The officer must also verify every 60 days that the offender is participating in any court-ordered treatment. Quarterly contacts in the community are required to determine whether the offender has engaged in any further criminal activity. Home visits are made when appropriate and are required within 30 days if the offender moves.

"Intermediate" supervision requirements are established for offenders who have neither high risk scores nor high need scores. Face-to-face contacts are required within the first 30 days of supervision and every 90 days thereafter. Quarterly contacts with community agencies are made to determine possible criminal activity, and verification of employment is required every 90 days.

"Special" supervision recognizes that only limited attention is needed when the client has very low risk and need scores. The client in the "special" category is required to make an office contact every 90 days, and the officer must make quarterly community contacts to determine whether he has been involved in any criminal activity. If the offender fails to make his office contact, the officer must then make a face-to-face contact within 15 working days after the missed deadline for making the visit.

The examples shown on the next page illustrate the differences in how offenders would be classified under the present system and the old.

If the officer feels that the classification system has placed an offender into a supervision level that is too low, he may—with his supervisor's approval—override the classification and place the person in the level he feels is most appropriate. These levels of supervision are the minimum requirements; the actual amount of supervision given often goes well beyond the minimum.

The needs inventory and the risk assessment are also used as a basis for changing supervision grades. Under the old system, in the discretion of the officer, a case could be placed in a lower grade of supervision after a specified time period. Under the new system, reclassification to lower grades may not be made unless the risk and needs scores on reclassification instruments justify it. Consequently, high-risk and high-need cases that make no progress stay at high levels of supervision. The reclassification may be modified by the probation/parole officer with his supervisor's approval.

As of February 1, 1982, 13 per cent of all probation/parole cases were classified as "high risk," 10 per cent were classified as "selective," 43 per cent were classified as "intermediate," 29 per cent were classified as "special," and 5 per cent had not yet been classified under the new system.

The new system of classification and the new policy of placing offenders in supervision grades consistent with this classification permits the officer to allocate his time and skills to the most demanding cases.

Behavorial objectives. In the past, probation parole officers had to develop and write out a plan of supervision for each of their cases. These plans were normally based on the officer's intuitive judgment and varied in quality depending on the importance he placed on this activity. Often it was a time-consuming exercise that had little value in practice. In the new case-management system, the officer must specify the desired outcomes of the supervision period by writing specific objectives. These objectives are directed at problems identified through the risk and needs instruments. Thus, if the offender has no job but does have an alcohol problem, the officer must specify what he is trying to do in dealing with these problems and what resources he will use in so doing. The officer is encouraged to involve the offender in setting these objectives. Besides saving him the time of writing a case plan, this approach helps the officer direct his supervision activities toward specific accomplishments. In addition, the achievement of objectives helps the offender's progress.

The Division expects that its new case management system will enable the probation parole officer to manage his time more efficiently and effectively. Another anticipated benefit is that the new system will clarify the objectives of supervision so that the officer's activities are congruent with the Division's desire to protect the community while it helps offenders obtain the aid they need to keep out of trouble. This means that for high-risk cases, regardless of the offender's need for assistance, the emphasis in supervision will be placed on maintaining constant awareness of the offender's whereabouts and activities. For clients with high need scores, the emphasis will be on finding resources in the community and on counseling the offender in an effort to help him cope with life without returning to crime. Movement from high-risk or selective supervision to intermediate or special levels requires that the offender demonstrate progress in meeting objectives or show other signs of stabilizing his behavior (job stability, home stability, completing a training course, etc.).

Management information

The Department of Correction's Research and Planning Division has developed a comprehensive system to accommodate the research and management information required by the new case management system. The potential effect on management decision-making is considerable. The available data will enable the Division to evaluate the impact of probation and parole on failure rates of offenders, and the risk-prediction instrument can be evaluated and modified to increase its precision in predicting failure. The Division will be able to monitor regional differences in failure rates and develop programs designed to reduce failures. Training can be focused on preparing officers to deal effectively with the

most frequent problems in the caseload. Resources can be allocated on the basis of work load. Regional and district differences in caseload characteristics can be quickly identified. Supervisors will have the specific breakdown of each officer's caseloads according to supervision levels, risk scores, and manifest needs. And information will be available to evaluate the effects of new programs or approaches that the Division develops in its continuing efforts to improve service delivery. The case management system has a built-in capability to develop in terms of precision and effectiveness. For the first time the system's effectiveness in terms of carrying out its mission can be monitored. The planning phase includes a systematic study of work load that will provide specific information on how long each task performed by the probation parole office takes, so that work load can be allocated equitably. Cost-effectiveness of the new programs can also be assessed.

New standards of performance are being developed that increase accountability at all levels and clarify for the officer what the Division expects in regard to performance. At the branch and unit level, systematic surveys of community resources will be made to see where the officer can refer the offender for help with his problems. Another survey will give the Division information about the areas where probation parole officers may need to develop special skills.

It is too early to tell what other changes will be required, but the new system should make it possible to respond to changing demands on the system and enable the Division to make a sound estimate of the risk that various alternative decisions entail.

As sufficient data becomes available to permit the system to be evaluated, *Popular Government* will report on the case management approach to probation and parole supervision.

Alternatives to Incarceration

(continued from page 11)

In 1971 Chief Justice Warren Burger said: "We have developed systems of correction which do not correct .... If anyone is tempted to regard humane prison reform as 'coddling' criminals, let him visit a prison and talk with inmates and staff. I have visited some of the best and some of the worst prisons and have never seen any signs of 'coddling,' but I have seen the terrible result of the boredom and frustration of empty hours and pointless existence."[23]

A retired commander of the State Highway Patrol said to me a few months ago: "I spent my life in law enforcement, and I know there are lots of people in prison who don't belong there. There are other things you can do with them."

Finally, the warden of one of the state's correctional units recently said: "I would estimate that I could release 50 per cent of the men in this unit without any harm to society; and the men released, the men who remained, the staff, and society would be better off for it."

23. Address to the National Conference on Corrections, Williamsburg, Virginia, December 1971.

The view from my office window encompasses Governor Aycock's statue, which contains the following from his statements:

> There is but one way to serve the people well, and that is to do the right thing, trusting them, as they may ever be trusted to approve the things which count for the betterment of the state.

I have become convinced that a considerable reduction in the use of incarceration for nonviolent offenders, thereby enabling the state's prisons to serve as a limited resource more capable of dealing effectively with violent offenders and proven incorrigibles, would count for the betterment of the state. There will be problems in so convincing the citizens of North Carolina; but I too believe that, if given the facts, the people can be trusted to approve.

The view from my window also encompasses the statue of Governor Vance, who once characterized North Carolinians as a people of sober second thought, who move cautiously, but always forward. I expect that we will move cautiously in North Carolina in turning to alternatives to one of the highest rates of incarceration in the western world. I also anticipate, however, that once appropriate alternatives have been settled upon, we will move forward.

Restitution: How Some Criminals Compensate Their Victims

William N. Trumbull

Does having to make financial amends for their crimes have a rehabilitative effect on probationers?

Except for so-called victimless crimes, every crime committed means a victim who has suffered injury or loss. The criminal justice system, however, has been primarily attuned to rehabilitating and/or punishing the offender, and only in recent years has the public's attention turned to the victim's need to have amends made for what he has been through. As a result, there is considerable interest in programs that require the offender to compensate his victim to at least some degree for the harm he has caused. This article examines how that concept is working in North Carolina.

In this state the victim of crime can be compensated for uninsured loss in three ways: (1) a civil lawsuit; (2) the state victim-assistance program, which provides limited compensation from state funds for victims of first- or second-degree rape or sexual offenses (see G.S. 143B-480.1 et seq.); and (3) restitution by the offender ordered as part of the sentence for his crime. The state has never enacted a general victim-compensation program, probably because of the huge cost. Civil lawsuits and restitution are both aimed at making the offender pay, but obviously the avenue to compensation is limited because many offenders have no money. Restitution ordered as a part of a criminal sentence is probably better than civil litigation from the victim's point of view because it is less costly and less time consuming and because the means of enforcing it are more effective.

There are three types of restitution: (1) financial repayment, (2) service to the victim, and (3) community service.[1] The type most often used in North Carolina is financial restitution—the payment of money by the offender to compensate the victim in part or in full for the loss or harm caused by the crime. Usually restitution is ordered by the courts, although a number of pre-trial diversion programs require criminal defendants to pay financial restitution as a condition of deferred prosecution.

Apparently the courts do not often order service to the victim or to the community. On the other hand, pre-trial diversion programs do use these types of restitution. Services to the victim would be useful for cases in which the offender is too poor to make financial payment or when no real loss or harm has been caused—for instance, a "joy rider" might be ordered to tune the victim's car. Community service is appropriate in "victimless" crimes against society at large rather than against an individual—crimes like prostitution, gambling, pornography, and drunk driving. Furthermore, community service can be used in tandem with financial restitution so that the victim is compensated for the direct loss or harm caused while society is compensated for the violence done to the social order. An example of community service is the volunteer work that a drunk driver is required to perform (when sober) at a local emergency room. Since such an experience will probably expose the drunk driver to some consequences of drunk driving, that community service might be rehabilitative as well as just.

In North Carolina, the judicial practice of suspending a prison sentence on condition that the defendant make financial restitution to the victim of his crime dates back at

The author, now an instructor in the Department of Economics at North Carolina State University, directed the study on which this article is based for the Institute for Research in Social Science at the University of North Carolina at Chapel Hill. He is working on a doctorate in Economics at UNC-CH.

The research for this article was funded by the North Carolina Governor's Crime Commission. The author wishes to thank Stevens Clarke from the Institute of Government and Mary Ellen Marsden from the Institute for Research in Social Science, The University of North Carolina at Chapel Hill, for their help.

1. Service as a form of restitution is very rarely ordered as a condition of *supervised* probation according to available data. There are no comparable data on service restitution as a condition of *unsupervised* probation.

least to 1927.[2] Specific statutory authority for the practice appeared in 1937.[3] The use of financial restitution was encouraged by the Law Enforcement Assistance Administration programs in many states during the 1970s. This federal encouragement was one factor that led North Carolina to adopt legislation in 1977 that defined restitution in more detail and prescribed conditions under which it could be used.[4] Over the past few years, many states—including North Carolina—have incorporated restitution into their statutes concerning probation, work release, and parole.[5]

In July 1980 the Governor's Crime Commission funded a study administered by the Institute for Research in Social Science at the University of North Carolina at Chapel Hill to evaluate the use of financial restitution as a condition of supervised adult probation, work release, and parole.[6] The material that follows discusses the results of that study regarding financial restitution as a condition of supervised probation—a use of financial restitution that is much more frequent than its use as a condition of work release or parole. ["Probation" involves a prison sentence that is suspended as long as the offender (the probationer) complies with court-imposed conditions; if one of the conditions is supervision by a Department of Correction (DOC) probation officer, the arrangement is known as "supervised probation." For present purposes, "probation" means supervised probation and "restitution" means financial restitution only.]

This article deals with the following questions:

- What is the law concerning restitution as a condition of probation?
- How much restitution is paid by probationers, and how does it compare with the total cost of crime?
- Who is the typical probationer ordered to pay restitution?
- What characteristics of a probationer influence whether he will be ordered to pay restitution, and what factors influence the amount he will be ordered to pay?
- Does restitution have a rehabilitative effect on offenders?
- Does being ordered to pay restitution make it more likely that a probationer will have his probation revoked and be sent to prison?
- Are low-income probationers who are ordered to pay restitution more likely to have their probation revoked than high-income probationers are?
- How is community service used?
- What suggestions can be made from the study about improving restitution?

The law concerning restitution

North Carolina law [G.S. 15A-1343(d)] says that "as a condition of probation a defendant may be required to make financial restitution or reparation to an aggrieved party or parties who shall be named by the court for the damage or loss caused by the defendant arising out of the offense or offenses committed by the defendant." The amount of restitution "must be limited to that supported by the record." Thus, if the court finds that a defendant broke into a house, caused $300 worth of damage, and stole a $200 television set, restitution in the amount of $500 may be ordered. But the court must also "take into consideration the resources of the defendant, his ability to earn, his obligation to support dependents, and such other matters as shall pertain to his ability to make restitution or reparation." The court "may order partial restitution or reparation when it appears that the damage or loss caused by the offense or offenses is greater than that which the defendant is able to pay." Thus the court may find that in assaulting a person, the defendant caused $2,000 in medical and hospital expenses, but it may order only $500 in restitution to the victim because the defendant is unemployed, has several dependents, and has no assets of any worth. This may seem unfair, but if the full restitution of $2,000 results in such a severe financial strain that the offender cannot satisfy the conditions of his probation and probation is revoked, the victim may end up with nothing and society will have to pay the high cost of imprisoning the offender and perhaps supporting his dependents.

An offender may also be ordered to pay restitution to reimburse a police agency for what it paid to obtain the evidence to convict him. For example, when the police suspect that a person is selling drugs, they may send an undercover agent to purchase drugs from him and then use the drugs so purchased as evidence of the crime of drug selling. If the offender is convicted, the court may order him to pay back the drug-purchase money as a form of restitution to the police agency [*Shore v. Edmisten*, 290 N.C. 628 (1976); G.S. 90-95.3].

Along with fines, court costs, and attorney fees, restitution is usually paid to the clerk of court, although judges sometimes order payment directly to the victim. Payment may be in one lump sum, but restitution is usually paid in weekly or monthly installments over the course of probation. In a survey conducted as part of the study, 65 per cent of the clerks who responded[7] said that they collect the full amount of restitution ordered before sending it on to the victim, a practice that can result in considerable delay before the victim receives repayment. In fact, 51 per cent of

2. State v. Schlichter, 194 N.C. 277, 139 S.E. 448 (1927).

3. N.C. Sess. Laws 1937, Ch. 132, Sec. 3.

4. N.C. Sess. Laws 1977, 2d Sess., Ch. 1147.

5. See A. T. Harland, "Restitution Statutes and Cases: Some Substantive and Procedural Constraints," in J. Hudson and B. Galaway (eds.) *Victims, Offenders, and Alternative Sanctions* (Lexington, Mass.: Lexington Books, 1980).

6. See the final report to the Crime Commission, "Restitution as a Criminal Sanction in North Carolina: Its Use and Effects" (Chapel Hill, N.C.: Institute for Research in Social Science, 1982), for the detailed analysis.

7. Seventy-seven of 100 clerks responded.

Table 1

Restitution and Income by Crime Type

	Total (N = 18,555)		Felons[1] (N = 4,079)		Misdemeanants (N = 14,476)		Property Crime (N = 9,959)		Violent Crime (N = 2,021)		Drug and Alcohol Crime (N = 2,020)		Other Victimless Crimes (N = 4,555)	
	No Rest.	Rest.	No Rest.	Rest.	No Rest.	Rest.	No Rest.	Rest.	No Rest	Rest.	No Rest.	Rest.	No Rest.	Rest.
Number	10,412	8,143	1,828	2,251	8,584	5,892	3,807	6,152	1,134	887	1,462	558	4,009	546
Percentage	56.1%	43.9%	44.8%	55.2%	59.3%	40.7%	38.2%	61.8%	56.1%	43.9%	72.4%	27.6%	88.0%	12.0%
Average Restitution	0	$658	0	$1,057	0	$506	0	$661	0	$1,103	0	$270	0	$305
Average Annual Income	$4,905	$4,500	$5,315	$4,784	$4,856	$4,391	$3,927	$4,148	$4,947	$5,598	$5,500	$5,449	$5,605	$5,711

the clerks said that at least half of the victims must wait over a year for payment. However, given the resources available to clerks, transmitting payments to victims on a periodic (e.g., monthly) basis may be too costly.

How much restitution is paid?

DOC records indicate that from January to December 1980, the courts ordered supervised probationers to pay just under $5.4 million. During that same period about $3.5 million was collected from supervised probationers—not necessarily the same probationers who were ordered to pay the $5.4 million, of course. (In addition, a certain amount of restitution—there are no exact records, but perhaps even more than $3.5 million—was collected from unsupervised probationers, prisoners on work release, and parolees.) The amount of restitution was small compared with the reported cost of crime in North Carolina in 1980 (at least $97 million[8]), but $3.5 million paid by offenders to victims is much better than nothing.

Who pays restitution?

To find out what characteristics of the crime, the offender, and the court are important in the decision on whether to order restitution and how much to order, the study group collected data from DOC computer files concerning all offenders placed on supervised probation in 1980—some 18,555. Restitution was ordered for 8,143 (44 per cent) of these probationers. The average amount ordered was $658—a total of $5,359,965. So the use of restitution is fairly common as a condition of probation, and the amounts ordered are not trivial—especially when compared with the incomes of these probationers. Those ordered to pay restitution had an average annual income (roughly estimated) of $4,500 before probation began. Interestingly, those *not* ordered to pay had a somewhat higher average income—$4,905. Apparently restitution is not reserved for the relatively wealthy.

Of the 8,143 probationers who were ordered to pay restitution, most were convicted of misdemeanors (5,892—or 72 per cent) and most had been convicted of property crimes (6,152—or 76 per cent). The most common crime committed by probationers ordered to pay restitution was larceny (1,577—or 19 per cent), followed by breaking and entering (982—or 12 per cent) and larceny consolidated with breaking and entering (697—or 9 per cent). The next most common offense was passing worthless checks (895—or 10 per cent). Most probationers who were ordered to pay restitution were male (6,705—or 82 per cent), and the majority were white (4,360—or 54 per cent).

Both the likelihood that the courts would order restitution and the amount varied according to the type of crime that the probationer was convicted of (see Table 1). Probationers convicted of felonies were more likely to be ordered to pay restitution (55 per cent) than were those convicted of misdemeanors (41 per cent)—although, since 78 per cent of all probationers were misdemeanants, in absolute numbers far more misdemeanants than felons were ordered to pay. The proportion ordered to pay restitution was highest for probationers convicted of property crimes (62 per cent) and next highest for those convicted of violent crimes (44 per cent). The proportions were much lower for those convicted of liquor and drug offenses. In such offenses, there were no victims in the usual sense; probably the restitution ordered was most often payment to law enforcement agencies for its costs in obtaining contraband

8. *Crime in North Carolina: 1980 Uniform Crime Report* (Raleigh, N.C.: N.C. Department of Justice). This figure includes losses covered by insurance but it excludes losses attributable to fraud and other "white-collar" crimes and excludes the value of recovered stolen property.

Table 2

Restitution and Income by Race

	Whites (N = 10,430)		Nonwhites (N = 8,125)	
	No Rest.	Rest.	No Rest.	Rest.
Number	6,070	4,360	4,342	3,783
Percentage	58.2%	41.8%	53.4%	46.6%
Average Restitution	0	$780	0	$578
Average Annual Income	$5,312	$4,880	$4,339	$4,068

Table 3

Restitution by Employment Status

	Unemployed	Earning under $7,000 yr.	Earning $7,000 yr. or more
Number (N)	6,838	5,186	6,225
Percentage of N Ordered to Pay Restitution	45.2%	46.0%	40.7
Average Restitution	$562	$576	$808

to use as evidence to convict the offender, as explained earlier. Thus an order to pay restitution was much likelier from crimes in which a victim was attacked or suffered property loss through theft. While probationers convicted of violent crimes were less likely to be ordered to pay restitution than were those convicted of property crimes, they had to pay more on the average ($1,104) than those convicted of property crimes did ($661). The larger amounts of restitution ordered for violent crimes may be due to the fact that these crimes caused greater losses on the average than property crimes.

The likelihood that a probationer would be ordered to pay restitution also varied with his characteristics, according to a multivariate statistical analysis.[9] White probationers were less likely to be ordered to pay than were nonwhite probationers (specifically, whites' odds of being ordered to pay restitution were an estimated 21 per cent less than nonwhites' odds), but whites were ordered to pay a larger amount on the average ($780) than nonwhites ($518). A probationer under 18 years of age was less likely to be ordered to pay than an older probationer, and less likely to be ordered to pay if he had less than a sixth-grade education. The probationer's employment status (as of the time the court imposed his probation) also was associated with his chances of being ordered to pay restitution. As one might expect, unemployed probationers were less likely than employed probationers to be ordered to pay. Surprisingly, among employed probationers those who earned less than $7,000 annually were significantly more likely to be ordered to pay than those who earned more than that. But they had to pay less (an average of $576) than those who earned more (an average of $808). Unemployed probationers ordered to pay restitution had to pay an average of $562. (See Tables 2 and 3.) Thus the courts apparently considered ability to pay when they set the amount of restitution.

The analysis indicates that the probationer's odds of being ordered to pay restitution were 39 per cent greater if he pled guilty than if he was convicted by trial—which suggests that restitution was often agreed to as part of a plea bargain.

The extent of the victim's loss probably was related to both the likelihood that the probationer would be ordered to pay restitution and the amount he was ordered to pay, but this relationship could not be tested because no data were available on victims' losses. Some other factors tested in the analysis were found to have no significant statistical association with the likelihood that restitution would be ordered: the offender's sex, marital status, number of dependents, prior criminal convictions, and location of the sentencing court.

Does restitution rehabilitate?

North Carolina law considers the various forms of restitution to be "ancillary remedies to promote rehabilitation of criminal offenders."[10] In my recent survey of judges, prosecutors, and probation officers, the majority of those who responded said that they believe that restitution rehabilitates offenders. And criminal justice researchers frequently write about the rehabilitative potential of restitution.[11] But does restitution paid as a condition of probation indeed help to rehabilitate offenders?

To answer this question, I used two measures of rehabilitation: (1) recidivism, defined as a conviction for a new crime after probation is completed that results in either a new probation sentence or a prison sentence; and (2) earnings in legitimate employment after probation is completed. In using these measures, I assumed that an offender, if rehabilitated, would spend less time in illegal activities and more in legal activities (such as employment) than one

9. Logistic multiple regression was the method used.

10. N.C. GEN. STAT. § 15A-1343(d).

11. See, for instance, the papers by M. K. Utne and F. Hatfield, P. Keve, and O. H. Mowrer in B. Galaway and J. Hudson (eds.), *Offender Restitution in Theory and Action* (Lexington, Mass.: Lexington Books, 1978).

who is not rehabilitated — that is, he should commit less crime and earn more money than an unrehabilitated offender. These two measures were not the only means of determining whether the probationer was rehabilitated, but they were the only means permitted by the available data.

To evaluate the effect on recidivism of being ordered to pay restitution, I collected data from DOC on 2,289 people who completed probation successfully (i.e., without revocation) during the first three months of 1979. Of this number, 572 (25 per cent) had been ordered to pay restitution while on probation. The DOC data did not show how much they paid but did indicate that their probations had not been revoked for failing to pay (or for any other reason). A total of 243 (10.6 per cent) of these 2,289 ex-probationers had recidivated—that is, during a follow-up period of 28 to 31 months after they completed probation they were convicted of a new crime for which they received a new sentence to either prison or supervised probation. A statistical analysis was performed to determine which factors were significantly associated (that is, had more than a random chance of being associated) with these 2,289 former probationers' prospects for recidivating. This analysis indicated that whether they had been ordered to pay restitution while on probation made no significant difference in whether they recidivated during that follow-up period. The analysis also indicated that males were far more likely to recidivate than females, all other things being equal, and offenders who had criminal convictions previous to the one for which they were on probation were more likely to recidivate than others. The analysis also indicated that older and better-educated offenders were less likely to recidivate than younger and poorly educated offenders. The type of crime and the offender's employment status, race, and marital status apparently had no effect on recidivism.

A statistical analysis was also conducted to see whether having been ordered to pay restitution while on probation affected the earnings of 1,136 offenders who had completed probation during the first three months of 1979. Earnings data for a 27-month follow-up period were obtained from the North Carolina Employment Security Commission. The analysis indicated that having to pay restitution while on probation had no significant effect on the former probationers' earnings during the follow-up period. It showed that the type of offender who was most likely to have high post-probation earnings was a young, well-educated male who had no problem with alcohol, had high earnings before being convicted, and was employed in a professional or sales position.

Does restitution increase the likelihood that probation will be revoked?

It can be argued that restitution is just one more obligation that some probationers have to satisfy—just one more opportunity to fail — and consequently having to pay restitution makes it more likely that the probationer will fail the conditions of probation and have his probation revoked. When asked whether restitution increased the probability of revocation, most judges, prosecutors, and probation officers who responded to the study survey said that it did. Many judges also said that they revoked probations because of failure to pay.

To evaluate the effect of restitution on the likelihood of revocation, the study group collected data from the DOC files on the crimes and the characteristics of 1,866 offenders (40 per cent of all offenders who started probation during the first three months of 1979) who were ordered to pay restitution while on probation; 554 (12 per cent) had probation revoked during a follow-up period of 17 to 20 months after their probation began. A statistical analysis showed no significant relationship between being ordered to pay restitution and revocation. In some cases probationers who did not pay had their probation revoked, but further investigation of 238 cases in which this happened suggested that there was almost always a second reason for the revocation—like commission of a new crime. In other words, failure to pay restitution apparently was very rarely the sole reason for revoking probation.

The probationer's income did apparently affect the probability of revocation: the higher his weekly earnings when his probation began, the lower the likelihood that his probation would be revoked. But despite this effect of income, *being ordered to pay restitution did not significantly affect the probationer's prospects for revocation, regardless of whether his income was high or low.*

The revocation analysis also indicates that a number of other characteristics affect the probability that probation will be revoked. Those convicted of drug-related crimes were less likely to have their probation revoked, all other things being equal, than those convicted of property crimes, violent crimes, and victimless crimes. Among those convicted of the latter crimes, there were no significant differences in the likelihood of revocation. The results also suggest that white, female, older, single, or well-educated offenders with no previous convictions are less likely to have their probation revoked than are nonwhite, male, young, married or divorced, or poorly educated offenders with previous convictions, all other things being equal.

The revocation analysis suggests that while the courts did not take particular care initially to set amounts of restitution to be paid in accord with what the probationer reasonably could pay, they may have often reduced the amount during the period of probation when it became clear that the probationer simply could not pay all that was ordered.

Although the conventional wisdom is that restitution rehabilitates offenders, my study showed no rehabilitative effect. But it does indicate that restitution can be used to compensate victims without significantly increasing the risk that probation will be revoked and the consequent additional cost of incarcerating the offender.

What about community service?

Community service is rarely used as a condition of supervised probation. DOC data show that of the 18,555 offenders placed on probation in 1980, only twenty-three were ordered to perform community service as a condition of probation. Some judges and district attorneys do cooperate with a number of private, locally funded agencies that have programs in which persons charged with crimes can participate during a period of deferred prosecution to show good conduct and thus avoid further prosecution and conviction.[12] These programs use community service, financial restitution, and even direct service to the victims in some cases. When he satisfactorily completes the program, the charges against the participant are dismissed. Usually only first offenders charged with relatively minor crimes are allowed to participate. Consequently the supervisory requirements are not as great as those for the average probationer. The programs are maintained on rather low budgets (each generally under $50,000 annually), with most of the supervision provided by either volunteers or the private agencies with which the participants are placed to do their community services.

Can the use of community service as a condition of probation be expanded? To do so, government or private nonprofit agencies—such as hospitals, homes for the elderly, parks, and programs for the handicapped or mentally retarded in which probationers could perform their service—would have to be found. The probationer's work would have to be supervised by someone—perhaps by a volunteer, with coordination by the probation officer. However it may be done, there would probably be some additional costs; the question is whether these costs would be outweighed by the benefit of the community services plus the elimination of prison expenses for probationers who would otherwise have to be sent to prison.

Nearly a third of the offenders placed on probation in 1980 were first offenders convicted of misdemeanors. Many of them may be very similar to those who participate in the local community service programs. These programs have demonstrated that community service restitution can be conducted at low cost for the types of offenders they serve. Perhaps the use of community service restitution as a condition of probation can be expanded with these programs as models.

Recommendations

My report to the Crime Commission contained two recommendations. The first was to consider how the payment of restitution could be made more rehabilitative. I suggested three possible ways: (1) separate the payment of restitution from the payment of court costs, fines, and attorney fees; (2) make the offender aware, through feedback from the probation officer, that the payment of restitution is appreciated; and (3) reward the offender when he completes the payments.

Typically, probationers are ordered to pay a fine, court costs, or attorney fees. These costs are added to restitution, if it is ordered, and the total sum is paid either immediately or in weekly or monthly installments sent to the clerk of court. Therefore it is probably difficult for an offender to distinguish, at least emotionally, the payment of restitution from the fine or other costs. If restitution is treated separately, and if the offender is made to feel that restitution is not just another form of punishment [G.S. 15A-1343(d) specifies that it is not] but rather an opportunity to do something that is socially constructive and appreciated, and if—when he finishes making his payments—the offender is rewarded with perhaps a small ceremony or a letter of recognition from the Secretary of Correction, then restitution might have some rehabilitative effect.

My second recommendation was to consider expanding the use of community service. This is a more constructive way to have offenders correct the harm done to society than simple punishment is, and a number of researchers have suggested that community service can have a strong rehabilitative effect.[13] As we have seen, a number of locally funded agencies have demonstrated that community service can be used at low cost.

12. For instance, the Allen H. Gwynn First Offender Program in Greensboro, the Community Service Restitution Project in Durham, and the First Offender Good Conduct Program in Raleigh.

13. See the papers by Utne and Hatfield, Keve, and Mowrer, *supra* note 11.

Political Firings of Public Officials

Robert P. Joyce

The Constitution has something to say about whether a public employee can be fired—and when.

One. You have just been elected sheriff of Hypo[1] County, on the Democratic ticket. It has been your goal for some time to serve your county and to see that its citizens get the public service and law enforcement they need and deserve.

You go over the list of deputies and discover that of the twelve, ten are Republicans. That's no good, you think. There are a number of deserving Democrats out there who worked hard in your campaign, who would love to be deputy sheriffs, who would serve the county well, and who would be of benefit to you and your administration.

You let those ten Republicans know that they will not be reappointed when you take office. After your swearing-in, you reappoint the two deputies who are Democrats and name ten new deputies from among your loyal supporters, all Democrats.

The ten nonreappointed deputies sue[2] you for the salary they have lost and to get their jobs back. Who wins? You or them?

Two. You have been the Democratic sheriff of Hypo County for three and a half years. New elections are coming up and you have announced—and the local papers have reported—that you're running for re-election. The Republicans don't seem to have a strong candidate to field against you. You feel good about the situation.

Your chief deputy, a Republican, comes into your office and tells you that he has decided to run against you. Nothing personal, he says. He just wants to be sheriff and thinks he can line up support and do a good job.

You fire him. He can run for sheriff if he wants, but not while he's serving you as your deputy.

He sues you to get his job back. Who wins? You or him?

Three. Same situation as Example Two, except you don't fire the deputy. If he wants to run for sheriff, that's his right, you think. And besides, you'll kill him in the election.

Some time later, you learn that the deputy has been secretly tape-recording his conversations with you and others in the office in the hope of getting damaging statements to use in the election. The rest of your staff complain. You've got to do something, they say. You agree and fire the deputy. He sues. Who wins?

Four. You have just won re-election as sheriff of Hypo County. You feel good about your win, about the status of law enforcement in the county, and about being sheriff—that is, until your secretary tells you that your chief deputy didn't vote for you in the election. You call the deputy in to ask him. He confirms it. He voted straight Republican. I don't need guys like him as my deputy, you think, and you fire him. He sues. Who wins?

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1. Short for "hypothetical."

2. In each case the employee sues in federal court under 42 U.S.C. § 1983, which provides:

> Every person who, under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory, subjects, or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws, shall be liable to the party injured in an action at law, suit in equity, or other proper proceeding for redress.

The Citizen/Employee

These four situations are based, loosely, on real cases decided in the last five years in the federal courts of the United States. Only one of them arose in North Carolina. Before we look at who wins in the situations, let's examine some of the considerations before a court that is deciding cases like these.

At first blush we might think that the sheriff has the right to hire and fire anyone he wishes as a deputy. The general rule in North Carolina is "employment at will."[3] By that rule an employer, public or private, can fire any employee at any time, for any reason or no reason, and any employee may at any time resign or quit for any reason or no reason. The rule of employment at will applies to deputy sheriffs just as to other employees. A 30-year veteran can be fired without even being told why. So we would think the sheriff might fire his deputies at any time.

Further, North Carolina law (G.S. 153A-103) gives a sheriff "the exclusive right to hire, discharge, and supervise the employees of his office."

So we might think that the answer is pretty clear in each example. The sheriff wins.

Not so fast.

A deputy sheriff is employed by a special kind of employer: the government. At the same time that he stands in an employee/employer relationship with the government, he also stands in a citizen/government relationship with it. One chief reason that we have in this country a Constitution setting out the powers and privileges of government is to protect citizens from the overbearing power of government. Against the power of the government, the individual citizen is weak. Before North Carolina would ratify the United States Constitution, it demanded the inclusion of a Bill of Rights expressly to protect individual freedoms. While the authors of the Bill of Rights probably did not foresee that fired public employees would use it to get their jobs back, such employees are citizens and therefore are entitled to the protections of the Bill of Rights.

Constitutional guidelines

When the government becomes an employer, it does not stop being the government, and the constitutional guidelines for its conduct toward its citizens still apply to its employees.

One such guideline provides that the government cannot deprive a citizen of property without extending to him due process of law—that is, basically, the right to a fair hearing. In this sense, the jobs of some public employees are their "property." If the employee has "a legitimate claim of entitlement" to continued employment, he has a "property interest" that can be taken away only through due process.[4] For example, state employees who are subject to the State Personnel Act and have been employed for five years have such a property interest in their jobs.[5] G.S. 126-35 provides: "No permanent employee subject to the State Personnel Act shall be discharged, suspended, or reduced in pay or position, except for just cause." The legislature has granted these employees this property interest: except for just cause, they may not be terminated. Therefore, when they are to be discharged and this property interest in their jobs is taken away, they must be accorded due process of law. That is, in order to protect their property they must at a minimum be given a statement of the reasons for the dismissal and an opportunity to be heard to rebut the reasons given.

But the great bulk of public employees in North Carolina, other than those subject to the State Personnel Act, do not have such a property interest in their jobs. Unless they are covered by a specific statute, local ordinance, or published policy of the agency (such as a university) that employs them, they are fully subject to the employment-at-will rule and may be terminated without regard to due process requirements.

Still, another constitutional guideline applies. Just as the government cannot deprive citizens of property without extending due process of law, so it cannot deprive them of liberty without due process. In the employment context, to stigmatize a person in an important, negative way is to deprive him of liberty (that is, he is deprived of the freedom to enjoy his good name and reputation in the community and is seriously injured in his ability to find other employment). When the government takes some action against an employee that seriously stigmatizes him, it must afford him a hearing so that he may clear his name. For instance, in a North Carolina case, the manager of a public school cafeteria was fired. She had

3. *See* Presnell v. Pell, 260 S.E.2d 611 (1979).

IT'S HARD TO RUN THE OFFICE EFFICIENTLY WITH CONTINUING DISSENSION AND DISTRUST.

4. *See* Board of Regents v. Roth, 408 U.S. 564, 577 (1972).

5. *See*, for example, Luck v. Employment Security Commission, 272 S.E.2d 607 (1980).

been in the position for fourteen years, but when someone told the principal that she had given workmen who were painting the cafeteria liquor to drink during school hours, he fired her. The State Supreme Court[6] held that due process required that the government give her the opportunity for a hearing at which she might attempt to clear her name of the stigma that the firing and the announced reason for it imposed. The courts have held that for the charge against a fired employee to stigmatize him enough to invoke the protection of due process, the charge must be more serious than merely that the employee was inefficient or did not meet acceptable standards.[7]

Now, neither of these constitutional guidelines causes you very much concern as sheriff in our examples. In general, deputies do not have a property interest in their jobs, and in firing the deputies you are not stigmatizing them.

So you're in the clear. You have not acted unconstitutionally toward the deputy. You, the sheriff, win. Right?

Not necessarily.

Freedom of speech and association

There is one other very significant constitutional guideline. The First Amendment to the United States Constitution guarantees to all citizens the rights to freedom of speech and association. Included within those rights are the freedoms to belong to political parties and to run for public office. Generally speaking, the government cannot limit these freedoms. And the courts have held that the government may not do indirectly what it is forbidden to do directly. Thus, when a citizen is entitled to a particular benefit from the government (for example, if he is eligible to receive welfare payments), the government may not make the receipt of the benefit contingent on the citizen's giving up his constitutional rights.[8]

A similar situation exists with respect to public employment. Public employees are citizens protected by the Constitution in the exercise of the rights of free speech and free association, including membership in political parties and candidacy for public office. If the employee is forced to choose between giving up his job and exercising one of these rights, the government has done to him indirectly what it may not do directly—it has deprived him of constitutionally protected rights. While employment at will is the rule and a deputy may be fired for no reason at all, he *may not* be fired solely because he has exercised constitutionally protected rights.

So, in the examples given earlier, the deputy is exercising a constitutionally protected right when he announces his intention to run for office, or joins a particular political party, or votes a particular way in an election. If you, the sheriff, fire him, you have indirectly deprived him of the free enjoyment of that right and he would win a lawsuit against you. Right?

Again, not necessarily.

The balance of interests

While it is true that the government does not stop being the government when it becomes an employer and thus is bound by the restrictions put on it by the Constitution, it is equally true that the government, when it becomes an employer, is acting on the public's behalf to get a job done. That job may be the collection of garbage, the regulation of sales of stocks and bonds, the provision of public transportation, or law enforcement by the sheriff's department. To get the job done, the government—like any other employer—must be able to make and enforce reasonable rules that its employees must follow. If a clerk in the register of deeds' office spends his entire work day exercising his constitutionally protected right to freedom of speech by chanting political slogans to his co-workers so that neither he nor they get their work done, the interests of the government and the public are ill served. A balance must be reached between the interests of the citizen employee and the government.

And now we come to the real issue. When a public employee exercises his constitutionally protected rights and the government terminates his employment as a consequence, how is the balance struck? Let's look at two recent cases in which public employees were fired because they belonged to the wrong political party and see how the United States Supreme Court reached the balance. Then we'll try to apply our understanding to our four examples.

***Elrod:* policymaking, confidential.** The first of the two Supreme Court cases is *Elrod v. Burns*, decided in 1976.[9] In 1970 a Democratic sheriff was elected in Cook County, Illinois, a large metropolitan county with a very large staff of deputies and other employees. In accordance with past practice, the new sheriff fired all non-civil-service[10] employees, including some deputies, who were not members of the Democratic party and would not promise to endorse the party, its candidates, and its policies. The Supreme Court held the firings invalid because they violated the public employees' right to freedom of association. The Court said: "If there is any fixed star in our constitutional constellation, it is that no official, high or petty, can prescribe what shall be orthodox in politics, nationalism, religion or other matters of opinion or force citizens to confess by word or act their faith therein."[11]

But recognizing that it had to try to strike a balance, the Court said:[12]

> Although the practice of patronage dismissals clearly infringes First Amendment interests, our inquiry is not at an end, for the prohibition on encroachment of First Amendment protections is not an absolute.

In a case in which an employee is fired because of his party membership, the Court said, the balance is struck by determining whether the employee is in a policymaking, confidential position. If he is, then it can be assumed that the governmental interest is paramount. In such a case the party loyalty of the employee is presumed to be necessary for the effective function of government. A newly elected Republican Governor of North Carolina, for example, may bring Republican speechwriters along with him and fire the old Democratic speechwriters merely because they are Democrats.

But all other employees—that is, all *nonpolicymaking, nonconfidential* employees (including the great majority of employees, such as building inspectors, secretaries, and sanitation workers)—

6. Presnell v. Pell, 260 S.E.2d 611 (1979).

7. *See*, for example, Paige v. Harris, 584 F.2d 178 (7th Cir. 1978), and Stretten v. Wadsworth Vetarans Hospital, 537 F.2d 361 (9th Cir. 1976).

8. *See* Board of Regents v. Roth, 408 U.S. 564, 576 (1972).

9. 427 U.S. 347 (1976).

10. That is, those with no "property interest" in their jobs, as described above.

11. 427 U.S. at 356, quoting Board of Education v. Barnette, 319 U.S. 624 (1943).

12. *Id.* at 360.

have the benefit of the balance in their favor. Because of the nature of their positions, the governmental interest in demanding party loyalty does not override their individual interests in the exercise of free choice in political beliefs and expression.

Branti: **appropriate requirement.** Four years after deciding *Elrod*, the Supreme Court replaced the "policymaking, confidential" standard with one that appears to swing the balance between the citizen employee's interest and the government's interest more easily in favor of the citizen employee.

As in *Elrod*, the issue in *Branti v. Finkel*[13] was the dismissal of a public employee for belonging to the wrong political party. After the Democrats got control of the county legislature in Rockland County, New York, the Republican public defender's term ended. The legislature then appointed a Democrat public defender, who fired two Republican assistant public defenders solely because of their political beliefs. The fired assistants sued to get their jobs back. Applying the rule of the *Elrod* case, the lower federal courts found that assistant public defenders are not the type of policymaking, confidential employees who may be discharged solely on the basis of their political affiliations and that their dismissals therefore violated their constitutionally protected rights.

The Supreme Court upheld the finding that the dismissals were unlawful but changed its reasoning a little—for two reasons. First, the Court said that party affiliation is not necessarily relevant to every policymaking or confidential position. The coach of the state university's football team makes policy, but political affiliation is not an appropriate consideration in selecting or retaining him. And second, some positions that are not policymaking or confidential require political affiliation—for example, election officials; some states' laws require that election boards be divided equally between Democrats and Republicans—a Republican election official who changed his party affiliation could lawfully be discharged simply for that reason.

So, in *Branti* the Supreme Court said:[14]

> [T]he ultimate inquiry is not whether the label "policymaker" or "confidential" fits a particular position; rather the question is whether the hiring authority can demonstrate that party affiliation is an appropriate requirement for the effective performance of the public office involved.

Whether the position involved is "policymaking" or "confidential" is merely one criterion to be used in deciding the ultimate question—whether party affiliation is necessary for the effective performance of the job.[15]

In *Elrod* and *Branti*, the citizen employee was dismissed simply because of his political affiliation. The courts—most important, the United States Supreme Court—have recognized that when such a political consideration motivates the employment decision, the public employer must satisfy the Court that the balance between the constitutionally protected rights of the employee and the need for efficiency and effectiveness by the government is in the government's favor. In *Elrod*, the Court struck the balance by

13. 445 U.S. 507 (1980).

14. *Id.*

15. This is the author's interpretation. No definitive statement of the relationship between the *Elrod* and *Branti* standards has emerged from the courts. *Compare* Barrett v. Thomas, 649 F.2d 1193 (5th Cir. 1981); Yeghiayan v. U.S., 649 F.2d 847 (Ct. Claims 1981); Nekolny v. Painter, 653 F.2d 1164 (7th Cir. 1981); and Garretto v. Cooperman, 510 F. Supp. 816 (S.D.N.Y. 1981).

Branti and the State Personnel Act

Some 69,000 state employees and a small number of local employees are protected by the State Personnel Act (G.S. Ch. 126) from adverse employment action on account of their "political affiliation" (G.S. 126-36). This protection is, of course, supplementary to the constitutional guarantees that *Branti* defined. It does not replace the *Branti* protection but in some way appears broader than *Branti's coverage. Branti* allows the government to escape liability for an adverse employment action taken on account of political affiliation if it can demonstrate that political affiliation is a requirement for the effective performance of the job. No such qualification on the employee's protection is stated in the State Personnel Act. It appears that if an employee subject to the act is adversely affected in his employment because of his political affiliation, the statute has been violated and no other considerations are relevant. No cases that address that question have yet come before the State Personnel Commission or the courts.

In a more important respect, however, *Branti* may provide a much greater protection for state employees than the State Personnel Act. It applies to all state employees, whereas the State Personnel Act by its own terms does not apply to the chief officers of agencies and other employees[1] "that serve in policy-making positions and any confidential secretary or confidential assistant to any such . . . employee" (G.S. 126-5). This standard was drafted to comply with *Elrod*, to make the act's political-affiliation protection apply to the same employees as *Elrod* covered. It can be argued that *Branti's* coverage is broader than *Elrod's* and to that extent is also broader than the act's. That is, some state employees who are policymakers may for that reason be exempt from the act but nevertheless are protected by *Branti*.

So an employee who is subject to the State Personnel Act may enjoy protection from adverse employment decisions based on political affiliation that is broader than the protection provided by *Branti*, but the *Branti* protection probably applies to some policymaking and confidential employees in state government who are specifically exempted from the act.

1. Including teachers and any employee who has been employed less than five years.

determining whether the position involved was a "policymaking, confidential" one. While under *Branti* this determination may be relevant to the balance, it is not controlling. Rather, after *Branti* the real issue is whether party affiliation is an appropriate requirement for the effective performance of the public office involved. It appears that this is a more difficult standard for the government to meet, and therefore protection will be afforded to more public employees.[16]

The examples

With this background in mind, let's reconsider the four examples at the beginning of the article. Suppose you are the sheriff and are sued by the deputies you fired.

Example One. In Example One, you have just been elected and when you take office you refuse to reappoint the deputies who are of the other political party. This is, of course, very similar to the situation in *Elrod*, in which the Supreme Court held that because the deputies were not policymaking, confidential employees, dismissing them violated their rights. Example One is based on the case of *Ramey v. Harber*,[17] which was decided after *Elrod* but before *Branti*. Though *Ramey* is similar to *Elrod*, the United States Court of Appeals for the Fourth Circuit ran counter to *Elrod* in deciding it and held that the firings were valid.

It did so largely because of the difference in size between the *Elrod* department and the *Ramey* department. The court noted "the intimate relationship that undoubtedly exists between the sheriff and his deputies in a small county" and "the high degree of mutual confidence and support" required.[18] In a larger department, as in *Elrod*, the relationship is likely to be "far more impersonal." This difference swung the balance in favor of the sheriff in *Ramey* and would appear to do so in Example One.

But remember that *Ramey* was decided before *Branti*. Remember also the *Branti* test for deciding who wins when a public employee sues after being fired for belonging to the wrong political party: Can the hiring authority show that party affiliation is an appropriate requirement for the effective performance of the public office involved?

For the *Ramey* holding to survive after *Branti*, it would have to be recast as follows: In a small sheriff's department, the relationship between the sheriff and his deputies is so intimate and personal that political affiliation is an appropriate requirement for the effective performance of the job of deputy.

Whether the sheriff would win in Example One after *Branti* is by no means clear. The fact that he won in *Ramey* is no guarantee that he would win in another case.

Example Two. Example Two moves a little further from *Branti*. In it, your deputy belongs to the other political party, and he lets you know that he will run against you. You apparently have not considered party affiliation a requirement for the effective performance of the job, since before his announcement you had kept the deputy in office. This situation was the case in *Simmons v. Stanton*,[19] on which Example Two is based. In that case the court ruled that the balance of the interests came out on the deputy's side. His interests in freedom of association and speech outweighed the government's interest. The sheriff testified that he fired the deputy because his continued employment would have created turmoil and morale problems. By extension, his argument was that the business of the government in serving the people would have suffered because of the turmoil. The court held, however, that because no turmoil or morale problems had actually occurred and because less serious alternatives (such as reassigning the deputy to less confidential duties) were available, the government's interests were not sufficiently threatened to swing the balance away from the employee. The sheriff in Example Two loses.

Assume for a moment that in this example the deputy is of your political party and announces his intention to run against you in the primary. The outcome should be no different. The balance of the interests is the same, coming out in favor of the deputy.

An element present in Example Two and absent in Example One is that the deputy is *actively* disloyal in a political sense to the sheriff: he plans to run against him. In *Branti*, the disloyalty is more remote, more ideological. The public employee was merely a member of the wrong party; he was no threat to his superior's job.

The court in *Simmons* said that while "a special need exists for confidence and personal loyalty between a sheriff and his immediate undersheriff in order to maintain an efficient working relationship," the need for loyalty was not sufficient to justify firing the deputy. Rather, the sheriff "could have addressed and accommodated [the need for loyalty] by some action short of discharge," such as reassigning the deputy to less confidential duties.

In view of Example Two and *Simmons* after *Branti*, the question can be framed this way: Is political loyalty to the elected sheriff an appropriate requirement for the effective performance of the office of deputy? Clearly, the *Simmons* court would answer that question No.

Example Three. Example Three is based on *Serna v. Manzano*.[20] It is just like the second except that you don't immediately fire the deputy. Instead, he stays on the job and eventually you learn that he has been secretly tape-recording his conversations with you and others for ammunition to use in the coming campaign. Your staff complains and you fire the deputy. In this situation the sheriff wins when the deputy sues. As the court in *Serna* said:[21]

> [The] actions of [the deputy] were disruptive and interfered with the efficient operation of the Sheriff's office. . . . We are disinclined to disturb the "balancing" by the trial court of the First Amendment interests of [the deputy] against the competing interest of the State to have an efficiently run sheriff's office free from dissension, distrust and continuing discord.

Example Three differs from Example Two in that it includes evidence of actual turmoil or disruption. That is enough to swing the balance in the government's favor.

Example Four. The final example is based on a case that arose in North Carolina. After your re-election as sheriff, you learn that one of your deputies voted against you, and you fire him. In the real-life case, *McCollum v. Stahl*,[22] the trial

16. One court has suggested that by a literal reading *Branti* excludes almost no public employees. "If *Branti* is taken to mean what it says, it raises a question whether President Carter's Cabinet members have a cause of action to retain their Departments in President Reagan's administration." Barretto v. Cooperman, 510 F. Supp. 816 (S.D.N.Y. 1981).

17. 589 F.2d 753 (4th Cir. 1978).

18. *Id.* at 756.

19. 502 F. Supp. 932 (W.D. Mich. 1980).

20. 616 F.2d 1165 (10th Cir. 1980).

21. *Id.* at 1167.

22. 579 F.2d 869 (4th Cir. 1978).

judge was so convinced that the balance of interests rested in the employee's favor that he directed the jury to find a verdict in favor of the deputy.

The appeals court said that to direct a verdict was error, that the jury should have been allowed to reach its own decision. Like the judge, it could find for the employee.

On the other hand, considering that the relationship between a sheriff and his deputy is so close, the jury could find that political loyalty to the sheriff is a reasonable requirement of the job and the dismissal of the deputy was therefore lawful.

Because *McCollum* was settled without having a jury decide the question, neither it nor any other case gives us an answer. But as in Example Two, we can follow the reasoning of *Branti* to help decide the question: Is political loyalty to the elected sheriff an appropriate requirement for effectively performing the job of deputy? In the *Simmons* case in Example Two, the answer appears to be No. In Example Four and the *McCollum* case, the answer also appears to be No. In each case, the sheriff imposed an inappropriate requirement: political loyalty. In Example Two that requirement of loyalty meant, "Don't run against me or you'll be fired." In Example Four it means, "Don't vote against me or you'll be fired."

Firings motivated by political and other considerations

We have looked at the question of firing public employees for political reasons in the context of a sheriff's department for purposes of illustration, but the teachings of *Branti* apply to all public employees. The clearest is that when a public employee is discharged because of his party affiliation, the government must demonstrate to the court's satisfaction that party affiliation is an appropriate requirement for effectively performing the job involved. If it can do so, the government has pursuaded the court that the balance between its interest in efficient operation overcomes the employee's interest in the exercise of his constitutionally protected rights. If it cannot so persuade the court, the balance is struck in the citizen/employee's favor.

As we learned from the examples, factors other than party affiliation may be involved. If the government official who has the authority to hire and fire is an elected official, the degree of political loyalty that may reasonably be required from employees is a factor to be considered in the balance. In such a case, a good approach is to follow the *Branti* reasoning: Is political loyalty to the elected official an appropriate requirement for the effective performance of the public office involved?

Further, if any factor other than the party affiliation or political loyalty of the employee is involved, that factor may tip the balance in the government's favor. When an employee's activity causes such disruption in the government agency that the agency's work is impeded—as in Example Three, for instance, the balance may be changed. The Fifth Circuit Court of Appeals[23] recently sought to develop a test that takes this factor into account. For cases like the ones we have discussed, the court proposed a test consisting of three questions:[24] (1) Has the citizen/employee shown that the government's conduct has infringed his rights? (2) Has he shown that the employment decision was motivated by political considerations (such as party affiliation or political loyalty)? (3) Has the government rebutted such a showing with evidence that some nonpolitical consideration (such as disruption or turmoil) motivated the personnel action?

The case in which this test was devised shows how it is applied. The newly elected sheriff demoted a deputy who had supported his opponent, the incumbent. When he was demoted, the deputy told a newspaper reporter, and the newspaper quoted him as saying, that the new sheriff was a "paranoid" person with a "Hitler mentality." The sheriff then fired the deputy.

The jury and the judge ruled that with respect to the *demotion*, the answer to the first two questions in the three-part test was Yes. Yes, the deputy showed that government conduct, the demotion, deprived him of his constitutionally protected right of freedom of association (party and political choice). And Yes, the deputy showed that the demotion was motivated by political considerations (his party choice and his support for the defeated incumbent sheriff). But to the third question, the answer was No. The sheriff had not shown by sufficient evidence any motive for the demotion other than a political one.

So to this extent, the court's holding is very similar to the probable outcomes in Examples Two and Four above. Political considerations accounted for the demotion, without countervailing considerations to swing the balance in the government's favor.

With respect to the *firing*, however, the situation was different. Again, the answer to the first question was Yes. Yes, the sheriff's conduct (here, the firing) had deprived the deputy of his constitutionally protected right to comment on the sheriff (here calling him "paranoid" and a "Hitler mentality"). But as to the second question, the court found that the answer was No. The firing was motivated not by political considerations but by the harsh criticism that the deputy leveled at the sheriff through the newspaper story. This criticism violated a policy of the sheriff's department that "no conduct subversive of the good order or discipline of the department will be tolerated." The court ruled that in this case the government's interest in maintaining the department's order and discipline overrode the citizen/employee's right to call his boss a "Hitler personality" in the press, and therefore the motivation behind the firing was not political but was based on considerations of the agency's efficient operation. The sheriff won with respect to the firing because the deputy had failed on the second question of the test.

Conclusion

From this discussion we can distill two rules: First, when a citizen/employee is fired because of his political affiliation, his rights have been violated unless the government can demonstrate that political affiliation is a reasonable requirement for the effective performance of the job. And second, when a citizen/employee is fired because he fails to show political loyalty to an elected official (as by running against him or voting against him), his rights have been violated unless the government can show by sufficient evidence that some motivation other than a political one—such as a legitimate consideration of efficiency—caused the decision to fire him.

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23. Barrett v. Thomas, 649 F.2d 1193 (5th Cir. 1981).

24. The court stated the test as follows: "First, have the plaintiffs alleged conduct that, if proven would constitute an infringement of their constitutional rights? Second, have the plaintiffs made a prima facie showing that impermissible political animus, motivated the challenged personnel decisions? Finally, have the defendants rebutted such a showing with sufficient evidence of nonpolitical motives for the challenged conduct?" *Id.* at 1200.

Tax-Increment Financing in North Carolina

David M. Lawrence

This fall North Carolinians will vote on an amendment to the State Constitution that will permit cities to use a new method of financing downtown redevelopment.

In its Spring 1982 short session, the North Carolina General Assembly enacted legislation that permits the use of tax-increment financing in North Carolina. Before this legislation can become effective, however, the state's voters will have to approve an accompanying constitutional amendment (proposed by the legislature in the same session) in next November's election. This article describes tax-increment financing (TIF), gives the arguments for and against its use, discusses how the North Carolina legislation responds to those arguments, and explains why we are to vote on a constitutional amendment.

What is tax-increment financing?

In essence, TIF is a device by which a city may borrow money by issuing bonds, use the money to fund the public share of a downtown development project, and secure the loan with property taxes levied on new private development generated by the public investment. This "public share" might take one of several forms. North Carolina's legislation permits the bond proceeds to be used to finance one or more "redevelopment projects," as defined in the urban redevelopment law, or for any purpose for which a city may issue general obligation bonds, as long as the proceeds are all spent within the tax-increment district (this term is defined below). To use an example common in states that already have TIF, the city might issue bonds and use a part of the proceeds to purchase and clear land in the tax-increment district for eventual resale to a private developer (a "redevelopment project") and the rest of the money to construct a convention center and parking facility (both being purposes for which general obligation bonds may be issued). The public facilities would be part of a mixed, public-private development that also includes a privately financed hotel and office building. These private facilities would be built on the land assembled and cleared by the city and then sold to the private developer. The debt incurred in issuing the TIF bonds would be secured and primarily repaid by taxes that private interests will pay on the hotel and office building and on other nearby development triggered by the project, although the city could also use the proceeds from sale of the cleared land and any net revenues of the convention center or parking facility to repay the loan.

As it is proposed in North Carolina, TIF will not give cities any powers beyond this new type of debt instrument.

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Cities will not be authorized to undertake any sort of activity that they are not now authorized to undertake or allowed to condemn property for any purpose for which they may not condemn now. The "public purpose" limitation (which prohibits expenditure of public funds for private, rather than public, benefit) would continue to apply to all city expenditures. TIF is simply a means of financing the local, public share of redevelopment projects pursuant to the state's urban redevelopment law. The financing device may be used only in "redevelopment areas," as defined in that law. Redevelopment areas are parts of the city that have been found to be either currently blighted or in substantial danger of becoming blighted if no public action is taken. In addition, TIF may be used only in redevelopment areas that are in or near a city's central business district.

For explanatory purposes, let us assume that the necessary constitutional amendment is approved this fall. A city council that wishes to use TIF will begin the process by designating a tax-increment district in one or more redevelopment areas. (The TIF legislation provides that the total area of such districts in a city may not exceed 5 per cent of the city's total land area.) It will also adopt a tax-increment plan for the district, describing the public and private development proposed for the district and stating how much the development is expected to cost and how it will be financed. Neither the district nor the plan will become effective, however, until the tax-increment bonds have been approved by the Local Government Commission.

Therefore, at the same time it defines the district and adopts the plan, the city must seek the Commission's approval of the TIF bonds. It is important to note that the Commission's approval is conditioned on findings that the bonds can be sold and that the private development forecast in the tax-increment plan would not be likely to occur without the public project that will be financed with the bonds.

Once the bonds are approved, the TIF district and plan become effective. At that time, the district's *base valuation* is determined. This figure is the assessed valuation of taxable property in the district, as of January 1 immediately before the district became effective. Each year thereafter that the district exists (the maximum duration is 20 years), this base valuation is subtracted from the actual current valuation of taxable property in the district. The difference is the *incremental valuation* of property in the district.

The city and the county in which the city is located then annually levy their normal rate of taxation on the entire assessed valuation of property within the district for as long as the district lasts. But from the proceeds of those taxes, they will keep only the amounts generated by taxes on the *base* valuation. The remaining proceeds of both city and county taxes, the amount generated by taxes on the

The proposed constitutional amendment reads:

Notwithstanding Section 4 of [Article V] or any other provision of this Constitution, the General Assembly may enact general laws authorizing any city or town to define territorial areas in or near the central business district of the city or town and borrow money, without need of voter approval, to be used to finance public activities in downtown development projects within such territorial areas. When a territorial area is defined pursuant to this paragraph, the current assessed value of taxable property situated in the area shall be determined. Thereafter, property situated in the territorial area continues to be subject to taxation to the same extent and in like manner as property not situated in such a territorial area; but the net proceeds of those taxes that are levied on the difference, if any, between the assessed value of taxable property situated in the district at the time the taxes are levied and the assessed value of taxable property situated in the district at the time the area was defined shall be set aside. Those set aside proceeds and any other revenues arising from the public activities undertaken in the territorial area and pledged in the bond order authorizing the bonds shall be the sole security for any bonds issued pursuant to this section.

incremental valuation, are placed in a separate tax-increment fund and used to retire the tax-increment bonds. If those incremental tax proceeds in any year exceed the amount that must be set aside that year for bond retirement, the excess will be turned over to the city and the county for use in general operations. Once the bonds are fully retired, the district is discontinued and the entire valuation becomes fully a part of the tax base of the city and the county.

The arguments for and against TIF

Arguments for. Three arguments have been most often made in favor of financing redevelopment through tax-increment financing. The first is that under this method, new development in a sense pays for itself. The only security for the tax-increment bonds is the amount of taxes collected on the *new* development located within the TIF district. Much of the economic benefit of such facilities as convention centers lies in the secondary business activity they generate—the hotels, restaurants, shops, and the like. A private developer of such a facility normally could not "capture" these benefits unless he owned all the land surrounding the facility for some distance. But the city, with its ability to tax the secondary development, in a sense *can* do so. This fact is the primary justification for the city's building the facility. The tax-increment scheme permits those captured tax values to be directly committed to retiring the debt incurred in order to generate them. It is important in this connection to understand that the city and the county need not levy taxes at a level high enough to assure incremental tax revenues sufficient to retire the bonds; rather, they levy at rates sufficient to meet their needs, and the bondholders hope that those rates (and the new development against which they are levied) are sufficient to meet debt service requirements.

This last fact leads to the second argument in favor of TIF. Because the bondholders depend for payment on the bonds they hold on an increment big enough to meet debt service requirements and ultimately repay debt, as a matter of practical marketing, tax-increment districts are not established and bonds are not sold unless there are firm commitments of private development. It will not be practically possible for tax-increment bond proceeds to be used simply to buy and clear land, and therefore the acres of vacant land that characterize so many earlier redevelopment areas ought not to result from TIF.

The third argument in favor is not used as often as the first two, probably because it highlights a politically sensitive aspect of TIF. Although the bonds are issued by a city, they are secured and repaid not only with *city* taxes on the incremental valuation of the district but also with *county* taxes on that valuation. Thus the county government becomes a participant in the redevelopment process. This aspect of TIF is probably demanded by market considerations, because the county taxes are probably necessary to generate enough funds to retire the debt. This county participation is expressly viewed in some quarters as an independent positive factor, in that it forces the county government, whose tax base will eventually benefit from the new private development, to share in the burden of public expenditure that leads to the private development. Under traditional urban redevelopment, only the city government—at the local level—paid for the public share, although each overlapping unit shared in the increased tax base.

Arguments against. The arguments against TIF fall into two categories. First are the arguments that oppose this financing device on basic policy grounds. Second are the arguments against its application, which are based on experiences in the twenty-some states that now permit use of TIF. Most of this second group of arguments arise from experiences in California, where TIF has been permitted since 1952 and in heavy use since the mid-1960s. (Only since the 1970s has TIF been widely used elsewhere.)

Policy arguments. The most important basic challenge to TIF is the other side of the third argument in favor of the financing device—the more or less forced participation of counties. It is argued that forcing a county to bear a portion of the repayment burden of the bonds without permitting it to participate in approving the project is unfair. To some extent, this criticism must be admitted, and policy-makers must simply decide whether the criticism is stronger than the supportive argument made above. But certain factors that mitigate the force of the criticism should be noted. First, only the county's property tax receipts would be affected; the county's share of other taxes, particularly the local sales tax (which might ultimately be increased because of the project), would be unaffected. Second, as a practical matter, the new development would probably be commercial in nature and therefore would add very little to the county's service burden. And third, North Carolina's TIF legislation requires that any increment proceeds unneeded for debt service be turned over to the county and city, in proportion to their tax rates, for use in general operations.

A second basic criticism is a claim that while tax-increment bonds are touted as special obligations, secured only by taxes on the incremental valuation, they are in fact treated as general obligations by the issuing city. That is, it is said that if incremental revenues in any year are not enough to meet debt service requirements, the issuing city will dip into its general fund to supply the deficiency rather than allow the bonds to fall into default. The city will do this, the argument runs, to protect its credit rating, because even though a default in theory ought not to affect the city's credit rating, in practice it probably would do so.

The argument that tax-increment bonds will in fact be treated as general obligations is difficult to evaluate; there seems to be no published empirical evidence one way or the other. But I suspect that it is probably true. North Carolina cities have in fact dipped into the property tax-

supported general fund to retire parking revenue bonds in order to protect the city's general credit reputation, and the detrimental effect on that reputation from a default on revenue bonds is no less remote than the effect from a default on tax-increment bonds. So the problem is real. North Carolina's legislation tries to meet it by giving approval power over the bonds to the Local Government Commission, which can exercise an independent check on the enthusiasms of the issuing city. But it should be remembered that in deciding on any particular TIF project, the city council is not just taking advantage of a "free ride"; it has the responsibility to decide whether the proposed TIF project will benefit the public and whether public assistance is necessary.

Finally, it is argued that the increases in tax base that accompany the project—the increments—are often the product not of public investment but rather of simple inflation. The accuracy of this criticism can be disputed, since property values in many downtowns have in fact been falling and may well continue to do so in the absence of public investment. But that dispute need not be resolved in regard to North Carolina legislation, which provides, in essence, that if an octennial reappraisal indicates a general increase in downtown property values that would have included properties in the district if no project had been undertaken, the *base valuation* of the tax increment district will be adjusted upward accordingly. Therefore, the incremental valuation will in fact represent *new* development.

Arguments based on usage. One frequent criticism of TIF as applied is that governments (a) draw the lines of tax-increment districts to include economically vigorous areas in which redevelopment is already occurring, or (b) issue bonds to assist large projects that would have happened anyway. The North Carolina legislation seeks to avoid these possibilities in two ways. First, a tax-increment district may be established only in defined redevelopment areas—areas that are blighted or in serious danger of becoming so. Second, the Local Government Commission may not approve tax-increment bonds unless it finds that the project to be supported by the bonds probably would not be undertaken without public financial assistance.

Another criticism is that sometimes very large TIF districts are created, thereby increasing the possibility of a positive increment—but at some cost to the general tax base of the city and the county. The North Carolina legislation seeks to avoid this—not only by limiting use of TIF to blighted areas in the central business district but also by an absolute limit of 5 per cent on the amount of the city's territory that may be included in tax-increment districts.

In California, TIF has been largely under the control of redevelopment agencies, and this arrangement has been criticized as harmful to centralized decision-making by the city council. In North Carolina, even in cities that still have separate redevelopment commissions, it is the city council that will establish the district and adopt the tax-increment plan.

Another criticism, based on experiences in both California and Wisconsin, is that TIF has been used to finance suburban projects and has in fact been anti-downtown in effect. But these states permit TIF for a wide range of economic development projects, including industrial development and suburban shopping malls, projects that often have less need of the public subsidies thought necessary to downtown redevelopment. The North Carolina legislation (and the constitutional amendment—see page 30) limits use of the device to projects in or near a city's central business district.

Finally, it has been said that use of TIF distorts redevelopment priorities, emphasizing capital-intensive redevelopment in order to maximize the increment. As a result, it is said, little housing is built using TIF. The numbers from California belie this argument somewhat; one report from that state indicated that, in square footage, approximately equal amounts of new housing and new commercial space have been constructed with TIF. Beyond the argument over numbers, however, the criticism assumes that in the absence of TIF, other sorts of development, undistorted by the pressures of meeting debt service on tax increment bonds, would occur. But in fact it is just as likely that without TIF, no development at all would occur. TIF may distort development priorities, but at least *some* development takes place.

The criticisms of TIF based on experiences in other states can be—and generally have been—dealt with in the legislation. The decision on whether to amend the State Constitution and thereby permit TIF in North Carolina should be based on the basic policy arguments for and against and not on arguments based on abuses in other states.

The final section of this article will briefly explain why the State Constitution must be amended before TIF can be used in North Carolina.

The need for a constitutional amendment

Local governments may issue two kinds of bonds—revenue bonds, which are to be repaid from the revenues derived from the project that is constructed with the proceeds from the bond sale, and general obligation bonds, which are to be retired from the proceeds of taxes that the local unit agrees to levy in order to repay the debt incurred in issuing the bonds. Article IV, Section 4, of the State Constitution provides that (in most instances) voter approval is necessary before a local unit may incur debt "secured by a pledge of [the government's] faith and credit"—that is, secured by the unit's power to tax. Voter approval is not needed in order to issue revenue bonds because the debt incurred is secured not by tax proceeds but by revenues from the project that was built from the bond proceeds.

Tax-increment bonds fall somewhere between general obligation bonds and revenue bonds. No general, unlimited

pledge of the power to tax stands behind tax-increment bonds. If the general property tax rates of the city and the county, when applied to the incremental valuation of a TIF district, should not yield enough proceeds to meet debt service on TIF bonds, the bondholders would have no legal right to require that additional taxes be levied. So TIF bonds are not general obligations—holders of general obligation bonds *would* have such a right. At the same time, they are not paid from revenues generated by a public facility; they are paid from tax proceeds. So they are not revenue-supported obligations. Again, they are somewhere between.

North Carolina's TIF legislation permits issuance of tax-increment bonds without voter approval. As a practical matter, however, no tax-increment bonds will be issued until bond counsel are satisfied that the constitutional requirement of voter approval does not apply to these bonds. One way to satisfy bond counsel would be a test case, in which the State Supreme Court holds that the constitutional restriction is inapplicable. But that method is time-consuming and expensive to the litigants, and it is sometimes difficult to place such a question before the Court. Therefore, the legislature has turned to the second method—which is to amend the Constitution itself to make clear that the requirement does not apply. Such an approach is much faster than the test case. Furthermore, it recogizes the broad public interest in resolving the matter and places the cost on the state generally rather than on particular litigants. We will know in November whether TIF will be possible in North Carolina.

Wicker Receives the Gladys Hall Coates Professorship

The many friends of Jake Wicker in governmental circles will be pleased to know that he has been named the first Gladys Hall Coates Professor of Public Law and Government at the Institute of Government. The new professorship honors the woman whose husband, Albert Coates, was the Institute's founder and first director. Mrs. Coates herself was an integral part of those building years. The chair was endowed by Paul and Margaret Johnston of Chapel Hill, who in 1979 also established the Albert Coates Professorship at the Institute.

A Tar Heel born, bred, and educated, Wicker came to the Institute in 1955 and is now its senior specialist in local government administration. He has primary responsibility for the municipal and county administration courses and the course for new mayors and councilmen. He also works in the fields of purchasing law, personnel administration, interlocal cooperation, annexation law, water resources and waste disposal, and many other functions that touch the life of every citizen. One of his foremost characteristics, besides being a first-rate teacher and punster, is his availability. By letter, telephone, and personal conference, Wicker is always ready to be helpful to governmental officials and private citizens who have problems and questions pertaining to his areas of competence. Few things are more important to him than good government for North Carolinians.

In addition to his teaching responsibilities at the Institute, Professor Wicker has served as principal researcher for a great many state and local government study commissions and has drafted several pieces of major legislation on local government for the General Assembly's consideration.

Wicker has also been an active member of the University community. He has served on the Faculty Council, the Chancellor's Faculty Advisory Committee, the University Faculty Assembly, and many other committees and boards of The University of North Carolina.

Gladys Coates, the remarkable woman in whose name the new professorship is established, came to Chapel Hill as a bride in 1928, and already her husband was thinking about the need for a place where governmental officials could learn about the law that affected their jobs. Over the next thirty-four years Mrs. Coates was an ever active worker for the Institute. During the lean times when the Coateses financed the infant organization in part from their own pockets, Mrs. Coates did whatever needed to be done—from running the mimeograph machine to sweeping the floor. In better times after the Institute became part of the University and funds were available to build and grow, she became its gracious hostess. Above all, however, Mrs. Coates served as a knowledgeable sounding board and loving critic for her husband. The two have been a team.

Simultaneously, Mrs. Coates became a historian of important aspects of the University at Chapel Hill, particularly student life. Indeed, she is held in such respect and affection that both the venerable Philanthropic Literary Society and Valkyries, the women's honorary society, elected her to honorary membership. Gladys Coates has made her mark on North Carolina.

The professorship that honors her was given by two Institute of Government "alumni," Paul and Margaret Johnston. Mr. Johnston was a member of the Institute faculty from 1952 to 1954, and his future wife was a secretary here. In 1954 he became administrative assistant to Governor Luther Hodges and in 1957 became the state's first Director of Administration. In 1960 he left government service to begin his business career. He now heads his own company, Johnston Industries.

In addition to the two Coates professorships, the Johnstons have endowed the Henry Brandis Chair in the UNC Law School. They were also major contributors to the Luther Hodges Chair in the School of Business Administration and established a special fund for the College of Arts and Sciences at UNC-Chapel Hill.—*MET*

Mr. Wicker and Mrs. Coates

Mr. and Mrs. Johnston

Strategies for Protecting North Carolina Farm and Forest Land

William A. Campbell

The nation—and North Carolina—may be losing excessive amounts of prime farm and forest land to development. What can be done to control this tendency?

Only recently has national and state attention been drawn to the loss of prime farm and forest land when that land is converted to other uses. At the national level, in 1979 the Carter Administration asked the Department of Agriculture and the Council on Environmental Quality to sponsor an interagency study on the loss of agricultural land and how to protect that land. That study group, the National Agricultural Lands Study, issued its final report in January 1981. The report, together with several special reports prepared by the same group, presents the most recent survey of the causes, consequences, and extent of the conversion of agricultural land to other uses and the various techniques for slowing or stopping that conversion. In North Carolina, a bill (H 1066) that would have established a state program to protect prime farm and forest land in cooperation with soil and water conservation districts was introduced in the 1981 General Assembly, but was not reported out of committee. On December 17, 1981, Governor Hunt called a special Conference on Retention of Prime and Important Farm and Forest Lands at North Carolina State University. At that meeting representatives of various organizations concerned with the issue made presentations and heard discussions of techniques for protecting farm and forest land.

The National Agricultural Lands Study indicates that this concern over conversion may be warranted. It is estimated that across the nation, 3 million acres of agricultural land[1] were converted to nonagricultural uses each year between 1967 and 1975.[2] In addition, an unknown amount of high-and medium-potential cropland[3] was converted to nonagricultural uses.[4] The impact of these conversions falls most heavily on states and counties that are undergoing urban and suburban development and expansion, where demand for land for housing, commercial and industrial uses, and transportation competes with farm and forest uses. The South generally and North Carolina in particular are not immune from the forces that are bringing about the conversion of agricultural lands, and in fact the Southeast may be about to experience a substantial increase in the rate of conversion:

> The South's existing reserves of land suitable for agricultural use are sizable compared to other regions, or even to areas of cropland now in production in the South. These southern land reserves are thus of exceptional importance to the country's agricultural capacity as a whole, and afford an opportunity for significant expansion of local agricultural operations in the South. However, while agricultural economists look to the productive capability of potential cropland in the South to meet projected demands for food, forest economists look to the productive capability of southern forest to meet projected demands for lumber and paper. Future conflicts may emerge because in some cases, they are both looking at the same lands. Of equal or greater significance, both population growth and low density community developments have recently been more predominant in the South than elsewhere in the country.
>
> Exceptional prospects thus appear to exist in the Southern region, particularly in the Southeast, for heightened demands on agricultural land for both agricultural and nonagricultural uses.[5]

How fast is land being converted in North Carolina? It is estimated that each year 0.48 per cent of the state's cropland is

The author is an Institute faculty member whose fields include property tax law and environment law.

1. Defined as "lands currently used to produce agricultural commodities including forest products, or lands that have the potential for such production. These lands have a favorable combination of soil quality, growing season, moisture supply, size, and accessibility." NATIONAL AGRICULTURAL LANDS STUDY, FINAL REPORT 21 (Washington, D.C. 1981).

2. *Id.* at 35.

3. Defined as "land not currently in cropland use. Four 'Potential Cropland' ratings reflect the relative ease and profitability of converting potential cropland to cropland use. There are high, medium, low and zero ratings of the potential for conversion to cropland." *Id.* at 21.

4. *Id.* at 35. For a discussion of the difficulties of estimating the amount of potential cropland and how easily it could be brought into production, see Shulstad et al., *Estimating a Potential Cropland Supply Function for the Mississippi Delta Region*, 56 LAND ECONOMICS 457 (1980).

5. FINAL REPORT at 40.

converted, 1.16 per cent of its pasture land, and 0.22 per cent of its forest land—a total of nearly 90,000 acres per year (see Table 1).

An important point made in the Study reports[6] is that in areas subject to conversion pressures, agricultural use and conservation practices start to become less efficient long before agricultural land is actually converted to nonagricultural uses. Apparently there is a spectrum of agricultural land use. At one (agricultural) end is a stable farming area characterized by large holdings, with nearly all arable land devoted to cultivation, a few rural crossroad communities, and generally poor access to urban centers. At the other (developed) end, most of the agricultural land is owned by nonfarmers and rented as farms until the time is ripe for subdivision into smaller tracts. Access to urban centers is good, and water and sewer lines have been extended into these areas. As an area moves from the agricultural to the developed end of this spectrum, several events occur that hasten the tendencies toward development. Land prices and property taxes increase, nonfarmers complain of the air and water pollution and other environmental disruptions associated with farming, and often these complaints are translated into restrictive ordinances or nuisance lawsuits. And farmers prepare for the inevitable sale to a developer and stop investing in capital improvements and sound conservation practices. Thus long before the land is converted it is no longer being farmed effectively or being farmed at all. For example, approximately one-fourth of all undeveloped land in the Atlanta urban fringe is idle.[7]

Those who are concerned with the conversion of agricultural lands—both natural resource and agricultural economists and concerned citizens—foresee several harmful consequences of this conversion. The domestic price of food will likely go up; exports of agricultural commodities will decline; and environmental degradation will accelerate as prime, high-quality lands are farmed more intensively and marginal lands are brought into production.[8] Worst of all, the conversion is usually irreversible: once the subdivision, shopping center, or highway is built and the land taken out of productive agricultural uses, a permanent choice has been made.[9]

These issues and others concerning the conversion of agricultural land are important, but they will not be discussed here. This article is a survey of the techniques for protecting agricultural lands once it has been decided that they should be protected.

When the leadership—political, agricultural, civic, and financial—of a state or county perceives that good-quality farm and forest land is being irreversibly converted to nonagricultural uses and decides that measures should be taken to protect those lands, numerous strategies may be pursued. A comprehensive listing and discussion of these strategies appears in a special report of the National Agricultural Lands Study entitled *The Protection of Farmland: A Reference Guidebook for State and Local Governments*. The rest of this article discusses the major strategies listed in the *Guidebook*, compares that list with techniques currently available in North Carolina, and comments on statutory enactments that would be necessary to give North Carolina all of the tools needed to protect agricultural land.

Protection techniques are described here only enough to give a rough idea of how they operate and what sort of governmental machinery is involved in them. The *Guidebook*—a rich source of information written in plain English—gives their details (and cites the states and counties that use them) and discusses their relative success, either alone or in combination with other techniques in a comprehensive approach to farm and forest land protection.

1. Property tax relief. This relief may come in the form of preferential assessment, deferred taxation, or property tax credits against the state income tax. The objective of property tax relief is to make it easier for a farmer to continue farming by lowering his taxes—a substantial expense of farming—and thereby remove one incentive for converting his land to nonfarm uses. With *preferential assessment*, a state allows the owner of qualifying land to have his property assessed at its value as a farm, rather than at the usual standard of fair market value. This "use-value" standard of appraisal will produce a lower value, and hence lower taxes, in urban fringe areas and other areas where pressures for other uses have driven up the market value. In rural areas, where farming is the only profitable use available, market value and use value are, of course, the same. A system of *deferred taxes* combines preferential assessment with a roll-back feature that requires the landowner to pay the difference between

6. *Id.* at 43-51, and National Agricultural Lands Study, THE PROTECTION OF FARMLAND: A REFERENCE GUIDEBOOK FOR STATE AND LOCAL GOVERNMENTS 33-37 (undated). Henceforth this publication will be cited as GUIDEBOOK.

7. *Id.* at 35.

8. FINAL REPORT, Ch. 4 and 84-85; Carter, Youde, & Peterson, *Future Land Requirements to Produce Food for an Expanding World Population*, PERSPECTIVES ON PRIME LANDS 37 (USDA 1975); and BARLOWE, DEMANDS ON AGRICULTURAL AND FORESTRY LANDS TO SERVICE COMPLEMENTARY USES, PERSPECTIVES ON PRIME LANDS 105 (USDA 1975).

9. FINAL REPORT at 8.

Table 1

Estimates of Agricultural and Forest Land in North Carolina and Amount Converted Yearly to Nonfarm, Nonforest Use

Current Use of Land	Land Use for Indicated Purpose in 1977 (Acres)	Estimated Yearly Conversion (Acres) 1967-75	Percentage Converted
Cropland	6,180,000	29,696	0.48%
Pasture	2,025,000	23,552	1.16%
Forest	16,818,000	36,224	0.22%
Total	25,023,000	89,472	0.36%

Source: These figures were supplied by Prof. Leon F. Danielson of the Agricultural Extension Service at North Carolina State University.

the taxes he paid on the basis of use-value assessment and those he would have paid on the basis of assessment at fair market value when he sells the land or otherwise converts it to a nonfarm use. The rollback period typically ranges from three to seven years; in North Carolina it is three years.[10] The *tax credit* technique allows the landowner to take his property taxes as a credit against his state income tax when the property taxes reach a certain percentage of his income. This tax limitation is known as a "circuit-breaker."

North Carolina has offered a system of deferred taxation for qualifying land since 1973.[11] The deferred tax has been used by numerous landowners, especially in urban and developing counties that have had a revaluation of real property since 1973. Although it has provided tax relief to the property owners involved, my conversations with county tax supervisors suggest that this measure has not significantly slowed the conversion of farmland to other uses. County tax officials would likely agree that the observation on property tax relief made in the Study's *Final Report* fits the North Carolina situation:

> In isolation, then, differential assessment is largely ineffective in reducing the rate of conversion of agricultural land. It does not discourage the incursion of nonfarm uses into stable agricultural areas; it simply enables owners of land under development pressure to postpone the sale of their land until they are ready to retire.[12]

Where tax relief programs have been effective, they have been combined with either a requirement that the landowner enter into a contract not to convert the land for at least ten years, as in California,[13] or a requirement that in order to provide the relief the local government must enact either an agricultural land preservation plan or agricultural zoning, as in Wisconsin.[14] The Wisconsin strategy, though complex, is appealing because it uses a comprehensive approach to protection and a tax credit, or circuit-breaker, rather than differential assessment. A circuit-breaker has several advantages over the system of differential assessment and deferred taxation used in North Carolina. First, it requires only one appraisal of the land—at market value; the use-value appraisal, required in North Carolina, is difficult to arrive at fairly and accurately in the politically charged environment that accompanies most revaluations.[15] Second, the revenue loss is absorbed at the state level (since the tax credit is against the state income tax), where it does not have the substantial impact on a few counties that differential assessment has. And third, tax relief is given only to those landowners whose property taxes are high in relation to their incomes rather than, as in North Carolina, to all who qualify, regardless of income.

2. Death tax benefits. A difficulty that often occurs when owners of farmland die, especially owners of family farms with large acreages, is that in order to pay estate taxes, the heirs must sell some of the land. In the Tax Reform Act of 1976,[16] Congress enacted two provisions to ease this tax burden on certain qualifying farmland. The first provision established a complex formula for appraising the land for estate tax purposes at its current use value.[17] The second provision allowed up to fifteen years in which to pay the taxes.[18] It is estimated that only about 30 per cent of the farms transferred as a result of the death of the owner were large enough to benefit from these provisions even before the Economic Recovery Tax Act of 1981 was enacted.[19] That 1981 legislation[20] provides an unlimited marital deduction[21] and an increased tax credit that by 1987 will exempt estates of up to $600,000,[22] and it therefore seems likely that the estate tax provisions will benefit even fewer farmers. Several states have adopted inheritance tax provisions modeled on the federal ones.

Although North Carolina makes no special provision in its inheritance tax for use-value appraisal of farmland or an extended schedule of payments, it appears that G.S. 105-29 requires the state to adopt the federal valuation of the estate and thereby would cause the state tax automatically to reflect the decreased value for inheritance tax purposes of any estate that qualified for the federal use-value appraisal. In any event, the death tax benefit is not likely to have much effect on the conversion rate of farmland.

3. Agricultural districts. Six states (New York, California, Minnesota, Illinois, Maryland, and Virginia) have enacted laws that enable landowners to establish agricultural districts. These districts are legally recognized geographical areas whose formation is initiated by the landowners; except in New York, property cannot be included in a district without the owner's consent. The purpose of these districts is to mark out an area in which farming is the chief land use and other uses, including residential development, are discouraged. The elements of an agricultural district may include (a) use-value assessment for property tax purposes, (b) protection against nuisance ordinances, (c) limits on public expenditures for water and sewer lines and highways in the district, (d) a requirement that state agencies prepare impact statements or otherwise consider alternatives before acquiring land in the district for public uses, (e) a restriction on cities' annexation authority in the district, and (f) a requirement that landowners in the district use sound soil and water conservation practices.[23]

North Carolina has no statutory framework for establishing agricultural districts. An act would have to be written from scratch that covered the creation of districts, their governance and dissolution, and the protective elements to be included. Maryland[24] and Virginia[25] would provide useful guides.

4. Agricultural zoning. Agricultural districts, while they discourage the conversion of farmland within them, do not by themselves prohibit a landowner from converting his property to nonagricultural uses. To regulate land use in this way, a type of agricultural zoning is required. In this kind of zoning, the appropriate local government establishes agricultural zones as part of its comprehensive planning process and then restricts the use of land

10. N.C. Gen. Stat. § 105-277.4.

11. See *id.* § 105-277.2 et seq.

12. Final Report at 69. For the same conclusion, see Currier, *Exploring the Role of Taxation in the Land Use Planning Process*, 51 Ind. L. J. 28 (1975).

13. Guidebook at 206-10.

14. *Id.* at 214-20.

15. For a discussion of the difficulty in making use-value appraisals, see Locken, Bills, & Boisvert, *Estimating Agricultural Use Values in New York*, 54 Land Economics 50 (1978).

16. P.L. 94-455.

17. I.R.C. § 2032A.

18. I.R.C. § 6166.

19. Guidebook at 70.

20. P.L. 97-34.

21. I.R.C. § 2056(a).

22. I.R.C. § 2010(a) and (b).

23. Guidebook, Ch. 4.

24. Md. Ann. Code, *Agriculture* §§ 2-501 to -515.

25. Va. Code 6 §§ 15.1-1506 to 15.1513.

within that zone to agricultural uses exclusively or permits structures unrelated to agricultural uses only on large tracts, typically forty acres and over.[26] This type of zoning differs from traditional agricultural zoning in most states, including North Carolina, in which the agricultural zone is usually a catch-all for a variety of nonagricultural uses, and dwellings may be constructed on a lot of at least an acre in size, even though they are not related to an agricultural use. The usual zoning paraphernalia—a planning board or commission, board of adjustment, and conditional and special uses—are also part of the zoning approach.

Although North Carolina counties have the general power to zone, for them to be able to accomplish either exclusive agricultural zoning or nonexclusive, large-lot zoning, it would appear that the present restriction[27] on zoning farm activities should be removed from the enabling legislation. Neither "farming" nor "bona fide farmers" is defined in the statute (see footnote 27), and to enact effective agricultural zoning ordinances, counties should be free, when necessary, to regulate the use of farmland and farm buildings. No similar restriction is contained in the enabling act for cities.[28]

5. Right-to-farm laws. The purpose of "right-to-farm" laws is to protect agricultural activities from common law nuisance suits and from county and municipal ordinances that might restrict certain farm activities. These laws have been seen as necessary to protect farming activities as the surrounding land becomes urbanized. North Carolina enacted such a law in 1979—G.S. 106-700 and -701. The statute protects farming enterprises that have operated for more than one year and were not a nuisance when they began from nuisance suits brought as a result of changed conditions in the locality. The statute also nullifies all county and municipal ordinances that would make such agricultural operations liable to abatement as nuisances. Harm caused by negligent or improper operations is not protected.

Although some sort of right-to-farm law is an important element in any comprehensive program to protect agricultural land, there are several difficulties with the North Carolina statute. First, it says nothing about who has the burden of proving that the agricultural activity was not a nuisance when it began operating. Furthermore, regardless of who bears that burden, how could a farmer who started his operation twenty years ago prove that it was not a nuisance then? On the other hand, how could the person complaining show that it *was* a nuisance?

Second, the statute enables a plaintiff's attorney to allege that the agricultural activity is a nuisance for reasons other than changed conditions in the locality—for example, that the farmer has enlarged his operation or that he is using different farming methods or different pesticides. If a plaintiff can successfully show this, the protection of the statute is lost.

Third, the statute does not protect the farmer against suits for negligence, but since being a nuisance and being negligent are independent grounds of liability, what is gained by inserting the negligence exception? Also, in this regard the statute does not protect the farmer from liability for a nuisance condition caused by the "improper" operation of the farm or its appurtenances. The term "improper" is not defined in the statute, and it has no generally accepted legal meaning; a plaintiff's attorney could therefore plausibly contend that maintaining a nuisance condition is a good example of an "improper" activity.

Fourth, the protection afforded by the statute continues even after a farm has been annexed into a city. This is an extreme form of protection unwarranted by the general purpose of right-to-farm laws.[29]

These problems with the North Carolina statute could all be cured by a better understanding of a right-to-farm law's purpose and more precise statutory drafting.

6. Acquisition of development rights. One of the most promising techniques for the long-term protection of agricultural land, especially in areas already under pressure for development, is the acquisition of development rights to the land by either a government agency or a private foundation or trust. The legal device used in this technique is a conservation easement in the land granted by the landowner to the holding agency. By the easement's terms the owner legally binds himself and his successors in interest not to undertake certain activities on the land. The restrictions can be tailored to fit the particular circumstances, but their general import is to maintain the land in its current state as a farm, forest, or orchard and not allow it to be developed.

Conservation easements have been obtained in three ways. The first is by purchase—the holding agency buys the easement at its market value. In areas subject to heavy development pressures, this can be an expensive way to do business, since in such circumstances the easement and the fee simply may have nearly equal values. The second is by donation—the owner gives the easement, thereby obtaining substantial income and estate tax advantages for himself.[30] This method may be attractive to landowners with relatively high incomes who can use the tax deductions. A third method—the bargain sale—lies between the first two. In this method the landowner sells the easement for less than its market value and then can use the difference as a charitable gift for tax purposes.[31] This option may appeal to a landowner whose income is such that the after-tax return is about the same from a sale at market value as from a bargain sale.

Counties in New York, Maryland, New Jersey, and Washington and the states of Maryland, Massachusetts, Connecticut, and New Hampshire have active programs for acquiring development rights to agricultural land.[32] Funding sources for the programs have included funds from the sale of bonds, a percentage of the deferred property tax collected when farmland is converted to nonfarm uses, a percentage of the real estate transfer tax proceeds, and state and county general funds.[33] Private organizations that have

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26. *Guidebook* at 112-16.

27. The relevant portions of G.S. 153A-340 read as follows:

> . . .a county may regulate and restrict . . . .
> (5) The location and use of buildings, structures, and land for trade, industry, residence, or other purposes, except farming.
>
> These regulations may not affect bona fide farms, but any use of farm property for nonfarm purposes is subject to the regulations.

28. See N.C. GEN. STAT. § 160A-381.

29. All of these criticisms are discussed fully in the GUIDEBOOK at 100-1.

30. These tax advantages are discussed in the GUIDEBOOK at 179-81.

31. *Id.*

32. *Id.*, Ch. 7.

33. *Id.* at 155. The funding of the Maryland program is commended because it comes from "the development tax penalty.... a share of open-space moneys realized from a state real estate

been active in acquiring development rights, usually through bargain sales and gifts, include the Trust for Public Land and the Marin County Agricultural Land Trust in California, the Mesa County Land Conservancy in Colorado, the Montana Land Reliance, and the Lincoln Rural Land Foundation in Massachusetts.[34] Two new organizations are the Massachusetts Farmland and Conservation Trust and the American Farmland Trust, which appears to be designed to operate on a national scale in the same way as The Nature Conservancy, which has been very successful in protecting lands that support a rich natural diversity and rare and endangered species.

North Carolina's Historic Preservation and Conservation Agreements Act of 1979[35] provides ample legislative authority in this state for both public agencies and private organizations to acquire conservation easements for the purpose of preserving agricultural land. Counties apparently are authorized to use both property tax revenues (without having to obtain voter approval)[36] and the proceeds of bond sales[37] to acquire conservation easements in agricultural lands. Funds for an acquisition program could be substantially increased by a state bond issue, by providing matching state funds to counties, and by tapping a portion of the real estate excise stamp tax revenues for this purpose.

For a program of acquisition of development rights to succeed, it would appear to be necessary for a private organization to exist, operating somewhat parallel to the North Carolina Nature Conservancy, able to act quickly to secure the rights to land threatened by development and to give technical advice both to local organizations interested in protecting farmland[38] and to a state agency whose task would be to manage a comprehensive protection program. The importance of this second element is discussed in the next section.

transfer tax, from county matching funds, and also from general revenues channeled through the state's capital budget."

34. *Id.* at 182-84.

35. N.C. GEN. STAT. §§ 121-34 through -42.

36. See *id.* § 153A-49(c)(23); and *id.* §§ 160A-401 through -407.

37. See *id.* §§ 159-48(b)(22) and -48(b)(8); *id.* §§ 153A-158 and -49(c)(23).

38. Technical assistance has been an important service offered by the San Francisco-based Trust for Public Land; GUIDEBOOK at 183.

7. State and metropolitan area integrated programs. To see that the various protection techniques are working in harmony, to integrate the goal of protecting agricultural land with other land-use planning, and to assist and coordinate both public and private efforts to protect agricultural land, several state and local governments already have integrated protection programs. The *Guidebook* makes note of three state programs in Wisconsin, Maryland, and Oregon. The Wisconsin program ties the circuit-breaker tax credit to the adoption of agricultural zoning or preservation planning by local governments.[39] The Maryland program helps in acquiring development rights and creating agricultural districts.[40] And the Oregon program is a comprehensive approach to protection that ties together state planning guidelines, exclusive agricultural zoning, tax incentives, and right-to-farm laws.[41]

The *Guidebook* also examines three integrated metropolitan programs—those in Dade County, Florida; in the Twin Cities Metropolitan Area, Minnesota; and in Lexington-Fayette County, Kentucky.[42] All use a comprehensive planning approach to farmland protection that relies heavily on zoning and public investment decisions. The Kentucky program is unusual in that it has existed since 1958 and is administered by a single metropolitan unit of government, the urban county. It has preserved numerous farms in the area.[43]

An integrated state program operated by an active state agency represents an effort to rationalize and bring together the disparate elements of a protection program. North Carolina does not now have such a program, but if it should be decided to undertake an effective program to protect agricultural land, such a program could be started with modest initial tasks. A state agency could, for example:

—Build on the work done by the Land Policy Council and identify areas of the state where loss of prime agricultural land is most imminent.

—Review the state laws and policies that affect the conversion of agricultural land and recommend changes in them.

—Make case studies in one or two rapidly urbanizing counties, such as Guilford and Wake, to see what has happened to agricultural land there and what public and private actions have either protected the land or accelerated conversion.

—Provide technical assistance to counties that are interested in adopting local integrated plans to protect agricultural land.

Local governments that wished to adopt an integrated protection program could be helped considerably by such a state agency—and also by a review of the use-value appraisal program and by having authority to create agricultural districts and to do restrictive agricultural zoning.[44]

39. *Id.* at 214-20.

40. *Id.* at 210-13.

41. *Id.* at 239-46.

42. *Id.*, Ch. 9.

43. *Id.* at 197-98.

The protection techniques discussed in this article (and much more fully in the *Guidebook*) can be used to impede, and in some cases stop, the conversion of agricultural land to nonagricultural uses. They appear to be most effective when used together as part of a comprehensive program of protection. The approach that seems to offer the most promise is one that combines (a) the acquisition of development rights by a private organization with a form of land-use planning that restricts public investment that would encourage development in agricultural areas, and (b) a carefully wrought program of tax incentives for landowners who wish to keep their land in agricultural uses.

44. A task force concerned with protecting farmland in Orange County has recommended an integrated approach that relies heavily on increased tax incentives linked to agreements restricting development for ten or twenty years. TO PRESERVE OUR FARMS: FINAL REPORT OF THE ORANGE COUNTY AGRICULTURAL TASK FORCE, Ch. X (Hillsborough, N.C. 1981).

Public School Enrollment Trends in North Carolina

Charles D. Liner

The baby boom generation has produced a baby bust—and school officials and others must plan for a smaller generation of children.

Public school enrollment trends are of special interest to a great many people other than just school administrators and teachers. As the article about the pig-in-the-python phenomenon (page 48) points out, they reflect underlying demographic trends caused by changes in birth rates and migration that have had, and will continue to have, a substantial impact in many ways on government activities and on many aspects of American life.

But this article is primarily concerned with the impact of these demographic trends on school enrollments because trends in enrollments have important implications for the state, local school boards, and local governments. Public school education is the largest single program in state and local government—it accounts for over a quarter of these governments' total general expenditures and about 44 per cent of state General Fund appropriations. State financing of public schools is tied directly to enrollments (average daily attendance and average daily membership, or ADM), and enrollment trends are important in projecting needs for teachers, classrooms, and school construction and renovation. This article will analyze current projections of public school enrollment in an effort to help understand and anticipate these trends.

During the 1950s and 1960s, the North Carolina public school system had to accommodate the tremendous number of children born between World War II and 1956 (see Chart 1). As a result ADM increased from 858,218 in 1949-50 to 1,177,476 in 1968-69, a gain of 37 per cent. But, as Chart 2 shows, during the 1970s ADM in grades 1 through 12 fell every year (though the newly adopted kindergarten program caused total ADM to rise to a record level in 1976-77). Between 1976-77 and 1980-81, ADM in grades K through 12 fell 4.8 per cent. Declines occurred in 87 per cent of the state's 143 school administrative units. Because the "baby boom" was followed by a "baby bust" (see Chart 1), these declines are part of a long-term downward trend that will continue during the 1980s and perhaps into the 1990s.

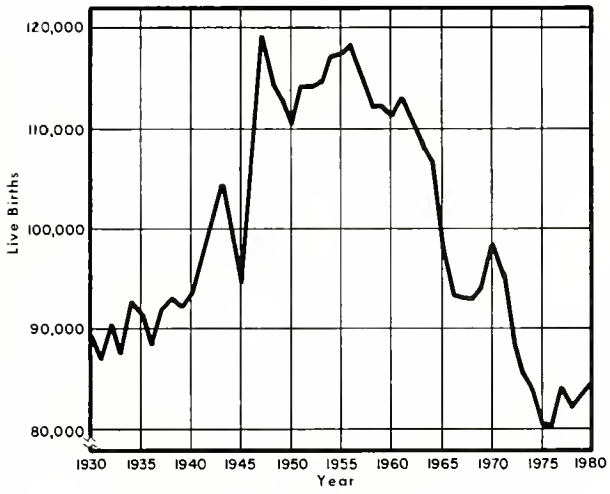
About the projections

The projections of ADM used in this article are made annually by the North Carolina Department of Public Instruction by means of a cohort-survival model that is based on the number of births within the state and the actual enrollment changes in each grade (changes that

The author is an economist who is an Institute faculty member. This article is based on the latest in a series published annually in the *School Law Bulletin* on public school enrollment projections.

Chart 1

Numbers of Live Births in North Carolina
1930 to 1980



Source C. Horace Hamilton, North Carolina Population Trends, Vol 2, Table 71, and N.C. Division of Health Statistics

reflect the effects of in-migration). Although the projections for individual school units can be improved by analyzing local data more thoroughly, the figures reported here are derived from a uniform application of the model in all school units. Since the model is necessarily based on past and current data, the projections cannot take into account either future developments or factors that are not reflected in these data. For example, they would not reflect the fact that a large manufacturing plant is about to open in a rural county that has not grown much in the past, and therefore the projections for this county's school unit might be too low.

Although the methods used in the state projections have the limitations inherent in any forecasting method, they have been successful in predicting past enrollment trends and reasonably accurate in predicting ADM in individual school units. The projections made in 1976-77 of total ADM in 1980-81 varied from actual ADM by an average of 3.7 per cent. The projections were within 2 per cent of actual ADM for 37.8 per cent of the units, within 5 per cent for 78.4 per cent of the units, and within 10 per cent for 95.9 per cent of the units. Considering the substantial changes that were occurring during this period and the difficulty of accurately forecasting ADM in the many small units, the state projections appear to be reasonably accurate. Their main value is not in predicting future ADM precisely, however, but rather in helping us analyze basic trends in the student population and thereby serving as a guide to policy and planning.

According to projections for the period 1980-81 to 1985-86, statewide ADM in grades K through 12 will fall 5.9 per cent below the 1980-81 level and 10.6 per cent below the 1976-77 peak level. ADM is expected to fall in 88.1 per cent of the school administrative units during this period. The magnitude of the decreases will vary by grade level. The largest declines will occur in high school—ADM in grades 10 through 12 is expected to drop an average of 11.6 per cent in 125 units between 1980-81 and 1985-86. It is

A Summary of School Enrollment Trends

—From 1949-50 to 1968-69, statewide ADM in grades 1-12 increased 37 per cent but then fell 11 per cent between 1968-69 and 1980-81. Even with the addition of the kindergarten program in the 1970s, total statewide ADM in 1980-81 was 4.6 per cent below the level for 1968-69.

—Between 1976-77 (the year in which total statewide ADM peaked) and 1980-81, total statewide ADM fell 4.8 per cent, and total ADM fell in 87 per cent of the state's school administrative units.

—Total statewide ADM is projected to fall 5.9 per cent between 1980-81 and 1985-86, and total ADM is expected to decline in 88 per cent of the units during this period.

—The largest declines are expected to occur in high school enrollment. ADM in grades 10-12 is expected to drop an average of 11.6 per cent in 125 of the 143 units between 1980-81 and 1985-86. Between 1980-81 and 1990-91, ADM in these grades is expected to fall an average of 19.1 per cent in 130 units; it will drop by 20 per cent or more in 52 units and by 30 per cent or more in 14 units.

—Of the 17 units that can expect increased ADM between 1980-81 and 1985-86, only three are city units (Newton, Red Springs, and Washington). Seven of the other units are in the rural east (Chowan, Currituck, Dare, Hertford, Pender, Pitt, and Tyrrell), five are in the mountainous west (Clay, Henderson, Jackson, Macon, and Madison), and two are in the state's central area (Cabarrus and Hoke). Only five of the 17 units can expect increases of more than 5 per cent.

—None of the larger city units is expected to have increased ADM in 1985-86, and the biggest declines are expected in the more populous city units like Asheville, Burlington, Concord, Fayetteville, and Salisbury. The largest drops in high school ADM between 1980-81 and 1990-91 are expected in city units—for example, in Asheville (-31 per cent), Burlington (-34 per cent), Fayetteville (-41 per cent), Greensboro (-33.4 per cent), and Salisbury (-42.8 per cent).

—Future enrollment trends depend on changes in birth rates and in-migration. It appears likely that (a) the number of births will not increase substantially, partly because the number of women in the childbearing years will decline; and (b) the rate of in-migration will not increase sufficiently to cause enrollments to rise much during the next two decades.

expected that between 1980-81 and 1990-91 ADM in these grades will fall an average of 19.1 per cent in 130 units; it will drop by 20 per cent or more in 52 units and by 30 per cent or more in 14 units. Although total ADM is not projected beyond 1990-91, analysis of demographic trends suggests that, despite a recent rise in numbers of births, total school enrollment may continue to decline in the 1990s.

Table 1 shows actual and projected changes in ADM by grade for 1976-77 to 1980-81, 1980-81 to 1985-86, and—for grades 5 through 12—1980-81 to 1990-91 (since the projections are based in part on actual births, ADM for grades K through 4 is not projected to 1990-91). While total ADM fell 5.0 per cent between 1976-77 and 1980-81, ADM fell as much as 12.4 per cent in some grades and increased slightly in grades 3 through 5. The largest drop occurred in grades 7 through 9, and this decline will cause ADM in the high school grades to fall substantially during the next period, when total ADM will fall 5.9 per cent. In the longer period, 1980-81 to 1990-91, ADM will fall substantially in each grade from 5 through 12. Although ADM in grades K through 4 may increase somewhat from 1980-81 to 1990-91, it is unlikely that such increases would significantly offset the projected loss of 87,292 students in grades 5 through 12, and therefore total enrollment will probably fall in this period.

Table 1

Actual and Projected Change in Statewide Average Daily Membership (ADM) by Grade

	Percentage change in ADM[1]		
Grade	1976-77 to 1980-81 (actual)	1980-81 to 1985-86 (projected)	1980-81 to 1990-91 (projected)
K	−7.3%	+2.6%	NA[2]
1	−12.4	−0.8	NA
2	−5.7	−5.0	NA
3	+0.2	−6.7	NA
4	+5.6	−18.4	NA
5	+2.9	−13.7	−11.5
6	−6.4	−8.3	−9.0
7	−12.1	−2.3	−8.7
8	−11.3	−1.0	−7.6
9	−10.5	+3.5	−15.2
10	−8.5	−2.0	−15.4
11	−1.6	−11.0	−18.4
12	−0.4	−12.9	−16.5
Total	−5.0%	−5.9%	NA

1. Excluding exceptional students in self-contained classrooms and trainable mentally handicapped students from all but total ADM.
2. Not available. Since the projections are based partly on actual births, projections for this grade are not available for 1990-91.
Source: Department of Public Instruction projections.

Table 2

Summary of Percentage Change in Actual and Projected Average Daily Membership (ADM) in 143 School Units

		Number of units					
	Actual total ADM, 1976-77 to	Projected ADM by grade level					
		1980-81 to 1985-86				1980-81 to 1990-91	
Percentage change	1980-81	K-6	7-9	10-12	K-12	7-9	10-12
Increase:							
10% or more	0	4	12	1	1	8	1
5% to 10%	1	3	23	3	4	5	2
0% to 5%	17	17	28	14	12	17	10
Decrease:							
0% to −5%	55	28	33	25	48	21	7
−5% to −10%	42	46	23	34	45	21	14
−10% to −15%	25	39	16	26	27	23	31
−15% to −20%	3	4	6	24	6	15	26
−20% to −30%	0	2	2	15	0	26	38
−30% or more	0	0	0	1	0	7	14
	143	143	143	143	143	143	143
Percentage of units with decreased ADM	87.4%	83.2%	55.9%	87.4%	88.1%	79.0%	90.9%

Source: Table 3

Table 3

Actual and Projected Percentage Change in Average Daily Membership[1] (ADM) by Grade Level for 143 School Units

School unit	Actual ADM 1976-77 to 1980-81 Grades K-12	Percentage change: Projected change in ADM by grade level, 1980-81 to 1985-86 K-6	7-9	10-12	K-12	1980-81 to 1990-91 7-9	10-12
Alamance	−11.4%	−23.0%	−11.4%	−11.5%	−17.1%	−34.1%	−35.6%
Burlington	−11.9	−21.6	−9.5	−11.5	−16.0	−31.8	−33.9
Alexander	−3.0	−4.2	+8.4	−9.5	−2.4	−0.3	−11.3
Alleghany	−3.1	−5.4	0.0	−4.1	−5.4	−7.4	−6.3
Anson	−9.3	−9.8	−10.4	−11.4	−10.2	−18.5	−20.4
Ashe	−6.3	−4.9	−4.0	−6.6	−5.0	−10.7	−14.4
Avery	−1.7	−11.8	−7.0	−9.0	−9.9	−20.2	−19.6
Beaufort	−3.4	+6.4	+17.7	−4.5	+6.7	+27.6	+6.8
Washington	+0.9	+2.6	+12.7	+3.9	+5.1	+20.7	+0.9
Bertie	−10.8	−1.7	−12.3	−31.0	−11.2	−13.0	−28.5
Bladen	−6.5	−9.0	−3.2	−9.6	−7.6	−15.4	−15.9
Brunswick	+3.0	−7.0	+7.9	−0.2	−1.9	−3.3	+6.5
Buncombe	−1.1	−8.0	+0.9	−1.5	−4.3	−8.5	−10.5
Asheville	−13.7	−10.5	−16.7	−14.1	−12.8	−27.3	−31.2
Burke	−4.8	−12.8	−4.6	−5.5	−9.2	−19.8	−17.2
Cabarrus	+3.1	−6.8	+12.0	+12.4	+0.6	−5.1	+2.9
Concord	−14.4	−14.6	−19.8	−7.1	−14.5	−34.5	−32.7
Kannapolis	−10.8	−7.3	−8.0	−9.8	−9.9	−21.6	−25.2
Caldwell	−7.9	−12.5	−9.7	−8.8	−10.4	27.3	−26.9
Camden	−14.0	−14.5	−20.8	−16.1	−16.4	−32.5	−44.0
Carteret	−4.1	−1.4	+1.6	−6.0	−1.9	−0.2	−10.1
Caswell	−10.4	−14.6	−7.4	−17.3	−13.4	−23.6	−26.2
Catawba	+1.1	−7.8	+8.4	+0.2	−3.0	−7.1	−3.6
Hickory	−12.2	−14.2	−4.6	−10.8	−10.9	−23.0	−25.7
Newton	−4.9	−11.3	−7.8	+0.5	−7.7	−19.8	−13.6
Chatham	−8.3	−3.9	−9.4	−2.9	−5.1	−13.8	−24.0
Cherokee	+0.2	−6.8	−0.6	+5.2	−2.6	−6.7	+2.0
Chowan	−3.8	+12.8	+10.8	−21.7	+3.5	+26.4	−9.5
Clay	+5.9	+1.2	+27.4	+6.3	+8.2	+17.0	+14.6
Cleveland	−5.2	−12.5	−11.5	−11.9	−12.1	−24.1	−23.4
Kings Mountain	+1.9	−7.7	+7.1	−5.5	−3.7	−8.1	+0.7
Shelby	−7.4	−13.3	−11.6	−15.8	−13.1	−25.4	−28.3
Columbus	−7.4	+1.6	−3.0	−15.8	−4.1	−6.8	−14.8
Whiteville	−8.4	−3.5	−8.2	−14.8	−7.0	−13.5	−21.7
Craven	−3.8	−0.2	+12.0	−13.6	−0.3	+8.1	−6.8
Cumberland	−2.3	−2.0	+10.6	−10.3	−1.0	+4.4	−9.5
Fayetteville	−14.5	−8.4	−15.4	−23.7	−14.0	−22.0	−40.9
Currituck	+0.2	+16.9	−3.9	−1.3	+7.6	+3.9	−3.6
Dare	+3.6	+24.2	+3.6	+0.6	+13.9	+30.2	+1.3
Davidson	+0.2	−11.3	−0.7	+0.9	−5.9	−15.3	−12.8
Lexington	−11.5	−12.8	−2.9	−13.5	−10.6	−18.9	−29.1
Thomasville	−11.6	−8.1	−18.1	−22.7	−13.7	−25.7	−32.6
Davie	−0.3	−8.7	−8.7	−4.8	−3.6	−3.9	−11.7
Duplin	−8.7	−7.3	−0.9	−16.3	−7.7	−11.3	−17.9
Durham	−0.9	−7.0	+2.8	+8.3	−1.2	−2.6	−8.8
Durham City	−9.7	−3.1	+7.1	−11.7	−1.5	+0.6	−14.7
Edgecombe	−7.6	−0.6	−6.0	−15.9	−5.2	−6.3	−21.1
Tarboro	−6.7	−0.8	−6.1	−15.7	−5.4	−7.8	−22.4
Forsyth	−6.9	−11.3	+0.2	−13.9	−8.9	−14.6	−25.1

1. Excluding exceptional students in self-contained classrooms and trainable mentally retarded handicapped students except in total ADM.

School unit	Actual ADM 1976-77 to 1980-81 Grades K-12	Percentage change: Projected change in ADM by grade level, 1980-81 to 1985-86 K-6	7-9	10-12	K-12	1980-81 to 1990-91 7-9	10-12
Franklin	−5.8	−4.9	−0.1	−15.3	−5.9	−11.8	−18.8
Franklinton	−7.8	−5.3	−4.7	−16.3	−7.4	−14.6	−22.2
Gaston	−3.5	−14.6	+0.2	−3.3	−10.6	−24.5	−14.8
Gates	−11.2	−7.5	−9.8	−14.0	−9.7	−24.7	−27.3
Graham	−2.1	−0.6	−8.1	−4.3	−3.4	−11.5	−11.5
Granville	−8.7	−17.3	−12.2	−8.5	−14.1	−27.9	−27.2
Greene	−15.3	+2.4	−0.9	−16.6	−2.3	−1.9	−18.7
Guilford	−3.9	−12.0	+3.2	−2.1	−6.0	−10.4	−16.9
Greensboro	−12.1	−12.4	−9.2	−16.7	−12.5	−21.4	−33.4
High Point	−12.0	−11.4	−14.4	−17.2	−13.2	−23.8	−33.6
Halifax	−10.1	−5.9	−14.8	−23.0	−11.8	−21.4	−28.0
Roanoke Rapids	−10.9	−10.6	−0.3	−14.3	−9.0	−12.6	−23.4
Weldon	−6.6	−1.9	+1.0	−18.1	−4.8	−6.8	−7.2
Harnett	−2.5	−3.8	+1.1	−11.9	−4.4	−4.8	−15.2
Haywood	−4.9	−16.8	−7.1	−7.0	−11.8	−26.6	−18.5
Henderson	+2.8	−1.0	+5.9	+0.3	+0.9	0.0	−4.2
Hendersonville	−3.7	−1.4	−10.0	−10.2	−5.7	−11.3	−16.2
Hertford	−11.5	+2.1	−11.5	−22.0	−7.9	−8.9	−27.1
Hoke	−0.3	−2.0	+14.6	−1.4	+1.7	+9.4	+4.3
Hyde	−8.6	+5.0	+4.7	−23.9	−2.5	+13.9	−28.3
Iredell	−4.3	−10.5	+4.3	−8.8	−6.5	−14.6	−14.5
Mooresville	−6.6	−14.0	−10.7	−14.6	−13.1	−32.0	−28.9
Statesville	−6.1	−12.1	−4.3	−17.4	−11.2	−23.0	−27.3
Jackson	+2.2	−6.6	+9.5	+2.6	+0.7	+2.5	−4.5
Johnston	−3.3	−5.7	+3.8	−4.1	−3.1	−0.7	−13.0
Jones	−16.8	−9.1	−0.7	−8.8	−5.3	−4.9	−18.4
Lee-Sanford	−3.1	+1.4	+1.1	−9.5	−1.1	+2.9	−18.0
Lenoir	−4.4	−7.9	+12.4	−8.1	−3.3	−1.0	−6.0
Kinston	−5.0	−6.0	+6.8	−17.2	−5.1	−2.9	−11.2
Lincoln	+0.7	−7.0	+9.9	−4.8	−2.5	−1.6	−8.0
Macon	+2.2	−0.3	+2.5	−2.3	+1.0	+1.9	−7.0
Madison	+7.0	−1.8	+10.0	−3.4	+0.9	+3.0	+3.2
Martin	−8.5	−8.2	−0.4	−17.7	−8.2	−13.3	−18.9
McDowell	+0.7	−12.5	+5.0	−0.3	−5.8	−14.2	−2.0
Mecklenburg	−7.3	−11.1	+1.5	−7.9	−7.3	−14.4	−22.3
Mitchell	−4.6	−5.7	0.0	−5.5	−5.3	−5.3	−24.1
Montgomery	−2.5	−5.4	+6.1	+4.4	−0.8	−2.6	+4.7
Moore	−5.0	+1.2	−2.8	−9.9	−2.4	−1.9	−14.0
Nash	−5.3	−4.8	+2.9	−7.9	−3.6	−4.6	−13.6
Rocky Mount	−4.2	+0.8	−0.1	−4.5	−0.7	+0.5	−13.2
New Hanover	−3.6	−11.9	−1.7	−7.4	−8.2	−17.2	−20.2
Northampton	−11.2	−7.8	−8.6	−25.4	−12.3	−15.3	−35.1
Onslow	−6.0	+0.5	+1.8	−13.6	−2.1	+1.1	−12.0
Orange	−2.9	−6.4	+4.1	+1.6	−2.3	−7.3	−12.1
Chapel Hill-Carrboro	−6.5	−11.1	−13.3	+3.9	−8.0	−19.8	−28.9
Pamlico	−8.6	−2.0	−4.5	−4.5	−3.2	+1.3	−16.7
Pasquotank	−10.5	−2.2	−3.4	−15.9	−5.5	−5.5	−21.8
Pender	−4.2	+3.0	+6.9	−11.3	+0.7	+3.9	−10.3
Perquimans	−10.9	+15.2	−13.1	−15.8	−0.2	+6.0	−27.1
Person	−8.8	−11.9	+9.2	−16.0	−8.0	−17.8	−23.1
Pitt	−2.3	+3.7	+5.9	−10.1	+1.4	+6.2	−6.6
Greenville	−7.1	+1.4	−3.5	−9.1	−2.4	+1.5	−19.9
Polk	−3.5	−14.8	−11.3	−19.2	−14.7	−29.3	−25.7
Tryon	−8.3	−19.3	−6.0	−9.0	−13.2	−31.1	−25.2
Randolph	−2.1	−11.3	−4.4	−2.6	−7.8	−18.6	−17.6
Asheboro	−12.4	−13.5	−11.2	−15.0	−13.1	−25.6	−28.6
Richmond	−2.9	−2.8	+5.0	−12.2	−1.9	−2.1	−8.8
Robeson	−2.2	−4.6	+8.5	−8.6	−2.2	−0.5	−5.8

School unit	Actual ADM 1976-77 to 1980-81 Grades K-12	Percentage change: Projected change in ADM by grade level, 1980-81 to 1985-86 K-6	7-9	10-12	K-12	1980-81 to 1990-91 7-9	10-12
Fairmont	−6.5	−6.1	+10.0	−18.1	−4.5	−0.3	−16.1
Lumberton	−2.0	−5.3	+7.4	−0.7	−1.3	+1.7	−4.5
Red Springs	−0.1	−1.9	+15.2	−9.9	+4.0	+11.2	−15.3
St. Pauls	−5.7	−8.1	−0.3	−8.5	−6.2	−6.8	−13.0
Rockingham	−0.8	−14.7	−0.6	−8.7	−9.8	−20.4	−15.2
Eden	−4.3	−12.6	−4.0	+0.5	−7.7	−16.9	−10.4
Madison-Mayodan	−3.9	−15.9	+0.3	−8.6	−10.5	−21.5	−21.8
Reidsville	−8.8	−12.3	−8.5	−21.3	−13.3	−23.7	−24.7
Rowan	−5.4	−7.0	+2.1	−2.8	−3.8	−12.3	−16.8
Salisbury	−18.0	−12.1	−17.6	−21.7	−15.5	−30.0	−42.8
Rutherford	−2.8	−6.2	−5.5	−7.4	−6.2	−14.3	−11.8
Sampson	−4.8	+1.4	+0.8	−15.5	−2.5	+0.3	−10.0
Clinton	−5.1	+1.3	−7.5	−10.5	−3.5	−3.1	−9.5
Scotland	−1.0	−6.4	+9.3	+0.8	−1.6	+0.1	−0.2
Stanly	−3.9	−9.1	+2.4	−6.8	−5.6	−15.3	−12.2
Albemarle	−7.8	−11.3	−7.5	−13.0	−10.6	−21.1	−31.2
Stokes	+3.4	−6.1	+5.7	+3.4	−1.2	−4.7	+3.8
Surry	−0.4	−9.9	+1.1	−4.0	−5.9	−10.6	−10.9
Elkin	−9.4	−12.8	−4.5	−7.3	−9.4	−18.6	−23.5
Mount Airy	−9.2	−11.6	−19.0	−22.8	−15.8	−28.8	−33.7
Swain	−2.2	+0.1	0.0	−9.4	−1.9	+0.5	−11.2
Transylvania	−5.6	−0.6	−8.2	−25.3	−8.2	−8.1	−26.7
Tyrrell	−13.4	+8.2	+28.7	−22.1	+4.9	+38.0	−23.1
Union	+3.3	−5.2	+7.3	+3.3	−0.4	−3.1	+0.6
Monroe	−1.1	−5.2	−2.6	−5.6	−4.6	−11.0	−13.3
Vance	−2.2	−9.6	+6.2	−1.8	−4.1	−8.1	−16.0
Wake	−2.3	−4.6	−5.3	−0.6	−3.8	−11.2	−14.8
Warren	−12.3	−5.5	−12.3	−21.8	−5.5	−7.8	−28.0
Washington	−14.0	−7.4	−22.1	−24.3	−15.3	−25.1	−43.1
Watauga	−2.9	−7.9	+0.2	−1.1	−4.5	−5.6	−9.8
Wayne	−5.5	0.0	+7.0	−11.0	−1.0	+5.9	−11.5
Goldsboro	−13.5	+0.5	−1.9	−27.7	−6.8	−5.4	−26.4
Wilkes	−5.7	−10.1	+2.0	−7.9	−6.7	−10.7	−18.4
Wilson	−2.7	−5.6	−3.2	−7.1	−5.3	−9.5	−15.9
Yadkin	−4.6	−10.9	−3.3	−12.9	−9.4	−19.1	−18.7
Yancey	−1.8	−6.4	−3.1	−11.1	−6.5	−11.5	−14.7
State	−5.0%	−7.5%	−0.4%	−8.2%	−5.9%	−10.6%	−16.7%

Source: N.C. Department of Public Instruction projections.

Table 2 summarizes the projected changes in ADM that are presented by individual units in Table 3. It also shows that actual ADM declined in 125 units—87.4 per cent of the total—between 1976-77 and 1980-81. For the period 1980-81 to 1985-86, 119 units (83.2 per cent) can expect lower ADM in grades K through 6; 80 units (55.9 per cent) can expect lower ADM in grades 7-9; 125 units (87.4 per cent) can expect lower ADM in grades 10-12; and 126 units (88.1 per cent) can expect lower total ADM. The largest declines will occur in grades 10 through 12—66 units can expect ADM in these grades to fall 10 per cent or more. In the period 1980-81 to 1990-91 the declines will be larger. ADM in grades 7 through 9 will fall in 113 units (79.0 per cent), and it will decline by 10 per cent or more in 71 units (33 units can expect declines of 20 per cent or more). ADM in grades 10 through 12 will fall in 130 units (90.9 per cent); 109 units can expect declines of 10 per cent or more. Of these, 52 units will have declines of 20 per cent or more, and 14 units will have declines of 30 per cent or more (four of these units can expect declines of more than 40 per cent).

Since birth rates have followed the same general decline everywhere, the units that are expected to have increased ADM are those in which in-migration has offset the general decline in birth rates. The projections suggest that these tend to be units in more rural areas. Of the 17 units expected to have increased ADM in 1985-86, only three are city units (Newton, Red Springs, and Washington). Seven of the 14 county units (Chowan,

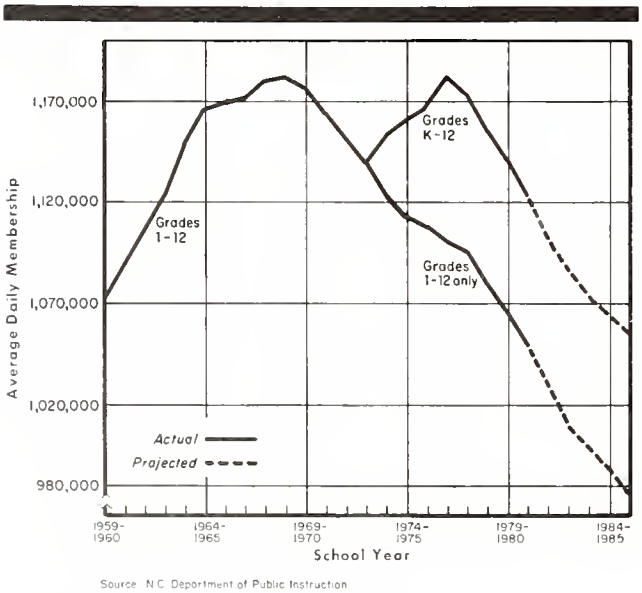
Currituck, Dare, Hertford, Pender, Pitt, and Tyrrell) are in the rural east (five in the northeast corner), and five (Clay, Henderson, Jackson, Macon, and Madison) are in the mountainous west. The other two (Cabarrus and Hoke) are in the state's central area. Of these 17 units, only five (Beaufort, Clay, Currituck, Dare, and Washington city) can expect increases of more than 5 per cent (the largest expected increase is in Dare—13.9 per cent).

None of the larger city units is expected to have increased ADM in 1985-86. In fact, the largest declines are expected in city units; the reason is that much of the population growth in urban areas is occurring outside the boundaries of city school units. For example, ADM in 1985-86 is expected to be significantly lower than in 1980-81 in Asheville (-12.8 per cent), Burlington (-16.0 per cent), Concord (-14.5 per cent), Fayetteville (-14.0 per cent), Salisbury (-15.5 per cent), and other city units. The expected decline of enrollments in city units is particularly noteworthy in projections of high school ADM to 1990-91; for example, large declines are expected in Asheville (-31.2 per cent), Burlington (-33.9 per cent), Fayetteville (-40.9 per cent), Greensboro (-33.4 per cent), and Salisbury (-42.8 per cent), among other cities.

As Table 1 shows, projected changes vary by grade. Even in units where total ADM will be increasing, ADM may decline in certain grades for a time and then increase. These patterns, which are predictable because they reflect past trends in birth rates, are demonstrated in Chart 3, which shows projected statewide ADM by grade level over the next decade. ADM in grades K through 3 should decline slightly until 1984-85, when it will increase slightly because of a rise in the number of births during the late 1970s. ADM in grades 4-6 has increased slightly in recent years but will decline for four years beginning in 1982-83, after which it will level off. ADM in grades 7-9 has been falling sharply in the last few years but should increase for three years beginning in 1982-83 and then decline sharply until 1988-89. ADM in grades 10 through 12 has been falling since 1977-78 and will continue to fall until 1984-85, when it will rise slightly before declining sharply in the late 1980s.

Chart 2

Actual and Projected Average Daily Membership
in North Carolina Public Schools
1959-60 to 1985-86



Source: N.C. Department of Public Instruction

The outlook

Falling enrollment during the past decade and the projected declines of the next decade reflect the end of the "baby boom" of the 1940s and 1950s, which interrupted a long downward trend in birth rates. But as Chart 1 shows, after 1956 the number of births that occurred annually in North Carolina began a plunge that by 1973 brought this figure below the depressed level of the early 1930s and ended, at least temporarily, only in 1977. The plunge was interrupted briefly by an aborted "secondary" baby boom of 1969-1971. The large number of women born during the early years of the baby boom reached the prime childbearing years in the late 1960s, but their increased number was offset by a dramatic decline in birth rates. In 1967 women aged 18 to 24 years expected to have an average of 2.9 children during their lifetime (down from an average for white women of 3.2 in 1955 and 3.1 in 1965); by 1974 this age group expected to have only 2.17 children.[1] Other statistics reveal important changes in attitudes, behavior, and factors that influence birth rates. Today women tend to marry later, to delay the birth of first and subsequent children, and to end their childbearing at an earlier age; and they are more likely to have their marriages dissolved by divorce.[2]

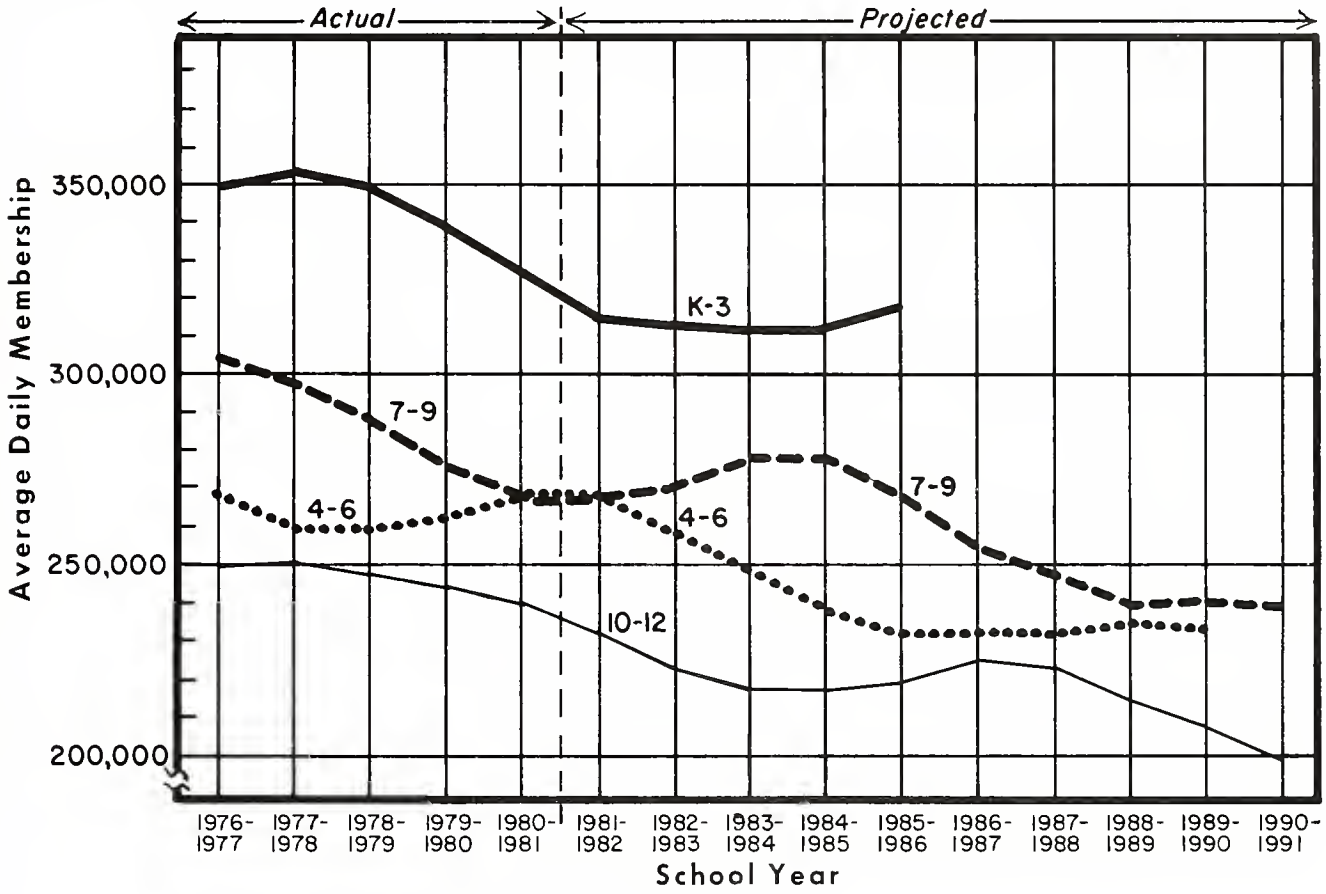
The drop in the number of births between 1970 and 1976 occurred at a time when the number of women in the prime childbearing age group was increasing. The fall in expected number of births during a lifetime ended in 1975 and remained stable until 1979 (the latest year for which survey results are available). During this period the precipitous decline in annual number of births in North Carolina ended. In 1977 the number of births per year increased 5.1 per cent above the 1976 figure and remained near this level through 1980 (but between 1977 and 1980 the annual

1. U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 358, *Fertility of American Women*, June 1979 (Washington, D.C.: U.S. Government Printing Office, 1980), Table 1.

2. See Maurice J. Moore and Martin O'Connell, *Perspectives on American Fertility*, U.S. Bureau of the Census, Current Population Reports, Special Studies, Series P-23, No. 70 (Washington, D.C.: U.S. Government Printing Office, 1978.)

Chart 3

Actual and Projected Average Daily Membership in North Carolina Public Schools by Grade Level, 1976-77 to 1990-91



Source: N.C. Department of Public Instruction projections.

number of births fell in 59 counties, and in the last quarter of 1980 and the first half of 1981 the number of births reported statewide fell below the level of the previous year).

Barring a reversal in the trend toward fewer births per woman, it appears that the number of births will not increase very much during the 1980s and perhaps not during the 1990s. The reason is clear from trends shown in Chart 1. Between 1956 and 1966 the number of births per year in North Carolina fell 21.1 per cent; between 1956 and 1976 this figure fell 31.9 per cent. Women born in 1956— the year the "baby boom" ended and the "baby bust" began— reached 18 years of age in 1974; at age 26 in 1982, they are about at the midpoint of their childbearing years. Although the declining number of women born in the state after 1956 has been augmented by in-migration, the number of women who enter the childbearing years is expected to decline during the 1980s. State population projections, which take expected migration into account, estimate that the number of women aged 15 to 19 years will decline 7 per cent below the 1981 level in 1985 and 5 per cent below the 1981 level in 1990.[3] The population of women aged 20 to 29 will increase about 4.8 per cent between 1981 and 1985 but then will fall in 1990 to a level slightly below the 1981 level.

Whether birth rates will go up or down is uncertain. Population projections for the state assume that they will rise during the 1980s, in which case the total number of births annually will increase in 1985 to a level about 10 per cent higher than the number born in 1980 and in 1990 to a

3. Office of the State Budget and Management, *Update, North Carolina Population Projections* (Raleigh, 1981).

The Pig-in-the-Python Phenomenon

The baby boom of 1945-56 and the subsequent baby bust that caused public school enrollment first to increase and then decline has influenced other government programs and many other aspects of life in the postwar era, and its influence will continue to be felt for many decades as the "baby boom" and "baby bust" generations grow older.

This phenomenon has been aptly called "the pig in the python phenomenon." Just as a snake's prey creates a moving bulge as it passes slowly through the animal's digestive tract, the baby boom generates a bulge that moves through the age distribution of the population, as Charts 4-6 show. For example, in education the baby boom generation required a huge school-construction and teacher-training program as it moved first through the elementary grades and then the high school grades before it inundated the colleges during the 1960s. The decline in births that began in 1957 has had a similar but opposite effect. Furthermore, since people in the 16-to-24 age group commit a large proportion of crimes, the increase in this group during the 1960s and 1970s undoubtedly contributed to rising crime rates then and to the current crowding of the state's prisons. As the number of people in this age group falls, we may perhaps see some reduction in crime rates and eventually in the prison population. As the baby boom generation grows older, it will increase the demand for health care services and programs for the elderly.

Since the baby boom generation is so large, the behavior of its members can have a substantial impact on events. For example, this generation was a powerful political force during the antiwar movement of the sixties. In the 1970s it was responsible for a boom in apartment construction in many communities, and, as its members establish families and settle down, they may affect the housing market. Perhaps the most significant and lasting influence of this generation, however, may stem from its members' decision to have far fewer children than their parents did (as Chart 1 shows, fewer children were born in North Carolina in 1980 than in 1930!). The influence of the baby boom generation, therefore, will endure long after its members pass from the scene sometimes during the twenty-first century.

level about 15 per cent higher than the 1980 figure. But the assumed birth rates used in projections for 1980 proved to be too high—and the assumption that they may rise may be unwarranted, given the recent downward trend. If birth rates remain at the actual 1979 level, for example, we could expect only a 5 per cent increase in births between 1980 and 1985 and only a very slight increase by 1990.

Nor is there a baby boom in sight for the 1990s. If 20 is the age at which women enter the primary childbearing years (the median age of first birth is 22.3 years), the number of women who attain this age should not increase until 1997. It is, of course, too early to speculate either on how many women of childbearing age will be added through in-migration to North Carolina's population during the 1990s or on birth rates that might exist then. But recent Bureau of the Census projections based on the assumptions that birth rates will remain at current levels and migration will continue at rates experienced from 1965 to 1975 suggest that the annual number of births in the 1990s will be lower than in the 1980s.[4]

4 *Illustrative Projections of State Population by Age, Race, and Sex, 1975 to 2000,* U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 796 (Washington, D.C.: U.S Government Printing Office, 1979), pp. 16-17.

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(ISSN 0032-4515)
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