

# POPULAR GOVERNMENT

INSTITUTE OF GOVERNMENT □ THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL



Winter 1988

NC's Schools for Talented and Gifted Students  
Managing Organizational Change    Recycling  
Board Retreats    NC's Seat Belt Law

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## POPULAR GOVERNMENT

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Over the years the Institute has served as the research agency for numerous study commissions of the state and local governments.

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James S. Stratford



# The North Carolina School of the Arts

**Marla Carpenter**

One of the sixteen campuses of The University of North Carolina, the North Carolina School of the Arts (NCSA) was established by the General Assembly in 1963 to train students of exceptional ability for careers in the performing arts. Students train in any of the four schools that make up the School of the Arts: the School of Dance, the School of Design and Production, the School of Drama, and the School of Music. A cluster of conservatories, NCSA offers its arts-training program—complete with the requisite liberal arts education—at the high-school and college levels. The school is accredited by the North Carolina Secondary Committee and the Commission on Colleges of the Southern Association of Colleges and Schools and offers a number of diplomas and degrees. These include the high school diploma with arts concentration in dance, music, and visual arts; the arts diploma at the college level in dance, design and production, drama, and music; the Bachelor of Fine Arts in dance, design and production, and drama; the Bachelor of Music; and the Master of Fine Arts in design and production.

Students applying to the school must audition and demonstrate talent and promise. Applicants to the School of Design and Production must interview with the faculty and present samples of past work in lieu of an audition. Because applicants are chosen in large part on their potential for a career in the arts, all students, once enrolled, must continue to show progress in their art or risk losing their place in the school and in the program of their choosing.

## Perspective

The founding of NCSA was a long and arduous process that still remains a pioneering effort.<sup>1</sup> Clearly there was a need for such a school in North Carolina and the South, where no school offering professional training in music, drama, or dance existed. But the concept of a performing-arts conservatory—let alone a state-supported conservatory—that equated the training of artists at a professional arts school with the training of doctors and lawyers at professional schools for medicine and law was new to many. At that time, the favorable cultural climate created by the Kennedy Administration had yet to be felt at the state level, and many still believed that the state had no business supporting the arts. In addition, some educational institutions in the state opposed a separate school. Instead, they sought to augment their own existing programs in arts education and training.

A group led by then-Governor Terry Sanford and his special consultant, North Carolina novelist John Ehle, set out to overcome opposition to the school, and the group was ultimately successful. Sanford's brainchild gradually gained support, and in 1963 the General Assembly passed legislation to establish the only state-supported, residential arts school of its kind in the nation. After a heavy competition in which several cities vied for the new school, NCSA opened its doors to students in 1965 in the old Gray High School campus in Winston-Salem.

In 1972, during the restructuring of higher education in North Carolina,

*The author is a writer/publicist in the Public Relations Office of the North Carolina School of the Arts.*

NCSA became one of the sixteen constituent institutions of The University of North Carolina. Again, legislators reaffirmed the school's mission as an institution "for the professional training of students having exceptional talent in the performing arts," which should "serve the students of North Carolina and other states, particularly other states of the South."<sup>2</sup> That NCSA not only survived but flourished before it was afforded the benefits of affiliation with the university speaks well of the foundations built during the early 1960s. That the institution is preparing to celebrate its quarter-century birthday as a nationally and internationally recognized school for the arts speaks even more highly of those foundations.

If the concept of a school for the arts raised eyebrows in the 1960s, so, too, did the organization of the school. Basically, its founders envisioned a somewhat radical departure from the norm: a school with a primary focus on artistic training in the performing arts but supplemented by a solid foundation in the liberal arts. In fact, the very reason NCSA was established separately from an existing educational institution, according to Sanford, was that "academic structure could very well stymie the artistic spirit, which demands more room for creativity and self-development; which needs deliberate encouragement to experiment, to look foolish, and to grow; and which needs hours of practice each day as well as tough, hard rules and routines."<sup>3</sup> However, while the General Assembly mandated that the school's primary purpose was professional arts training, school administrators did not forget that the founders insisted that the curriculum also represent an enduring commitment to liberal arts education for each artist. Such an education, they stressed, would enhance an artist's talent by providing a broader understanding of the world.

Another factor the founders considered in the training of professional artists was age. Research of the period maintained that creativity and artistic talent could be identified at an early age. Naturally, it was assumed that training for the talented should begin when identified—or, at least, before the artist graduated from high school or college.

The faculty chosen to train these young artists represented yet another departure from the norm. Who could



Sarah Turner

**Conductor Alexander Schneider, a visiting artist, rehearses the Symphony Orchestra.**

prepare students better for careers in the performing arts, founders reasoned, than professional artists? Who better to teach young artists than those who have striven for excellence, who have studied with the best, and who have achieved success in their fields?

### The School Today

Because of its distinctive approach, the school continues to fulfill its mission, as evidenced by the high percentage of its alumni working in their chosen profession or in an arts-related field. The School of Design and Production, for example, documents the placement of 95 to 100 percent of its students. For any school, this would be an achievement, but for an arts school it is extraordinary.

Enrollment, which started out at 226 students, has grown to more than 700 students annually—an optimal number for the current campus. According to statistics for the fall of 1987, there were 738 students at NCSA: 204 enrolled in dance; 126 in design and production; 29 in visual arts; 128 in drama; 245 in music; and 6 in general studies. Half of the student body comes from North Carolina, representing 64 of the state's 100 counties, and about 70 percent of the students come from the Southeast—both prime targets of the legislation that

established the school. Also, more than forty-two states and seven foreign countries are represented in the student body. The approximate cost per student as of the 1986-87 fiscal year was \$12,000.<sup>4</sup>

College students now make up more than half of the student body. In the fall of 1987, 248 students were enrolled in the high school program; 437 in the undergraduate college program; 14 in the graduate program; and 39 as special students. While it is important for some artists, such as dancers, to begin training early, it is less important—and even harmful—for others to do so. The School of Drama, for example, abolished its high school program many years ago in favor of a college program. The School of Design and Production's program is also for college-level students only (including a graduate program), although it has a visual arts program for North Carolina high school juniors and seniors. The schools of Dance and Music, on the other hand, enroll students at a younger age. Some of these students are enrolled in the school's Pre-Professional Dance Program, which is operated in conjunction with the Winston-Salem/Forsyth County public schools. While the legislation that made the school part of the UNC system permits the acceptance of even elementary school-age children at NCSA, the residential program for pre-high school students has always been small and is being phased out. These students still will be admitted, but they will be commuting, rather than boarding, students.

Following the school's tradition of artist-administrators, NCSA is led today by Chancellor Jane E. Milley, a noted pianist, educator, and administrator. Dr. Milley was formerly dean of the School of Fine Arts of California State University at Long Beach and arts adviser to the chancellor of the California State University System. Similarly, the arts schools are led by deans who are regarded highly in their professions.

Students at NCSA are instructed by a faculty of about 100 artist-teachers, creating an enviable student-faculty ratio of 7.3-to-1. Faculty members are called artist-teachers because they are practicing artists, chosen for their excellence and professional standing in their fields. Among the school's faculty are well-respected professionals such as ballet teacher Melissa Hayden, former

ballerina with the New York City Ballet and American Ballet Theatre; modern dance faculty member Richard Gain, former soloist with the Martha Graham Company, the Joffrey Ballet, and American Ballet Theatre; flute instructor Philip Dunigan, former member of Royal Ballet Orchestra and New York City Opera; acting instructor Yury Belov, former director of clowning for the Moscow State Circus and technical adviser for the Columbia Pictures film *Moscow on the Hudson*; and master scenic design teacher John Lee Beatty, designer of more than two dozen Broadway productions. These artists do not stop performing once they decide to teach. In fact, the administration encourages faculty to pursue active professional careers, which helps to keep the artists' skills sharp and to give their students a chance to learn lessons even they could not teach in the classroom.

In addition to working with faculty, students also have the opportunity to work with prominent guest artists, who visit the school frequently. Among those who have visited the school are Rosemary Harris, Helen Hayes, Alexander Schneider, John Cage, Menahem Pressler, Aaron Copland, Bella Lewitzky, Agnes de Mille, Arthur Mitchell, and Jessica Tandy. While the state provides some funding for guest artists, foundations and corporations, such as Z. Smith Reynolds, Mary Reynolds Babcock, and AT&T, have been instrumental in bringing distinguished guest artists to the school over the years. A new program in the School of Dance, the Lucia Chase Fellowship Endowment, promises to bring one or more world-class stars from the professional world of dance to campus to work with NCSA students. The endowment was established by Alexander C. Ewing in honor and memory of his late mother, Lucia Chase. The school anticipates that the first Lucia Chase Fellow will visit during the current school year.

Because the primary purpose of the school is arts training, performance is an integral part of the program. Students are expected to perform in or to assist in preparing productions or concerts throughout their training at NCSA. Student appearances before their peers and the public are determined by a student's instructors, based on his or her level of achievement. These performances range from student recitals to



Kurt Eslick

Students working on the Prague Quadrennial project

chamber music recitals, ensemble performances, operas, symphony orchestra concerts, ballet and modern dance programs, and plays. To give all students the opportunity to perform before the public, NCSA compiles a lengthy performance schedule each year, which typically includes more than 300 performances.

In keeping with the intentions of its founders, NCSA complements the professional training students receive with a strong liberal arts education, provided through the school's Division of General Studies. General studies courses are required for the high school diploma as well as the various degrees that the school offers. However, students at the college level who wish to concentrate solely on their art form may elect not to take any general studies courses and to receive an arts diploma upon completion of the arts program alone. Many students who leave school early to practice their profession (particularly in dance, where career length is often determined by age) eventually return to finish their degrees.

A strong correlation exists between achievement in academics and artistic ability that may be attributed to motivation, according to William Pruitt, acting vice chancellor for arts and academic programs. For the last five years, NCSA has ranked third in the UNC system (with The University of

North Carolina at Chapel Hill and North Carolina State University slightly higher) among the sixteen UNC campuses in the average Scholastic Achievement Test scores of its entering freshmen. And many students who come to the school with less-than-distinctive academic records begin to perform better in academic courses simply because they are happy to be at the school—and want to stay.

Through its Division of Student Affairs, NCSA offers supplementary programs and services to assist students in their personal development. These services, which range from health affairs to counseling, are especially important in light of the various age ranges of the student body and the competitive nature of the school.

The school also makes every effort to ensure that no qualified student is denied the opportunity to attend for lack of money. Three fourths of the students receive some form of financial assistance, and last year NCSA awarded \$1.3 million through its student financial assistance program, including merit and need-based awards. Merit scholarships are awarded to students of outstanding talent. Among these numerous opportunities are the Sanford Scholarships, awarded competitively each year in dance, design and production or visual arts, drama, and music to North Caro-



Fall Dance 1986



Cyrano de Bergerac, presented in the spring of 1985

## NCSA Reaches Out Beyond the Campus

NCSA maintains an active schedule of touring during each school year. Touring not only increases the school's visibility in the state and the Southeast but also helps to attract talented students. The program also gives students an opportunity to perform under less-than-perfect conditions—conditions that they might find in the real life of an artist. During the 1986-87 school year, 200 touring performances reached a total audience of more than 60,000 people, primarily in North Carolina—a three-fold increase in touring since the 1984-85 season. Recognizing the particular needs of rural communities, the focus of touring over the past couple of years has been in rural areas of the state. More than half of the performances given last year were presented in rural areas. Two of the most popular tours are the annual Christmas-season production of *The Nutcracker* and the Senior Repertory Company tour, in which drama school students perform any of three plays they have in repertory during the spring of their senior year. The majority of all touring performances are given in North Carolina public schools.

In addition to performing, students and faculty members frequently give master classes, workshops, lectures, and residencies throughout the state, sharing their expertise with various community groups and schools. The acclaimed faculty ensemble, the Clarion Wind Quintet, is one of the most popular groups requested across the state. Its members give in-school workshops and master classes in flute, clarinet, oboe, horn, and bassoon.

NCSA also serves the people of this state through special programs instituted primarily for the communities of Winston-Salem and the Triad. These programs include the Community Music School, featuring private and group instruction in all orchestra and band instruments, piano, voice, guitar, and composition; and the Adult Center for Arts Enrichment, featuring special courses and seminars for those who want to learn more about a particular art form or production. NCSA faculty members and recommended students teach in both programs.

Because of the school's standing in the arts world, NCSA frequently is sought out for assistance on special projects. Such was the case when the United States Institute for Theatre Technology requested help in preparing the United States' exhibit for the Prague Quadrennial of Scenic and Costume Design 1987—the olympics of contemporary stage and costume design and of theatrical architecture. The exhibit, which students and faculty from the School of Design and Production constructed, not only won the grand prize of the competition but afforded students the opportunity to work with some of the leading minds in technical theatre and design.

While such opportunities do come along occasionally, NCSA takes great pains to provide structured programs beyond the school's on-site training program, including international programs in music and dance conducted each summer. The International Music Program is an honors program that allows outstanding student musicians to study and perform in and to learn about the cultures of foreign countries such as Italy, England, and Germany. Touring invitations also come from other parts of the world; during the summer of 1987, music students participated in the Jerash Festival's first International Youth Festival in Jordan. The International Dance Program traditionally bases ballet students in Italy and modern dance students in England for several weeks of study, performance, and sightseeing.



lina residents who are first-time applicants; and the North Carolina National Bank Music Competition, which awards cash scholarships for musicians (who are between fourteen and twenty years old and North Carolina residents) to study at NCSA. Students in need of financial assistance may receive funds from federal, state, and institutional grants and loans as well as work-study assistance. The variety of need-based awards available include the UNC Board of Governors' general Minority Presence Grant Program for black North Carolinians.

## The Future of NCSA

Under the leadership of Chancellor Milley, NCSA in 1985 undertook an intensive self-examination that produced a long-range plan of priorities. "We want the North Carolina School of the Arts to be the best performing arts school in the nation," she explains. National recognition of the school indicates that NCSA has made significant progress toward this goal. In recent months, for example, NCSA has received a number of inquiries from groups in other states who wish to emulate the school's training program. In fact, almost every arts-training school in the country that has been founded in the past fifteen years has used NCSA as a model.

NCSA also continues to attract a high level of national media interest. In May 1987 the school was featured on a national radio show, "Lincoln's Music in America." When WGBH, Boston's public television station, needed to interview dancers for a program on osteoporosis, they contacted the school. NCSA also has been the topic of numerous stories in the national print media, such as *Smithsonian* magazine. This attention has helped to build NCSA's reputation as one of the strongest art schools in the nation.

While the school's reputation has grown strong nationally, and even internationally, its reputation in its own state has not kept pace with that growth. This fact is reflected in the school's enrollment, which through the years had become composed predominantly of out-of-state students—until this year. In the fall of 1987, in accordance with the mandate from the state legislature, NCSA reached a goal of 50 percent in-state enrollment for the first time in many years.

To increase the school's visibility throughout the state, NCSA regularly is represented at college recruiting fairs held by North Carolina high schools and has initiated direct-mail campaigns, increased advertising, and more touring performances. The school also has instituted special auditions in various regions of the state to attract students.

In addition, NCSA is revising some of its training programs to reflect the special needs of in-state students. For example, a new program has been created in the School of Drama to provide a general introduction to theatre for North Carolinians entering that school. Eventually, the program will be expanded as a preprofessional program for North Carolinians entering both the Drama and the Design and Production schools. Currently, students in public schools receive little exposure to the arts in their curricula. Dr. Milley laments this deficiency: "Sadly, students are not required to have taken even one unit in the arts in order to graduate from a North Carolina high school. Nor are they required to have completed a course in the arts for admission to schools of The University of North Carolina."

While one experience with the arts in public schools does not an artist make, arts educators generally are pleased with the Basic Education Program for North Carolina's public schools, which will establish a discipline-based arts curriculum in grades kindergarten through twelve by the 1992-93 school year. While a unit in art still will not be required for graduation, exposure to art will be a mandatory part of the curriculum offerings. Many perceive this part of the Basic Education Program as an affirmation of the General Assembly's commitment to the arts—the same commitment that prompted it to establish NCSA.

And the Basic Education Program should benefit NCSA, at least indirectly. Exposure to art in the public schools will help prepare talented students for arts training at a higher level. According to Pruitt: "There's not so much of a question of talent lacking out there, but training lacking. We're still largely a rural population in North Carolina. There are people out there who have never seen a live play. We're at the point that basketball was in North Carolina in the 1950s." Sports enthusiasts will remember that UNC Coach Frank McGuire won

the NCAA title in 1957 with a group of student players from New York and New Jersey—not from North Carolina.

NCSA also is attempting to build stronger ties with and provide more services to the public schools in the state by offering more workshops, demonstrations, and lectures on campus. Every summer since 1980, for example, NCSA has served as the host for ARTSWORK, a professional workshop for teachers and principals in North Carolina's public schools. And the school plans to be more involved in state arts organizations.

With its training programs well established, NCSA is considering moving into uncharted territory. School officials currently are considering adding programs on acting in and writing for films. "With the film industry now in the state," Dr. Milley explains, "the school has an excellent opportunity to grow with the industry's needs."

Surely, if NCSA did nothing more than continue to train students through its existing programs and special opportunities, it would be deemed a success. But the school continues to move forward and to meet new challenges. Along the way, the school also has proven itself to be a good citizen of the state, the Southeast, and the nation. North Carolina's Thomas Wolfe explained it best: "If a man has a talent and cannot use it, he has failed. If he has a talent and uses only half of it, he has partly failed. If he has a talent and learns somehow to use the whole of it, he has gloriously succeeded, and won a satisfaction and a triumph few men ever know."<sup>5</sup> The North Carolina School of the Arts is helping students to develop their artistic talents so that they may succeed and win that rare satisfaction and triumph.

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1 For an account of this complicated story, see Leslie Banner, *A Passionate Preference: The Story of the North Carolina School of the Arts* (Winston-Salem: North Carolina School of the Arts Foundation, 1987).

2 N.C. Gen. Stat. § 116-64

3 Banner, *A Passionate Preference*, xiii.

4 For the 1985-86 school year, the total expenditure per student for all North Carolina public schools was \$2,915. This figure is based on the average daily membership for January 1986. Data were compiled by the Information Center, N.C. State Board of Education, Controller's Office, June 1987.

5 *The Web and the Rock* (New York: Harper & Brothers, 1939), 462.

Courtesy, NCSSM



# The North Carolina School of Science and Mathematics

**James McDuffie**

Years before the publication of *A Nation at Risk*<sup>1</sup> and the attention it focused on the role of public schools in America's eroding preeminence as a global scientific and technological leader, North Carolina had developed its own imaginative response to keeping, if not setting, pace with the world—the North Carolina School of Science and Mathematics (NCSSM). Amid swelling criticism of the public schools and a national acknowledgment that Johnny could not do his arithmetic any better than he could read or write, NCSSM opened in 1980 as the nation's first public, residential high school for students with special aptitude and interest in the sciences and mathematics. Newspapers nationwide chronicled the North Carolina approach, beginning that first fall with 150 of the state's brightest young scholars hard at work in a converted, turn-of-the-century hospital in Durham.

The concept of state-funded schools for the academically gifted in North Carolina was first proposed in the early 1960s by novelist John Ehle, a staff member in the administration of Gov. Terry Sanford. Ehle's model contained four separate, contiguous campuses devoted to the arts, science and mathematics, languages, and the humanities and social sciences. Sanford found support for part of that model—that of a residential arts school, known today as the North Carolina School of the Arts—but it was not until 1978 that a residential science and mathematics school became a reality.

From the outset, NCSSM was controversial and, as such, was not without its detractors. Educators, legislators, and members of local school boards raised

questions about cost, elitism, and the skimming off of the best students from local schools. They were skeptical of the residential requirement and fearful of political influence playing a part in the admission of students. Although debate over these and other issues at times split the educational community, the concept was championed by Gov. James B. Hunt, whose own efforts first to educate the public of the special needs of the gifted and then to advocate reform led to the creation of the school.

Hunt's purposes in establishing the school were visionary. As conceived, the school would be a pioneering effort to boost the quality of education for high-caliber students and to catalyze improvement in science and mathematics across the state and nation. In this way, North Carolina would develop the scientific and technological leadership of the twenty-first century, consolidate its successes in landing high-technology industries, and prepare the state and its people for the complexities of the technological age and competition in a global economy. No longer could North Carolina depend almost exclusively on an economy driven by agriculture, textiles, and manufacturing, all of which had shown their vulnerability in the shifting sands of the international marketplace.

## Beacon School

Now in its eighth year of operation, NCSSM has become the beacon institution that its planners envisioned. As an affiliate school of the University of North Carolina system, NCSSM operates separately from the state's depart-

*The author is the communications officer of the North Carolina School of Science and Mathematics.*



Mark Burton demonstrates a paddle boat he built during the school's Special Projects Week.



Wade Rogers, a student in the Mentorship program, studies the southern pine beetle with the North Carolina Forest Service.

ment of public instruction—an arrangement that affords the school a more flexible institutional form than the traditional high school. For example, a board of trustees governs NCSSM, setting the standards for hiring faculty and for developing curricula and other school policy. Among other things, this autonomy has permitted the school to hire from the private sector outstanding faculty who exceed basic state certification requirements but lack the actual certificate and to choose textbooks more advanced than those on the state-approved list.

The continued support of the General Assembly and of the private sector—an essential element in the operation and gradual development of a school for excellence in which students attend tuition- and room-and-board-free—also has shaped NCSSM. Cost is estimated at \$10,000 per student.<sup>2</sup> Some 90 percent of the school's annual operating budget of more than \$6 million is derived from state appropriations. The remainder comes from corporations, foundations, parents, alumni, and friends, all of whom have generously endorsed the concept by contributing \$9.6 million since the school was established. The total investment in the campus, which was converted from the old Watts Hospital and Watts School of Nursing complex, now stands at \$30 million, which includes the \$8 million value of the original site, \$17.5 million in state construction funds, and \$4.5 million in private funds.

The flexible and innovative institutional form and ongoing commitment by a public-private partnership has been to the great benefit of the school's 475 students, who represent every geographic region and ethnic group in North Carolina. The current student body is 54 percent male and 46 percent female; minorities account for about 15 percent of the student body.

Students are selected statewide through a rigorous and multi-faceted admissions process aimed at identifying those candidates who have the potential to be the scientific and technological leaders of the next generation. A prospective student's admissions portfolio includes test results, course grades from the first three semesters of high school, letters of recommendation from teachers and counselors, an essay written by the student to measure both logical thinking and creative expression, and an evaluation of the candidate's personal and academic sparkle as exhibited in a personal interview.

## Curriculum

NCSSM students typically arrive on campus having met the state graduation requirements in mathematics and science. But the school requires an additional five units—two in mathematics and one each in chemistry, biology, and physics—and students usually elect additional courses and graduate having accumulated six or seven units in

mathematics and science at NCSSM alone. The current course catalog lists twenty courses in mathematics and computer science, sixteen in biology, eight in chemistry, and eight in physics. Although NCSSM emphasizes mathematics and science, the school's instructional program is comprehensive. Students must complete additional requirements in English, a foreign language (the choices being Russian, German, Chinese, Latin, French, and Spanish), American history, and physical activity. Other classes in the social sciences, music, and visual arts, though elective, are well attended.

Most courses are taught at an advanced level and explore material and concepts usually found in college courses for freshmen and sophomores. Students are guided in their studies by a uniquely qualified faculty—all have master's degrees and half hold doctorates—with backgrounds in college and secondary-school classrooms, corporate laboratories, and research institutes. Many faculty members have credentials uncommon in secondary education. NCSSM's four physicists hold doctorates in astrophysics, biophysics, solid-state physics, and theoretical physics; the school's language coordinator holds a doctorate in linguistics and speaks eight languages; and the principal, who also teaches in the school's chemistry department, once headed the biochemical neuroendocrinology

division in the Biological Sciences Research Center at the UNC School of Medicine.

Along with a challenging curriculum and talented faculty, the students' instructional program is further enhanced by hands-on use of state-of-the-art equipment and special research activities and programs. Many seniors, for instance, are placed in Mentorship, a program that allows them to work closely with distinguished scientists and scholars in the Research Triangle. Often the research is original, and the student's contribution to it is significant enough to share in the credit.

## Impact and Outcomes

Although it is too early to assess fully the specific impact of the school on its graduates or on education in general, some positive indicators do exist, including the success of the residential instructional program, the response by teachers and school systems to outreach activities, and the use of the school as a model for similar institutions in other states and foreign countries.

Thus far the school has successfully identified and enrolled a sample of the state's finest students in science and mathematics, as evidenced by the fact that for four consecutive years it has enrolled more National Merit Scholarship semifinalists than any other school, public or private, in the nation. The 175-member class of 1987 had 63 National Merit semifinalists and 13 National Achievement semifinalists. The school's mathematics team won the 1987 national Atlantic and Pacific Mathematics competition, and former students are among the ranks of Rhodes Scholars, designers of Space Shuttle experiments, and international Physics Olympiad medal winners. Also, nearly 100 percent of NCSSM's graduates have entered colleges or universities. Two thirds have elected to attend North Carolina institutions; the rest have been widely distributed among the most prestigious and selective colleges, universities, and military academies in the country. And each graduating class has been offered scholarships and grants totaling more than \$2 million.

The investment by the state, the private sector, and award-granting institutions continues to suggest a promising



Courtesy NCSSM

Dr. Jane Goodall talks with a student during a visit to the school.

payoff. Preliminary surveys indicate that the great majority of NCSSM graduates are involved in important study and work related to science or mathematics, and most are doing so within North Carolina.

Beyond identifying and educating some of the state's best students, the school has taken no less seriously its charge to contribute to improvements in mathematics and science education across the state and nation. More than 4,000 teachers—almost exclusively from North Carolina schools—have participated in summer workshops in science, mathematics, and computer science, and these teachers have returned to their classrooms with software, laboratory experiments, and new ideas. Even lab equipment has been loaned to the schools of workshop participants. The school also houses one of the Mathematics and Science Education Network centers of The University of North Carolina, administers the Summer Ventures in Science and Mathematics program, and coordinates the statewide distribution of software developed by the Minnesota Educational Computing Consortium, which benefits forty school districts each year.<sup>3</sup>

However, NCSSM's biggest contribution yet to the improvement of mathematics education may come with the completion of its new fourth-year mathematics course, which is being developed for nationwide distribution with support from the Carnegie Corp. The course, currently a part of the NCSSM curriculum, emphasizes

computer-aided problem solving, statistics, data representation and analysis, and other topics more useful in college and the work-a-day world than the time-consuming calculations of traditional high school mathematics courses.

## A National Model

The continued growth and success of the school and its component programs have led other states and nations to use NCSSM as a model for their special education needs. Louisiana and Illinois have opened schools based on NCSSM. Many others, including Maryland, Mississippi, and Oklahoma are planning similar schools. In all, delegations of legislators, educators, and business leaders from thirty-five states and fifteen foreign countries have visited the campus. The Kingdom of Jordan plans to open a school and has sent its director to spend a month in residence at NCSSM. And, in each of the past three years, the Republic of Korea has sent teams of five science educators to spend two weeks in residence working with the school's science faculty.

Establishment of a special residential school for the gifted is costly, but many states already have decided that they cannot afford to forgo such a valuable educational initiative. NCSSM Director Charles Eilber suggests that all states give thoughtful consideration to the idea: "Every state has parents, a business community, and a legislature concerned about the quality of education being provided to their young people who have the potential to lead. Every state has academically talented students who are unserved or underserved by their present schools. And every state has schools, large and small, in which the few students with deep interests in science and mathematics are not always challenged by their teachers or are not provided the resources required to develop their talents and interests."

But, Eilber adds, residential schools are not necessarily the only—or, for some communities, the best—solution. Communities should look to ways of providing some of these resources to academically talented students in their own home schools. "Every community provides extensive after-school programs for athletically talented students," Eilber elaborates. "Why can't teachers,

## A Sample of Courses Offered at NCSSM

### *Mathematics and Computer Science*

Advanced Programming: C • Exploratory Data Analysis • Statistics  
Calculus • Mathematical Modeling

### *Sciences*

Cell Biology and Biochemistry • Biophysics • Genetics • Bioethics  
Organic Chemistry • Chemical Instrumentation • Polymer Chemistry  
Organic Spectroscopy • Applied Electronics • Astrophysics

### *Humanities and Other Areas*

Wisdom, Revelation, Reason, and Doubt  
Africa, Asia, South America: Literature and History  
Intermediate Chinese • "Telling Lives": History as Biography  
Arms and Ambassadors: Diplomacy and Its Failures  
Economics: Money, Management, and Markets • Religion and Politics  
Philosophy and the Modern Predicament  
Advanced Music Theory with an Historical Perspective  
Advanced Electronic Music • Kinetics

1 National Commission on Excellence in Education, *A Nation at Risk. The Imperative for Educational Reform. A Report to the Nation and the Secretary of Education, United States Department of Education* (Washington, D.C.: Government Printing Office, 1983).

2. For the 1985-86 school year, the total expenditure per student for all North Carolina public schools was \$2,915. This figure is based on the average daily membership for January 1986. Data were compiled by the Information Center, N.C. State Board of Education, Controller's Office, June 1987.

laboratories, computers, and libraries be made available as late into the afternoon—or even on Saturdays—as are coaches, gymnasiums, and tackling dummies?"

Whether a special school would answer an educational need in any particular state obviously depends upon many factors. But as states have decided to do something about education for the academically talented, they have looked to North Carolina, where the vision of one governor and the General Assembly's commitment to excellence in education have produced the nation's premiere residential public high school for scientifically and mathematically gifted students.

3. The Mathematics and Science Education Network is composed of ten centers that conduct in-service teacher training and research aimed at improving mathematics and science education in North Carolina. Each center is housed at a constituent campus of The University of North Carolina.

Summer Ventures in Science and Mathematics is a five-week, cost-free, summer enrichment program for academically talented high school juniors and seniors. Six campuses of The University of North Carolina host Summer Ventures institutes.

# Managing Planned Change in Organizations

**Roger M. Schwarz**

Think of the last time you tried to create a significant change in your organization. Did employees understand the change? Did they actively support it? How did you know how well the change worked? Were there any consequences you did not anticipate? These questions reveal that managing change in organizations is a complex task that requires managers to consider many issues.

The purpose of this article is to describe the basic issues that managers face and the decisions they need to make in order to manage planned change successfully. Organizations are continually changing, but many of these changes are not carefully planned. The term *planned change* refers to changes that are carefully conceived and methodically implemented. This article focuses on the process of change rather than the content. Content refers to what is being changed (for example, a performance appraisal policy or decision-making style); process refers to how the content is changed. Managing the process of change is as important as the content. By understanding the process issues, managers can create organizational change more effectively, regardless of the content.

The content of organizational change includes many areas. Some changes focus on how people think about and behave toward each other. These include improving communication among people, increasing participation in decision making, learning to manage conflict constructively, and improving relationships with the public. Other changes focus on how parts of the organization are arranged. These include regrouping the units that constitute the organization,

changing the flow of work, and changing individual job descriptions. Still other types of changes focus on the introduction of new technology, such as computers. Finally, organizations sometimes change their mission or their culture, which includes the basic beliefs and assumptions that guide all activity in the organization.

This article has three sections. The first section describes six elements necessary for managing planned change. The second section describes how managers can manage planned change systematically and predict how the changes will affect other parts of the organization. The last section discusses ways to manage change more effectively by having employees participate in the process.

## Six Elements Necessary for Planned Change

Six elements are necessary for effective planned change to occur in organizations:

1. Motivation to change the present organization;
2. A vision of the future organization;
3. An understanding of where the organization is now;
4. A process for moving from the present to the future organization;
5. Resources to move from the present to the future organization; and
6. A method of assessing changes.<sup>1</sup>

*The author is an Institute of Government faculty member who specializes in management and organizational psychology and change.*

These six elements, when managed in unison, ensure that the change will be planned effectively, implemented successfully throughout the organization, and assessed to guide changes in the future.

### **Motivation to change the present organization**

Like individuals, organizations develop ways of doing things that become habits or ingrained behaviors. Although people may recognize that an organizational habit reduces the organization's effectiveness, the habit may persist because change is difficult. Change requires members to unlearn old behaviors and to learn new ones. While organizations are in the process of change, members are often uncertain about what is expected of them, which can create stress. Consequently, members will be reluctant to initiate or participate in a particular change until they are sufficiently motivated to change the present organizational behaviors.

The motivation to change may come from internal desires to improve the organization and how it serves the public, or it may come from outside the organization. Changes that are based on internal desires for improvement are more likely to be successful than changes that are made solely to comply with the demands of others. The ideal motivation for change arises from organizations that have given up their "if-it-ain't-broke-don't-fix-it" philosophy for one that explicitly encourages continual improvements. The philosophy of these organizations enables them to tap into a continuous source of positive motivation for change.

An organizational crisis—a poor decision compounded by negative media publicity, for example—can generate a high level of motivation for change. In an effort to stem the crisis, the organization may opt for a quick-fix solution that like a pain reliever, temporarily relieves suffering but does not eliminate the root of the problem. Unfortunately, the quick-fix solution reduces the motivation of members to carry out the long-term change necessary to avert future crises. The task for the manager is to provide enough of a quick-fix for the organization to continue to function, without decreasing the motivation needed for the more long-term change.

### **A vision of the future organization**

The second element for change is a vision of the future organization. Just as sailors set their ship's course by a beacon, a vision can provide direction for an organization. The vision is particularly helpful when forces outside the control of the organization make it impossible to steer a straight course. A vision allows the organization to tack back and forth, still moving ever closer to its goal. For example, severe budget cuts temporarily may make it impossible for a county to realize its vision of a single location for providing all of its social services. Until funding can be obtained, the department of social services may seek better-located separate facilities, yet remain cognizant that in the end it wants to have a single location. Without a constant vision to reorient it, an organization blown off course may never reach its goal.

Whereas motivation leads people to change their present organization, a vision motivates them to move in a particular direction. But the vision must be clear. Organizational change is a type of journey, and few people are willing to embark on a journey without knowing the final destination. The vision should be clear enough that employees understand how their work will be affected, including what they and the organization will gain and lose as a result of the change. The vision also serves as a blueprint—from it people can tell when they have reached the type of organization they set out to create or how much more they need to work.

Ideally, a vision should be comprehensive enough to provide guidance for any significant change the organization might consider. The vision includes what the organization stands for and what it wants to be. A comprehensive vision makes possible a set of changes that are coherent and consistent rather than piecemeal.

Defining the vision is a complex process that requires individuals to explore the basic beliefs they hold about the purpose of the organization and how members should work together to achieve that purpose. The responsibility for creating a vision rests primarily with those who govern the organization—the chief administrator and the board if one exists. However,

because implementing the vision requires the concerted effort of all members, employees throughout the organization must share in the vision if it is to be realized.

### **An understanding of the present organization**

Change requires knowing not only your destination but also your point of departure. Many organizations underestimate the time required to complete a change because they overestimate their closeness to the goal. However, the gap between an organization's present state and desired state is determined not only by how far the organization must travel but also by the nature of the journey. For example, for an organization trying to develop an effective set of policies, the change process will differ depending on whether they currently have few or no policies or have an elaborate set of burdensome policies. Understanding where the organization is starting from enables the members to assess more accurately the degree and nature of change required to realize their vision and goals.

Understanding the present organization can be accomplished through an organizational assessment.<sup>2</sup> In this process, members may be interviewed, surveyed, or brought together in groups to identify how individual jobs, the communication among members, and rules and procedures facilitate or hinder the achievement of the organization's goals. A good assessment identifies the aspects of the present organization that need to be changed to reach the desired future organization. For example, does the future organization require that members change their attitudes, that members change their rules and procedures, or that a different technology be used to do the work? A thorough organizational assessment allows members to identify the causes of present problems and to plan changes accordingly rather than to concentrate on symptoms of the problem. I will discuss organizational assessment further in the section on assessing change.

In addition to generating information, an organizational assessment serves two other purposes. First, it signals members that the organization is beginning a process of change, and it raises expectations that things will be differ-



ent in the future. Second, these raised expectations increase the motivation among members, which can be used to facilitate the changes.

### **A process for moving from the present to the future**

Once the organization knows its present situation and has a vision of its future, it can develop a process for moving from the present to the future organization. The process includes all the activities and decisions required for the organization to reach its desired state: Who will decide on the changes? How will the diagnosis and changes be introduced and conducted? And how will the organization free up time for these activities?

The process of change is a time of transition for an organization. Consequently, the way the organization functions during the transition will be different from the way it functions at present and from how it will function when it reaches its desired state. As an example, if an organization is converting from typewriters to word processors, there will be a transition period during which some people will use typewriters while others learn to use the word processors. If the system is complex enough, a new function, such as data processing, may be created to take responsibility for the equipment and new personnel. Until the system operates reliably, both typewriters and word processors may be used to ensure that work is not interrupted. Similarly, members may keep back-up copies of their work until they have confidence in the new system.

The transition period itself needs to be managed, and how it is managed is critical. To facilitate the change, the transition process must be managed in a way that is consistent with the future state of the organization. For example, using an authoritarian management process to implement a more participative management style is unlikely to yield the desired results because the ends are inconsistent with the means.

Who will manage the transition is also an important decision. It is often difficult for organizations to use their permanent structures to change themselves. Temporary management structures, such as committees, task forces, and temporary appointments, as well as consultants

may provide the flexibility needed to manage the transition.

### **Resources to move from the present to the future**

Creating organizational change requires resources. One resource is support from key individuals in four groups: 1) those involved in planning the change; 2) those involved in implementing the change; 3) those directly affected by the change; and 4) other influential individuals whose support helps facilitate the change. Different changes require different degrees of support from employees. Some changes—relating to board members, for example—may require support only from top-level managers; other changes—increasing the flow of information up the organization, for example—may require the commitment of the total organization. Before initiating any change, the manager needs to assess the level of support from each of the four groups and to determine if it is sufficient to carry out the change.

Time is another resource necessary for change. The process of change occurs while the organization carries out its basic activities. Therefore, members must find extra time for activities such as planning sessions, an organizational assessment, and implementation programs, including training and evaluation. Ironically, many organizations that are in need of change operate by crisis management and are least able to create the extra time needed to manage the process of change. These organizations can make time for change activities by temporarily reducing low-priority activities, reallocating work, or meeting outside of normal work hours. This is particularly important because there is often a loss of efficiency in the early phases of a change process. If the change is complex, extra time may be needed for several years.

A third resource is money. Obviously, the amount of money required will vary with the type of change, the size of the organization, the use of outside consultants, and other factors. Organizations can use money to obtain outside resources, which will save the organization time in the change process. For example, using outside consultants can speed the process of helping the organization create a vision, a process for

change, and a method for monitoring the change. Although outside resources can help reduce the time required, it is important to note that, even with help, the process of change is slow. In addition, although money can purchase assistance, the responsibility for managing change still lies with the organization.

### **A method of assessing changes**

Going through the change process does not guarantee that the organization will reach its desired destination. Organizational members need a reliable way of knowing how much progress they have made and when they have achieved the new organization they set out to create. The organizational-assessment approach used to identify the initial state of the organization can become a tool for measuring how the organization has changed and for identifying additional changes that are needed. To return to our sailing analogy, organizational assessments are the sextant readings that enable members to know their position, to chart whether they are on course, and to make corrections if they are not. Periodic assessments, like regular sextant readings, allow an organization to remain on course by fine-tuning its change efforts. Without regular assessments, the organization runs the risk of having to make major shifts in direction to correct a change strategy that has long been off course.

What should the assessment measure? The specific answer depends on what the organization is changing, but several factors must be included. First, the assessment should measure the behaviors and attitudes that people would take as evidence that the change has occurred. For example, if the objective is to create an organization in which people can honestly share negative information, it would be important to assess whether individuals have shared more negative information, have increased their trust in other members, and have found the negative information useful.<sup>3</sup> Second, the assessment should identify unintended consequences of the change. For example, if an employee has told his supervisor that the supervisor makes the employee's job more difficult by frequently changing the priorities of the employee's projects, did the super-

visor punish the employee for sharing honest information? Finally, the assessment should examine the change process itself used to achieve the outcomes the organization is seeking. How has the change process helped members create the new changes or made it more difficult to create them?

By focusing on the change process as well as the outcomes, the assessment enables members to improve the transition. By communicating the results of the regular assessments, members can develop a common understanding of the current organization, the progress they have made, and the areas in which more change is needed.

Together the six elements form a continuous cycle of planning, change, and assessment that can be applied to any change. To simplify this section, I have discussed the change process as if an organization makes one change at a time; for example, it either builds better relationships with its clients *or* converts to a computer system *or* establishes a performance appraisal system *or* increases the flow of constructive negative information. However, as we will see in the next section, it is not possible to make only one organizational change at a time. Therefore, planned change usually requires using the six elements to coordinate a set of simultaneous changes. The following section describes how an organization can effectively manage these simultaneous changes.

## Managing Change Systemically

To manage change effectively, it helps to think of an organization as an open system. An organization is an open system because it consists of parts that are coordinated to accomplish a mission and because its ability to accomplish the mission depends on things outside of the organization (for example, community support). We usually think about the parts of an organization in terms of function or departments—the personnel department, the finance department, or the public relations department, for example. However, thinking about an organization as an open system is more helpful for identifying problems and managing organizational change. Let us consider dividing the organizational sys-

tem into six parts: the mission and tasks, people, behaviors and processes, structures, technology, and the environment, which is not part of the organization but greatly affects it (see Figure 1).<sup>4</sup>

**Figure 1**  
**An Open-Systems Model of Organizations**



The mission and tasks are central to the organization. The mission is the purpose for which the organization is designed. The tasks are the activities that produce the service or product to accomplish the mission of the organization. For example, the mission of a school is to produce educated students who can continue learning on their own; it achieves that mission by teaching various subjects and by teaching the value of learning itself. Organizations can have more than one mission. For example, during the Depression, organizations were created not only to build roads and bridges but also to provide employment for those who had lost their jobs. The mission and tasks are the central core of the organization around which all other parts should be designed.

The people in the organization refers to the needs, skills, abilities, expectations, values, assumptions, and basic beliefs that members hold. Author Max Frisch, describing the hopes of managers, once said that they had sought workers but that human beings had come instead. Each person brings a different set of needs, skills, abilities, and so forth. The effective organization uses these individual differences to carry out its tasks.

Behaviors and processes are the methods that people use to help them carry out the mission and tasks of the

organization. Examples include how members communicate, solve problems, make decisions, lead and supervise, plan, and handle conflict. Processes are designed to provide a common method for working together that enables members in different parts of the organization to coordinate their work efficiently. For example, when members from different departments meet to solve a problem, they will work more efficiently if the different members agree to use the same problem-solving methods. In addition, the more consistent the behaviors and processes are with the task of the organization, the more effective the organization will be. For example, a police department handling life-threatening emergencies will require a more streamlined form of problem solving than a planning department, which has more time to gather information and consider alternatives.

Structures are the parts of an organization designed to organize or control behavior in such a way that it furthers the mission of the organization. The structures are usually delineated in writing in the form of an organizational chart, reward policy, job descriptions, or financial control system, for example. The hierarchical structure (illustrated by an organizational chart) organizes groups of people, shows who reports to whom, controls who has the authority to control others, and sometimes controls who can talk directly to whom.

Technology represents the techniques and tools that members use to convert the raw resources into the organization's finished products or services. To return to an earlier example, ideas can be converted to a written format using a pen, a typewriter, or a computer and printer. Similarly, police departments can match fingerprints with suspects either manually or with the aid of a computer. Technology also includes intangible techniques, such as the type of therapies mental health agencies use and the type of educational programs that schools use.

The environment, although not part of the organization, has a great effect on it. The environment of an organization comprises the people, events, information, equipment, laws, buildings, weather, and any other factors outside the organization that affect how it carries out its mission. The environment also includes any of these factors that

are affected by the organization's actions, even if that factor is unable to affect the organization in turn.

Ideally, an organization and its environment work together in this way: People in the environment purchase the services or products that the organization produces, which gives the organization the resources to continue to produce services and products. Similarly, government takes in revenues (through taxes and other sources) and human labor and converts them into services that it offers to its community, which, in turn, continues to pay taxes.

Thinking about organizations as open systems has several implications for managing change. First, to work effectively, the different parts of an organization have to fit together. For example, an effective performance-appraisal system requires: a valid method (*technology*) for assessing performance; members (*people*) who value feedback and have the interpersonal skills to discuss other members' behavior (*behavior and processes*); and a reward system (*structure*) that reinforces behaviors that further the organization's mission (*mission and tasks*) in such a way that good performers choose to remain rather than move to a competing organization (*environment*). Here the quality of a system is defined not just by the quality of its parts but also by the goodness of the fit among the parts. To use a sports analogy, the best basketball team is not necessarily the one with the five best shooters but rather the one with excellent players who precisely coordinate their movements and can quickly and smoothly adjust to each other.

Second, viewing organizations as a system of interdependent parts means it is rarely possible to change only one thing. Each time one part of the organization changes, other parts with which it is linked must change either to achieve or to maintain a good fit among the parts. In the past few years, a number of sanitation departments have converted from two-person garbage trucks to one-person trucks that automatically lift specially designed garbage cans over the truck, empty them, and return them to the curbside. While at first glance the change seems to involve only the purchase of new trucks (*technology*), in reality many other changes must occur to support use of the new trucks. For instance, the *structure* of the sanita-

tion workers' job will need to change. Whereas formerly the workers coordinated their work with others on the truck, now one worker will carry out the work alone. The new trucks will perform some of the work the worker used to perform but will require other actions (*behaviors and processes*). Assuming the worker enjoyed working with coworkers, he or she will need to develop a positive attitude (*people*) about working alone. The sanitation department must also change the behavior of the citizens (*environment*), who now will be required to place their specially designed garbage cans in a certain position at the curb so that the truck can automatically empty it. In this way, a change in one part of the system requires changes in other parts. By using the open-systems model shown in the figure, managers can identify the various parts of the organization that must change if the change is to be implemented successfully.

The third implication of thinking of organizations as open systems is a need to consider the environment when managing change, which the garbage truck example illustrates. Ultimately, an organization survives only as long as it provides a service or product that the community (environment) values and is willing to pay for or support. The Coca-Cola Company recognized this fact when customers refused to buy the new-formula Coke and demanded that it return to the original formula.

Organizations that ignore the demands of their environment do so at their peril. Even government organizations, which generally provide services that the private sector is unwilling or unable to provide, must still heed their environment. In addition to moving out of the jurisdiction, citizens have a number of ways to influence a government that has created a change with which they are dissatisfied or that has failed to create a change they consider necessary. They can write letters, attend hearings, protest, withhold taxes, or vote in new officials, to name a few. Parents dissatisfied with the school system can send their children to private schools.

Organizations are not helpless in the face of the environment though. They often influence the community to accept and support organizational changes. Government leaders constantly try to educate the community about difficult

issues so that the community will be more supportive.

In summary, viewing organizations as open systems helps manage change in two ways. First, it helps to identify the various parts of the organization that will need to change to support the initial change. Second, it helps to focus on the demands of the environment, which must be met if the organization is to survive.

## Managing Change Through Participation

In the previous two sections, I have described six elements needed to create change and a systemic approach for managing that change. In this section I will discuss how managing change through participation reinforces the six elements and the systemic approach.

### Participation and the six elements of planned change

Like managing in general, managing organizational change is often more effective when employees participate in decision making. Involving employees in organizational changes has several benefits that are directly linked to the six elements necessary for planned change.<sup>5</sup> First, involving members increases their *motivation* to change. People support what they help to create. If employees play an active role in designing the changes, they will understand the process better, have greater trust that the changes will meet their needs, feel more ownership toward the process, and be more committed to implementing the changes.

Second, participation generates more *resources* for change. Members become a resource for *understanding where the organization is now*, for *assessing the changes*, and for identifying a *process* for implementing the *vision*. Understanding where the organization is now (the initial assessment) and assessing changes requires information from members throughout the organization. Members are more likely to provide accurate and helpful information if they are involved in designing the assessments. They are also more likely to accept the assessment information and use it to fine-tune the organizational changes if they have been involved. Furthermore, involving

employees generates more and better ideas for implementing the vision of the organization. Given the vision, employees can identify how they would perform their jobs differently to make the vision come alive. Members can also identify how other parts of the organization could change.

Finally, when managers give employees influence in the change process, they help improve the quality of work-life for those employees. Apart from the value to the organization, involving employees in decision making meets a basic need for people to have some control over their jobs.

Participative decision making, while a type of organizational change, is also a process of change that has some costs as well as benefits. Bringing together a group of people who have different perspectives about the change will generate constructive conflict. To resolve the conflict—by integrating the different perspectives into a plan for change that meets the needs of those involved—the group must have effective problem-solving skills. During the time the group is learning these skills, it may reach decisions slowly. Yet, once members develop the skills, they can apply them whenever they are needed. Thus, organizations may require more time to make decisions participatively, but this additional time may be offset by the reduced time required to implement a change that has the broad support of those responsible for the implementation.

Managers who choose to involve employees in the change process need to decide how much influence they will allow employees to have. They can vary the degree of employee influence in two ways: by deciding when to involve employees in the process and by establishing how and by whom the decisions will be made. In the first case, employees can become involved at one of three phases. When they are involved from the earliest phase, the manager has identified some need for change, but employees help define that need and identify the problems. When involved at the middle phase, employees develop alternative solutions to problems that others have defined. Finally, when involved only in the last phase, employees are asked to participate in implementing changes that have been developed by others.

In the second case, managers can vary the amount of influence employees have by deciding which people will make the decisions about changes and how they will make those decisions. Where there is no participation, managers make the decisions using information immediately available to them and without consulting employees. Where there is little participation, managers still make the decisions, but these decisions are based, in part, on information they receive and solicit from employees. With full participation, managers share the problem with employees, who together share their information about the problem and as a group decide on a course of action. Ideally, the decision is made by consensus, and the manager is willing to accept and implement any decision that has the support of the entire group (including his support). One of the strengths of consensus decision making is that each member's views must be carefully considered to reach a decision that all can support.

Between little and full participation lie several approaches that offer employees varying degrees of influence. Which type of participative decision making to use depends on the manager's philosophy of management and the specific situation. In general, greater participation is more effective when the problems and changes are not routine, when the manager needs additional information to make a decision, and when employees must accept the changes to ensure implementation.

Who should participate in managing the change process? I have identified these people in the earlier discussion of resources needed to move from the present to the future organization. They include those who plan the change, implement it, are affected by the implementation, and can affect the change through their own influence or resources. Unfortunately, those whose jobs are affected by changes are often not involved. Yet no one knows the details of a job better than the people who do it; these people often know what parts of their job can benefit from changing and what effects any external changes will have on their jobs. The open-systems model reminds us that some key participants may be located outside the organization, in its environment. In each case, the manager must decide whether to involve all the rele-

vant persons directly or whether to select individuals to represent the perspective of their particular area or position. Experience indicates that the organization and its employees obtain greater benefits when they are directly involved. Even when the change is a large one, it is possible to involve all employees directly. If the employee-representative approach is used, frequent communication between the representatives and those they represent is essential.

## Participation and the open systems approach

Participation also promotes the open-systems approach to managing change. Managing change requires the ability to view a situation from many perspectives. Unfortunately, in organizations our perspective on situations is greatly limited by the position we hold and the area in which we work. Even those whose positions at the top of the organization provide them with a broad perspective are affected—they can easily overlook the large number of small changes needed to ensure the success of the larger change. Similarly, when employees express concern about implementing changes in which they have not been involved, managers sometimes describe them as "resisting" changes, as if the employees are acting irrationally. Yet often the employees are not resisting but are reluctant to implement changes that they believe will have unintended consequences.

Involving members from various areas and levels promotes the open-systems approach to managing change. It encourages everyone to contribute his or her piece of the puzzle so that, ultimately, all have a common understanding about how the different changes need to fit together for the organization to realize its vision. At the same time, it shows people where they need to work together to realize their vision.

## Conclusion

In this article, I have described the organizational change process as an uncommon, special period of time. Yet, as many have said, the only thing that is constant is change itself. For the manager, the choice is not whether to

change but whether to manage change methodically and systemically or to respond to events one at a time and only after they have become crises.

I have also identified some specific actions that managers can take to create successful change. I have shown that the process of managing planned organizational change is complex but not mysterious. It can be challenging and rewarding. When managed well, organizational change can generate an exciting vision that motivates members and breathes new life into an organization.

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1. For an in-depth discussion of the six elements necessary for change, see R. Beckard and R. T. Harris. *Organizational Transitions: Managing Complex Change* (Reading, Mass.: Addison-Wesley, 1977).

2. Organizational assessment methods are clearly described in D. Nadler. *Feedback and Organization Development: Using Data-Based Methods* (Reading, Mass.: Addison-Wesley 1977).

3. To learn how to share negative information constructively, the change process requires that members get together in their normal work units and discuss real situations where they have tried to share negative information. It also requires that they learn some new skills for sharing information. Creating this change by sending individual employees to communication seminars is unlikely to work and may increase frustration.

4. This open-systems model of organizations is based on a model presented in Harold J. Leavitt. "Applied Organizational Change in Industry: Structural, Technological, and Humanistic Approaches," in *Handbook of Organizations*, ed. James G. March (Chicago: Rand McNally, 1965).

5. For an impassioned discussion of participative management, see M. Sashkin. "Participative Management is an Ethical Imperative," *Organizational Dynamics* 12 (Spring 1984): 4-22.

**Now Available**

## **Automating Data Processing**

The Local Government Commission has published *Doing It Right: Automating Data Processing in North Carolina Local Governments*. This manual was prepared by the Center for Urban Affairs and Community Services, a division of North Carolina State University. Center staff have helped over 100 North Carolina local governments and governmental agencies to automate their data processing. This publication will be valuable to units of government considering automating their operations or modifying existing computer systems. It describes step-by-step a process local government staffs can follow on their own or with outside help to procure the right automated data processing system.

The manual updates and expands upon two previous publications. Sections include an overview of electronic data processing, instructions for conducting feasibility studies for automation, instructions for preparing and evaluating Invitations for Bids, suggestions for developing contracts, and guidelines for implementing computer systems. A section on procuring microcomputers gives shortcuts for procuring small systems. A sample Invitation for Bids for hardware and software, vendor response forms, and other illustrative forms are included.

The manual can be ordered from the Department of State Treasurer, State and Local Government Finance Division, 325 N. Salisbury Street, Raleigh, N.C. 27611. The charge per copy is \$9.00 plus, for North Carolina residents, 5 percent sales tax.

### *What Some Boards Have Done On Their Retreats*

The exact format and content of a retreat varies according to what the board wishes to accomplish. The vignettes below briefly describe what several North Carolina boards have done at their retreats over the past few years.

■ The largely new council and the new mayor were unclear about exactly what they could accomplish during their terms and exactly how they should go about it. They spent a lot of time discussing their ideas about the respective roles of the mayor, the mayor pro tem, the council, and the city manager. They listed, discussed, and clarified specific expectations they had of each other. The group then discussed how it should make decisions. Members participated in an exercise to test the effectiveness of consensus building as an alternative to majority voting. Finally, the board listed all those matters that would command its attention during the next five years and established a time table for setting priorities among these issues.

■ The mostly new governing board was unhappy with the performance of the manager and wanted to identify and resolve the specific sources of its dissatisfaction. Discussion revealed that the previous board had expected the manager to be aggressive in recommending policies for the board to adopt; however, the new board was interested in providing its own policy direction and in having the manager serve largely to carry out the wishes of the board. The group carefully delineated and clarified what the board expected of the manager and what the manager expected of the board. Participants negotiated a clear agreement of what roles the board as a whole, individual members, and the manager would play in decision making and administration.

■ In two separate retreats, the governing board developed a management-by-objectives process to help it to achieve a four-year agenda. In the first retreat, the board and the manager developed a set of beliefs that would guide the city's planning and management process and broad goals for the next four years. In the second retreat, the board, the manager, and key staff decided on a process and a schedule for developing a management-by-objectives system. Finally, the board instructed the manager on how he should report progress on the system's development.

■ For the first time in many years, there were two new members on the board. The board held a retreat to orient the new members, to make them a part of the group, and probably to learn more about these "strangers." The board concentrated on developing a set of basic beliefs about the community and its governance and on sharing expectations among the commission, the chairman, and the manager. This group found that it helped to start with a discussion of goals each of them would like the board to have over the next five or ten years. Members then looked at these goals and discussed what kind of basic beliefs about government they implied. Finally, the board concentrated its discussion of expectations on those which members had of each other in personal dealings and in the conduct of county business.

# Governing Board Retreats

**Kurt Jenne**

**D**oes your board of commissioners or city council have a hard time resolving members' different views about controversial agenda items, usually leaving somebody mad about the results? Is one or more of your members driven to distraction trying to satisfy citizen complaints while the administration grouses about meddling in administrative matters? Do a few of your members seem always to get angry at each other over every disagreement they have?

No governing board is cursed with all of these problems, but most have experienced at least one of them from time to time. Each of these problems is a signal that the board's process is getting in the way of its products—that what it does suffers from how it goes about doing it. A board needs at least four conditions to function effectively. First, it needs vision, including a clear, agreed-upon set of beliefs and goals to guide its governance. The board does not have to agree totally on this vision for the community, but there should be some common basis for unity. Second, a board needs plans. It needs to map out how it will go about achieving those goals upon which members clearly agree and whether it will try to resolve major policy issues on which they do not agree. This helps to establish a third condition. The board and its administration need to have clear and reasonable expectations of each other so that everyone knows what role he or she is expected to play in achieving goals and resolving conflict. Finally, members of the board and the administration need to be able to work as a team, even during the inevitable conflicts and disagreements. This requires building trust that

each member will work for the board's visions and developing the skills to work always as individuals who are also part of a team.

Few governing boards are fortunate enough to create these four basic conditions in the natural course of events. Most have to work at it. New governing board members find themselves together with four to twelve other persons who were chosen by someone else; are varied in their knowledge, skills, and experience; and are expected to produce immediate and effective results as a group. The one clear tie that binds them—service on the board—gives scant guidance for evaluating specific decisions and actions. Those who have never served on the board might have no idea what they can reasonably expect of other board members and often have little or no experience in working effectively in a group setting. Thus, most boards need to spend part of their time together developing the basic conditions for effective operation.

The regular meeting is ill-suited for pulling the board together into a working team. There is rarely any time-out from the steady stream of routine business. The demands that immediate problems make on attention, energy, and time crowd out those items that have neither strong advocates nor immediate consequences. The board usually is left to deal with long-range thinking, planning, and process issues at the end of a regular meeting, when it has neither the time nor the energy to do them justice.

The setting of the regular meeting also tends to stifle team building. The regular meeting's controlled formality dis-

*The author is an Institute of Government faculty member whose fields include city and county management.*

courages spontaneous and creative thinking and communication. Moreover, board members risk appearing foolish by acting spontaneously and creatively before the large audience at a regular meeting. Special meetings or work sessions held in the same place but at another time do not work much better. Members hardly can resist discussing current problems or issues that are worrying them, and the atmosphere of the regular meeting lingers and haunts the special session, chilling the free exchange of ideas.

### **Different Time, Different Place, Different Thing**

Many governing boards use a retreat to overcome the barriers that the regular meeting and its usual environment place in the way of building teamwork and setting directions. The governing board and any number of its top management staff that the board wants to include literally retreat from the normal patterns of the workplace to think, talk, and plan about how they will do their work.

The retreat is very different from a regular meeting. Developing beliefs and goals, making plans, clarifying roles, and building teamwork all take a lot of concentrated time and attention. The retreat is an opportunity to focus for a long time on a single question—how to work together—without the pressure of a loaded agenda. Consequently, a retreat typically lasts one or two days, during which as few as only one or two issues are dealt with, and the board usually agrees in advance how much it will attempt to do in the time available. By going away from the regular meeting place, the board can create a relaxed, informal, creative atmosphere in which to work. By disassociating itself from the time and the place of the regular meeting with its cluttered agenda and formal structure, participants can approach their task with a fresh perspective. While the personal risk of being open and creative seems lower in the relaxed atmosphere of the retreat, participants usually sense that it is, at the same time, higher because they cannot fall back on old protective patterns built around limited time, parliamentary procedure, and custom. Thus, the retreat, by its timing, location, and nature, leads everyone to expect that this

is a special event, for a special purpose, and not just business as usual. This difference makes it easier for the governing board and top management to pay particular attention to the unusual business for which they have gathered: focusing on the processes they use to accomplish their work.

Making a retreat a special event is an important ingredient in achieving its goals; however, that alone will not guarantee its success. If what happens at the retreat does not improve the way the board functions by changing board members' attitudes, knowledge, and behavior, then participants will quite rightly view it as a waste of time and will be unlikely to allow their time to be wasted on the same kind of activity again. Thorough preparation, careful execution, and thoughtful follow-up all increase the chances of success.

### **Preparing for the Retreat**

Thorough preparation will help to make the most of the valuable time that board members have together in this special setting. It will also help to prevent surprises or last-minute fumbling that could distract participants from the tasks at hand. Preparations should be made to have everything and everyone in place at the start.

**Decide on the participants.** Everyone on the board should participate. One of the major objectives of any retreat is to develop some unity among members about major aims and behavior within the group, wherever the board can find it. Nobody doubts that they will disagree often about the substance of specific matters that come before the board; however, if the members handle these matters with mutual understanding and respect, the board will be more effective. It is important—whatever agreement can be reached about behavior, expectations, goals, or basic beliefs—that every member share in that understanding. It takes only one person who is not a part of the process to undermine the effectiveness of such consensus. Great care should be taken to choose a time that clearly is acceptable to every member so all can attend. Many boards have found that if a member is persuaded to agree to a time reluctantly, it is very likely that he or she will cancel at the last minute or simply not show up.

Who participates in the retreat besides members of the governing board varies greatly from jurisdiction to jurisdiction. Boards in cities and counties with a manager invariably include him or her, for the manager is clearly in close partnership with the governing board in all of its work. If other members of the administration work particularly closely with the board, they might also be included. Some boards ask their attorneys or clerks to participate, and some invite appointed finance officers because financial factors dominate their decision making. This choice is entirely the board's. However, the board should be cautious about casting the net too broadly. If the group becomes too large, then communication becomes harder, less personal, and less open. Also, the inclusion of persons on the fringe or outside of the governing board's closest working relationships might inhibit honest and open expression of feelings and ideas, thereby defeating one of the retreat's fundamental purposes.

**Find a skilled facilitator.** A participant cannot facilitate the group's work and participate in it effectively as well. Participants will work very hard over their chosen issues, and it simply is too much to expect of one person to give the issues total attention if he or she is also responsible for facilitating the discussion. Also, one of the facilitator's most difficult tasks is to draw out all participants to ensure that all views are expressed, even when this involves leading the group into conflict. To do this well requires not only skill and experience but a disassociation from the group and the issues that a participant is unlikely to have.

The facilitator's job in a retreat is to monitor the direction of the board's work, alert it when it moves off-track, and clear obstacles from its path. He or she normally accomplishes this by doing five things:

1. Directing the board's efforts toward its objectives but being flexible enough to change direction if the board makes a conscious decision to do so;
2. Constantly challenging participants to clarify their expressions and intentions;
3. Helping participants to summarize and present data and information



without distorting it with his or her own perspective;

4. Helping the board to crystalize conflict and to manage it by suggesting approaches for resolving it; and
5. Helping the board to agree on a plan of action to accomplish any decisions it reaches during the retreat.

Skilled facilitators are often available from nearby universities or community colleges, the Institute of Government, or private consulting firms. The facilitator should be chosen early in the preparations so that the board can satisfy itself that it will be comfortable with whomever is chosen and so that the facilitator can participate in planning for the time, the setting, and the agenda. There are several things that a board might look for in choosing a good facilitator. He or she should:

1. Be interested in helping the board to clarify and accomplish its own objectives and not have his or her own set agenda;
2. Engender a feeling of complete trust at the very first meeting;
3. Listen well;
4. Be aware of the importance of having concrete results from the retreat;
5. Have training and experience in working with small groups to accomplish concrete results; and
6. Be able to help the board to evaluate how much personal and political risk would be involved in what it wants to accomplish at the retreat.

Often the mayor and the manager meet with a prospective facilitator to plan the agenda and evaluate the facilitator at the same time. In this initial meeting, the facilitator can help to sharpen the objectives of the retreat, define clear roles for facilitator and participants, and help to estimate how much personal and political risk participants are likely to be comfortable with.

**Choose the location and time.** The only suggested rule for location and time is not to use the regularly scheduled meeting time or place. Beyond that, the retreat should be held any place where the board members will feel comfortable, relaxed, and undistracted. Retreat settings in North Carolina have included a private island, hotel

## ***Selected Products From Retreats***

The statements below are an assortment of beliefs, goals, and expectations which various governing boards, school boards, and staffs have developed for themselves at retreats held in North Carolina during the last several years.

### ***Beliefs***

The city council should be proactive in identifying and solving problems, not reactive (governing board).

There are practical limits to what the board can do; the board should be realistic (governing board).

We should educate every child in our school system to his or her full potential (school board).

We shall be persistent in pursuit of our ideas; however, when those ideas are without support, we shall react professionally and move on to other activities (staff).

We shall create an atmosphere of caring and respect for one another. People in the organization are its most important asset and are vital to its success (staff).

Council should listen to the public but not be expected to support every voice before it (governing board).

### ***Goals***

To stimulate among citizens a greater interest in participating in city government (governing board).

To increase the number of blacks in key positions in the next five years (governing board).

To expand revenues enough to meet the cost of existing and new service needs (governing board).

To build an effective relationship with the [neighboring] town of \_\_\_\_\_ (governing board).

To develop partnerships between area businesses and schools (school board).

To make administrative decisions and actions always consistent with policies and practices of city council (staff).

### ***Expectations***

Boards have expected their managers to:

Keep the governing board fully informed.

Take initiative in recommending policy and urge the board to reconsider when appropriate.

Seek policy direction from the board and fully support the board's decision once it is made.

Maintain good relationships with other governments.

Managers have expected their boards to:

Issue directions as a body, not individually.

Stand behind the manager and staff when they are carrying out board policy.

Handle job seekers according to personnel ordinance and procedures and not apply pressure to hire.

Take initiative to get information and stay informed.

meeting rooms, conference centers, the Institute of Government, church camps, and corporate retreat centers loaned by local businesses. They have varied from very luxurious to very spartan, with everything in between. Most, but not all, have been outside the jurisdiction that the board served.

Most boards choose a one-day or two-day format. Less than one day is probably not effective. Even if only one issue is to be taken up, having the group together for less than 24 hours does not allow the time necessary to pay due concern to how things are done. It is likely that a group will leave feeling a little frustrated that it has not really been able to tie off the matter at hand and to see definitive progress or agreement. More than two days is more time than most elected officials can take away from home or work, and usually everyone is tired out at the end of two solid days of effort.

**Observe the open meetings law.** Despite the desirability of making the retreat a closed meeting to encourage open and honest discussion, it is nonetheless an official meeting under the state's open meetings law! Some boards feel that if they do not take action or discuss specific pending business, the open meetings law does not apply; however, most of what is discussed at any retreat would constitute deliberation and, therefore, would require an open meeting. It is unlikely that any of the subject-matter exceptions for which closed or executive sessions are permitted would be an appropriate topic on which to hold a board retreat. Thus, to comply with the open meetings law on a retreat, the governing board must call a special meeting or announce it as a continuation of a regular meeting that has been adjourned or recessed. It must give all required notices in either case.

**Deal assertively with publicity.** Sometimes news media send reporters to retreats but not in every case. It depends on the attitude of the local newspapers, radio, and television, the relationship the board has with them, and probably the other requirements for coverage that face the news directors during the time the retreat is held. In North Carolina, when news reporters have attended, their presence has varied in its intensity. In one case, representatives of all three media,

newspapers, radio, and television, stayed throughout a two-day retreat, including all of the meals board members had together. On the other extreme, some reporters have dropped in once to see what was happening and have left after less than an hour.

Coverage of retreats has usually been favorable when a reporter was present, probably because he or she saw firsthand how hard members worked, how seriously they took the effort, and how productive the results were. Bad press has tended to come from persons who did not attend and who implied that the board went off to relax at the taxpayers' expense. The board might counter this kind of coverage in advance by explaining the value of what it is doing and what it expects to achieve, by preparing to respond to criticism without embarrassment, and by resolving to obtain concrete results that will be visible in the way it conducts its business after the retreat. All successful businesses use retreats to help them to operate more effectively, and the board has no cause to be defensive about doing the same thing to make government more effective.

The board should try to determine whether news representatives plan to attend and, if so, prepare to include them graciously. At the same time, members should be aware that the presence of reporters surely will affect the openness of discussion, and they should be prepared to accept less productive results than might be the case if they were alone.

### Conducting the Retreat

Thorough preparation for the retreat should put everything in place before it starts. Although the setting is relaxing, the retreat itself will not be. For this reason, several things should be done during the retreat so that participants gain the trust, the knowledge, and the insights that will help them to operate better as a governing board.

**Assemble the night before.** This ensures that everyone will be on hand to start promptly the next morning. It is also useful to gather the group together for a short time to greet each other. If not all board members know the facilitator, he or she can get to know everybody before the work begins. Some boards have only a short reception with

refreshments or a meal together for this gathering, but even an hour or so of work on this first evening can be a good time to establish clear expectations about the retreat itself. Each member might say what he or she expects to get out of the retreat. If the group believes that it cannot meet all of the expectations on the list, then it can try to reach consensus on how much it will try to achieve. At this time the role of the facilitator can also be agreed upon—for example, how much the group wants him or her to lead discussion as opposed to simply recording it and asking for clarification when necessary. After this meeting, participants should retire early and get a good night's rest so that they are fresh and ready to start work the next morning.

**Start on time, work hard, and quit when there's nothing more to do.** Starting promptly sets a serious and businesslike tone for the retreat. Moreover, there is usually less time available than anyone thinks. It should not be wasted. To a group that is accustomed to dispatching dozens of agenda items in a few hours, a whole day or two can seem to stretch ahead interminably—that is, until the discussion begins to deepen, as it invariably does. Then, in many instances, the time available becomes too short.

The special effort that goes into setting up a retreat is aimed mainly at promoting frank and open exchange of beliefs, feelings, and data. Therefore, participants should expect to share openly during the retreat and to exert the extra effort that candor often requires. Openness can be risky in the environment of a regular meeting for political reasons. It can still be risky in a retreat for personal reasons. Participants have to deal with the dual risks of self-revelation and conflict throughout a retreat. This is hard work. The facilitator often must take responsibility for drawing out participants in order to resolve issues—often through open conflict—but the real stress and strain of this process ultimately falls on the participants. It is no surprise that, after a day's work at a retreat, almost everyone retires quickly for a good night's sleep.

When the group has finished its work, the retreat should end, even if that happens earlier than everyone expected. If the retreat has been successful, par-

ticipants might be tired, but they also will be buoyed by a sense of accomplishment. It is better to end with such a feeling than to allow it to dissipate by lingering aimlessly after the job is finished.

**Seek consensus and pinpoint disagreement.** One of the valuable products that can come out of a retreat is a clear sense of where board members agree and where they disagree on issues of substance or procedure. While it is worthwhile to find areas of agreement, it is just as important to clarify areas of disagreement.

Consensus is a difficult process, but it is very effective in getting total commitment to the group's decisions. It is difficult because it requires persistent discussion and reasoning to bring everyone together. Deciding by vote occurs as soon as a majority agrees, but voting does not persuade the minority—it only overrules it. At worst, it can create saboteurs of the action that the vote has dictated. Deciding by compromise means somebody gives up a position in exchange for support on something else, closure of the issue, or avoidance of conflict. Compromise is not as hard on those who disagree with the decision as voting is, but it does not make them favor the decision either. Consensus requires that participants talk and use facts and reason to convince everyone that a given action is the best thing to do under the circumstances. It might take a long time, but when the decision is made, everyone agrees with it even though it might not be ideal to some. The setting and the time available for discussion in a retreat make it conducive to achieving high-quality decisions by consensus.

In those instances where consensus cannot be reached, it is important to delineate other views that participants hold. This step establishes that, even if they hold minority positions on an issue, their views and the reasons for them are not insignificant but are recognized as legitimate. It also clarifies for other board members who stands where on what issues and why. The use of reasons for positions throughout these discussions tends to separate people's positions from their personalities. This distinction makes it easier to disagree with each other without disliking each other. The board might simply highlight positions of disagreement or might try

to decide on a strategy and a timetable for resolving the disagreement if that is important.

**Evaluate the experience.** One way to get clues about how successful the retreat has been is to ask the participants to evaluate it. An evaluation both indicates whether a retreat would be worthwhile to do again and allows members of the board to review what went on, how it affected them individually and as a group, and how well it served its purpose.

**Decide on some definite next steps.** If the board is to use what it develops at the retreat, it should decide on some concrete steps to take after returning home. Two obvious actions to consider are how the board will practice or use skills, attitudes, and knowledge and to what extent it wants to make formal statements on the beliefs, goals, and understandings it articulated. Experience has shown that if the board does not make these decisions before it leaves the retreat, it probably will not do so later on.

### Using the Results of the Retreat

Thorough planning and careful execution can make a retreat seem productive and send participants away feeling good about what they did. However, what they did at the retreat does not matter as much as what they do when they return to the board's normal environment. Thoughtful application of the skills, attitudes, and knowledge developed at the retreat is the deciding factor in whether the retreat will help the board to operate more effectively.

**Use it or lose it.** The ultimate value of the consensus reached at a retreat is its application in day-to-day business, which is the fundamental reason for holding the retreat. If the board reaches consensus on a basic set of beliefs about how things should be in the community, then those beliefs can be used to guide day-to-day decisions. Members can ask themselves and the group in any instance, "Is this action consistent with our basic beliefs about governing the community?" It is a powerful way to bring policy debate back to basics and to focus on the critical aspects of an issue. Goals developed at retreats can be used in the same way. Plans of action can be used as checklists to monitor the

board's progress on its long-range agenda. Agreements on roles of board members, manager, staff, and other boards and commissions can be referred to when conflicts arise over responsibility or authority for routine business. Finally, members can use their better understanding of each other and any new interpersonal skills they developed and practiced during the retreat to reduce the interference of personal conflicts with the substantive issues in their regular meetings and business. If the board does not keep sight of these things and use them on a routine basis, they will soon be forgotten and have little or no effect on the board's work. Thus, the retreat is not an end in itself but a point of departure for a continuous effort to improve the board's effectiveness.

**Show off what was done.** One way the board can keep the accomplishments of the retreat fresh in its members' minds and, at the same time, demonstrate them to citizens is to publish the results. Some boards have simply posted lists of beliefs, goals, role expectations, or plans in the regular meeting place for everyone to see and refer to from time to time. Some boards have published them in the newspaper along with a brief report about how the board developed them. Other boards have taken belief statements and tried to summarize them in a succinct "mission statement" that is widely circulated and used on a regular basis to aid policy making at many levels. (See box, page 23 for the kind of statements produced at retreats.) Keeping the product of the retreat before everybody serves to demonstrate some of the retreat's concrete accomplishments as well as to keep it foremost in the minds of board members and staff so that it will be used in the day-to-day work of governance.

### Deciding Whether a Retreat Would be Useful

The structure and setting of a retreat can produce conditions that will help the board work through some issues that it cannot deal with effectively in its regular environment. But the structure and setting alone cannot guarantee success. The willingness and ability of the participants to work together and to apply the results of the retreat in their regular public business is essential. If

members of the board do not believe that the retreat is worthwhile, or if they do not believe it is worth the cost in money, time, effort, and risk, then it might not be worth doing. Based on the discussion above, a board might ask itself the following set of questions in considering whether to hold a retreat:

1. Would everyone on the board participate in the entire retreat?
2. Would a setting be available that would be conducive to open discussion and consensus building?
3. Could it be held at a time when members could get away and when they would not be distracted by pressing business?
4. Could the board find a facilitator who is competent and whom it trusts to be objective?
5. Could the board work effectively with the press present if necessary or are the issues too sensitive?
6. Could the board live with criticism from those who misunderstand or disagree with the usefulness of a retreat?
7. Would those members of the board who are skeptical or anxious be willing to make a conscientious effort to make it work?
8. Would the board be likely to use the products of the retreat when it returns to the regular routine?

If the board could not answer yes to a substantial number of these questions, the retreat might not be worth the required cost and risk. This decision is one that each board has to make for itself.

### Retreats for Other Groups

While a retreat of a governing board and top staff is the most common use of this kind of meeting, it can be useful for other groups as well. The retreat can be an effective way for the governing board to discuss mutual beliefs, goals, and expectations with one or more of its advisory boards and commissions. School boards have held retreats with their superintendents and top management staff. Superintendents hold retreats with the principals in their systems. City managers and county managers have used retreats to do administrative goal setting and planning with their top department heads and

staff. In short, many different groups of people whose effectiveness depends on their ability to share common beliefs and goals, to have clear and reasonable expectations of each other, and to work

well together on a day-to-day basis have used retreats to build the unity of effort needed to do the best job possible.

1 N.C. Gen. Stat. §§ 143-318.9 through -318.18(19).

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# North Carolina's Seat Belt Law: *Public Safety and Public Policy*

**B. J. Campbell**

On October 1, 1985, North Carolina became the eighth state with a traffic law requiring motorists to wear safety belts when riding on the streets and highways. This article reports the effects of that law and contrasts North Carolina to other states and nations with similar laws.

## History of Seat Belt Laws

Lap safety belts were used in aircraft from the very earliest days and have been a familiar item to American motorists for a long time. Even before the 1950s, lap seat belts were occasionally installed in cars—presumably by people then regarded as “safety nuts.” In the 1950s Ford Motor Co. marketed an optional safety package including two front-seat lap belts. The North Carolina Highway Patrol purchased a group of these cars and thirty years ago adopted a policy of using the belts.

By 1964 North Carolina and several other states had passed laws requiring manufacturers to install two front-seat lap belts in new passenger cars. In 1966 United States auto makers made front- and rear-seat lap belts standard. Beginning with 1968 models, the federal government required lap/shoulder belts in two front-seat positions and worked toward having belts provided wherever vehicle passengers were intended to sit, starting with cars and later including trucks and vans.

Though belts became standard equipment, there was no commensurate attempt to get people to wear them, and there was not even any discussion of state laws requiring belt use. In fact, there was a presumption in some cases

that no official intent existed to use the belts. For example, the North Carolina Supreme Court in the late 1960s reviewed a lawsuit that argued that occupants could contribute to their own injuries by not wearing the seat belt provided! Our court held that, while the belts were present in the car because of legislative intent, there was no evidence that the legislature intended the belts to be worn.

In 1970 parliamentarians in Victoria, Australia, enacted the world's first seat belt law, requiring front-seat occupants to buckle up and imposing a modest fine for an infraction. Other Australian states followed suit, as did an increasing number of nations around the world—with the notable exception of the United States (see Table 1).

## Seat Belt Laws in the United States

Given what was happening in the rest of the world, it is surprising that seat belt laws were not enacted earlier in the United States, but a review of the public stance of various leadership groups shows how belatedly the issue was raised in our country. In the late 1960s the newly created National Highway Safety Bureau of the United States Department of Transportation (DOT), empowered to set highway safety standards for the states, promulgated seventeen different standards, touching almost every area of highway safety. However, anything to do with seat belt use was conspicuously absent. It was not until 1984 that DOT first publicly endorsed seat belt laws.

*Dr. Campbell is director of the University of North Carolina Highway Safety Research Center.*

**Table 1**  
**Countries with Laws Requiring Seat Belt Use<sup>2</sup>**

Country	Year Instituted	Usage Rates
Australia (8 states)	1970-72	81%-93%
Austria	1976	65%
Belgium	1975	70% rural 60% urban
Brazil	1972	10% highways
Bulgaria	1976	
Canada (8 provinces)	1976-85	49%-74%
Czechoslovakia	1969	66%
Denmark	1976	70%
East Germany	1980	
Finland	1975	93%
France	1973	59%
Greece	1979	
Hong Kong	1983	
Hungary	1977	65%
Iceland	1981	60%
Ireland	1979	50%
Israel	1975	80%
Ivory Coast	1970	
Japan	1971	20%
Luxembourg	1975	60%
Malawi	1982	
Malaysia	1979	
Netherlands	1975	65%
New Zealand	1972	86%
Norway	1975	87%
Poland	1984	
Portugal	1978	
Puerto Rico	1974	6%
South Africa	1977	62%
Spain	1974	75%
Sweden	1975	76%
Switzerland	1976	68%
Turkey	1984	
United Kingdom	1983	92%
USSR	1976	
West Germany	1976	96% highways 93% rural
Yugoslavia	1985	

The first such child protection law took effect in Tennessee in 1978, and in a relatively few years Wyoming became the fiftieth state to follow suit.

With support for belt laws by key national organizations, the auto industry, and the federal government, things began to happen by 1984. As of late 1987, the country has undergone sweeping changes in public policy regarding the issue of safety belts, with the result that about three fourths of the population is now covered. In addition, supplementary automatic systems are being phased in under federal directive. The era of occupant restraint seems upon us. Table 2 shows states with belt laws enacted since New York led the way at the end of 1984.

As time for the 1985 session of the North Carolina General Assembly rolled around, preparations were being made to support passage of a seat belt law. Several health and safety organizations supported the belt-law bill, including the North Carolina Medical Society, the North Carolina Public Health Association, the North Carolina Nurse's Association, an association of rescue squads, the North Carolina PTA, the North Carolina Red Cross, the North Carolina Public Health Academy, and others. In addition, the automobile industry made funds available in North Carolina and other states to finance lobbying and educational activities in support of such a law. At that time there was no organized opposition to the law, though some individual citizens spoke against the bill on the grounds of infringement on personal freedom. In due course the law passed by a ten-vote margin in the Senate, by a few votes in the House, and became effective October 1, 1985.

## Politics of Seat Belt Laws

Belt laws have prompted debates that are intense beyond those usually associated with traffic laws. It is of interest to review the arguments and consider why this is true. Almost any law represents a balance between some regulation of individual behavior in return for some community benefit. It is exactly that delicate balancing act that legislatures are uniquely empowered to perform. Sometimes they are believed to do it well and sometimes not.

Other safety leadership groups also ignored seat belt laws until recently. The American Public Health Association supported belt laws only in the fall of 1983; Consumer's Union, only in November 1984; and the American Automobile Association and the American Medical Association, only in 1985. The auto industry certainly did not favor such laws until recently. General Motors Corp., for example, came out in favor of them in late 1983.<sup>3</sup>

One factor delaying consideration of belt laws was the division of opinion over the desirability of automatic restraint systems, such as air bags, as opposed to mandated use of seat belts. This argument (not raised in foreign countries) was a divisive factor for years and created a stalemate blocking implementation of either approach. On the other hand, if the air-bag issue *delayed* belt laws, the success of child safety-seat laws probably had the opposite effect.

**Table 2**  
**States Requiring Belt Use<sup>1</sup>**

State	Prelaw Belt Use (%)	Highest Belt Use (%)	Latest Belt Use (%)
California	18	47	47
Connecticut	25	56	56
Colorado	18		
District of Columbia		55	55
Florida	22	60	60
Hawaii	33	73	64
Idaho	16	27	27
Illinois	16	47	47
Indiana	20	52	52
Iowa	18	63	63
Kansas	10	44	44
Louisiana	12	35	35
Maryland	30	74	66
Massachusetts*	20	37	25
Michigan	20	58	44
Minnesota	20	33	32
Missouri	10	34	34
Montana	33		
Nebraska*	11	45	29
Nevada	21		
New Jersey	18	42	35
New Mexico	12	53	50
New York	16	57	48
North Carolina	25	77	64
Ohio	16	48	41
Oklahoma	16	41	35
Oregon	35		
Tennessee		28	28
Texas	15	66	60
Utah	18	22	22
Virginia	35		
Washington		36	51
Latest average, population weighted (excludes Massachusetts and Nebraska)			47

\* Law repealed

## Scientific Question, Part 1: Do Seat Belts Work?

One cannot argue that belts are perfect. Some crashes are so severe that even a seat belt cannot keep the person alive. Other crashes are so severe that, when one is thrown violently forward, impact against the belt itself can be enough to break the sternum or ribs (ignoring for the moment what the person would have slammed against if not belted).

However, the evidence for overall belt effectiveness consists of literally scores of studies. Some studies are based on experimental crashes using lifelike dummies equipped with impact-measuring instruments. Other evidence is based on similar experiments using cadavers and on still others using live volunteers. These experimental studies are in addition to myriad studies of actual highway crashes.

The evidence shows that lap/shoulder belts help in two ways. The obvious way is by keeping the body back so that one is not as likely to strike the windshield, dashboard, or steering wheel. The other, less obvious way belts help is through the "ride down" effect. This ride down effect is relevant because there are really two collisions. The first collision occurs when the car crashes to a stop, an event that takes only about a tenth of a second. The second collision occurs a split second later when the unbelted body slides forward, traversing the inches to the windshield, steering wheel, or dash. By the time the body slams into that target, the car has already stopped. However, if one is belted, the body slams forward into the belt *while* the car is still slowing to a stop. Thus, the body "rides down" during those vital few thousandths of a second, slowing with the car and, thus, receiving the benefit of the energy-absorbing nature of the car structure itself.

Figure 1, based on North Carolina crashes, illustrates the evidence for belts.<sup>5</sup> This figure shows the percentage of drivers seriously injured among lap/shoulder-belted versus unrestrained drivers. Data on one million front-seat occupants were arrayed according to level of vehicle crash damage, ranging from mild to very severe. Naturally, the injury curve rises sharply at successively higher levels of crash severity until at crash-level seven (the worst 2 to 3 per-

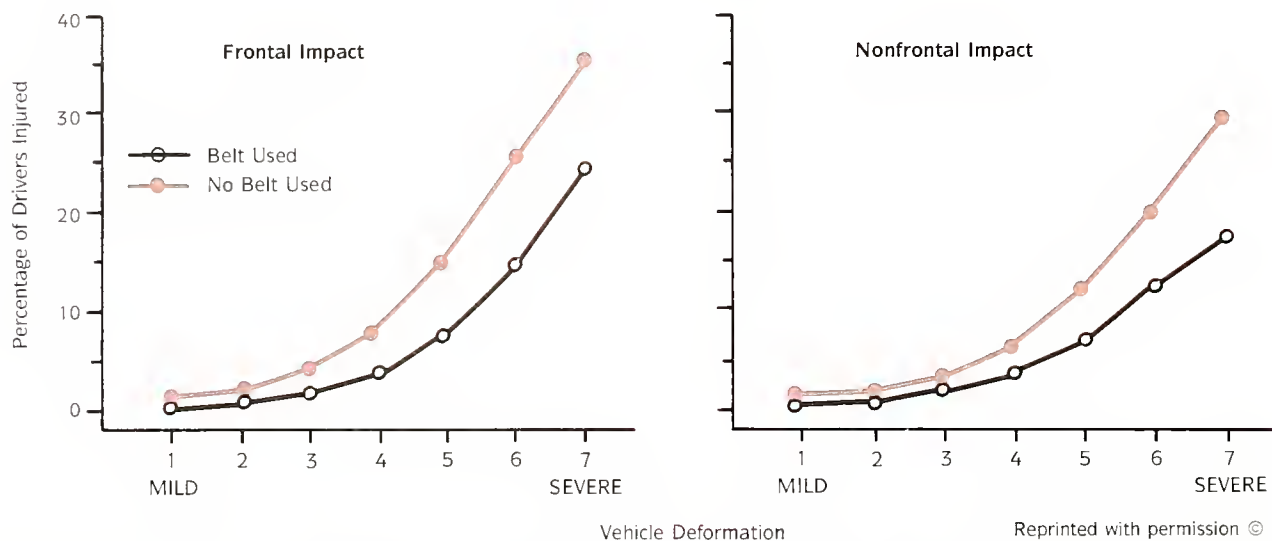
Those who favor seat belt laws cite research showing the seat belt can be the single most cost-effective highway accident countermeasure available. Seat belts do not cost very much (compared to building interstates and the like), the cost has already been borne in that most vehicles have belts, and belts are effective in reducing the personal and economic costs of crashes.

Those who oppose seat belt laws may assert that (1) belts are not as effective as claimed, (2) belt laws do not produce

meaningful reductions in casualties, and (3) wearing a seat belt should not be a subject for governmental regulation, even if the law does save lives, because it is not government's business to "save us from ourselves."

There are two kinds of questions here: one is a scientific question, and the other is a public policy question. The scientific question is whether belt laws work. The public policy question is whether belt laws are justified even if they do work.

Figure 1  
 Percentage of Drivers Sustaining Serious or Fatal Injury by Degree of Vehicle Deformation by Seat Belt Use



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cent of all crashes) approximately 35 percent of unbelted drivers sustain serious injury. However, at every level of crash severity, drivers who are belted are less likely to be injured. When the data are appropriately summed, the net effect is that serious and fatal injuries occur only about half as often among lap/shoulder-belted drivers as among unbelted drivers in crashes of the same severity.

There are so many studies of this sort, done by so many researchers in so many countries, that there is no reasonable scientific doubt that seat belts are effective in reducing death and injury. Belts are not perfect, but if *everyone* buckled up, belts could save 40 to 50 percent of those who otherwise die.

### Scientific Question, Part 2: Do Seat Belt Laws Work?

Opponents of the law may concede that belts themselves are valuable in reducing death and injury but may still argue that belt laws do not bring about improvements in highway death and injury. Opponents may seize on the seeming discrepancy between the large 40 to 50 percent belt benefits and the relatively small changes in death and injury usually seen after a belt law is passed.

What accounts for this discrepancy? There are a number of reasons:

1. Belt laws do not apply to all vehicle occupants. The North Carolina belt law exempts rear-seat occupants; it exempts all commercial and farm vehicles being used in commerce; it exempts older cars; it provides for medical exemptions and exemptions for slow-moving delivery vehicles; and, of course, the law does not apply to bicycles, pedestrians, or motorcycles. All in all, 30 percent or more of those involved in crashes fall in categories not covered by our seat belt law.
2. Not everyone buckles up. In North Carolina surveys during the summer of 1987, belt use was measured at 64 percent. Obviously, the potential benefit is again reduced in that a maximum of 64 percent of the 70 percent covered by the law is buckled up—a net of about 45 percent.
3. Belt effectiveness in reducing injury and death is about 40 to 50 percent. This percentage of the above 45 percent is about 18 to 23 percent.
4. State population and driving mileage is growing. If miles driven increase about 5 percent each year,

then, other things being equal, fatalities would do likewise. That growth would offset some of the belt-law benefits.

5. Significant changes in the state's economy exercise a heavy influence on the number of road deaths—beyond that accounted for by changes in driving mileage. During the recession of the early 1980s, North Carolina deaths reached a twenty-year low. During economic recovery, deaths increase sharply. North Carolina and the nation are now in a time of growing economy and rising deaths. Belt laws are working against an overall rising tide.
6. There is scientific evidence that drivers with the highest crash risk are the ones least likely to buckle up. The 36 percent who do not buckle up in North Carolina will account for more than 36 percent of total deaths.

There is, however, persuasive evidence that seat belt laws reduce deaths in a magnitude consistent with the above reasoning. Several of the best research studies carried out in the United States and in foreign countries show law-related fatality reductions of 7 to 18 percent among occupants targeted by the law (see Table 3).



**Table 3**  
**Effectiveness of Seat Belt Laws in Reducing Fatalities<sup>6</sup>**

Country	Years	Actual Change in Deaths
Australia	1970-71	-15%
	1973	-7.5%—21%
	1971-78	-5.7%
Sweden	1975-78	-12%
	1974-75	-10%
Germany	1976-80	-30%
	1974-84	-25%
	1983-84	-15%
England	1982-83	-21%
	1982-84	-18%
Canada	1984	-10%
United States	1985-86	-6.6%
	1985	-5.8%
	1985	-7%

**Table 4**  
**Injuries Before and After United Kingdom Seat Belt Law**  
**Data from 14 Hospitals**  
**(Drivers plus Front Seat Passengers)<sup>7</sup>**

Injury Category	Before Law	After Law	Change
Number Treated	4,803	4,121	-14%
Number Admitted	1,319	924	-30%
Bed Days	13,086	9,262	-29%
Brain Injuries	956	582	-39%
Eye Injuries	151	93	-38%
Fractured Ribs	202	147	-27%
Skull Fractures	55	44	-20%
Lower Extremity Fractures	64	57	-11%
Spine Fractures	72	67	-7%
Major Brain Injuries	54	59	+9%
Spine Sprains	1,090	1,352	+24%
Fractured Sterna	33	71	+115%

In addition to reducing fatalities, seat belt laws also reduce injury. In England, where belt use is above 90 percent, hospital admissions for motor vehicle injuries were reduced by 30 percent, as seen in Table 4. When these data are projected for all casualty hospitals in the United Kingdom, this reduction amounts to about 8,000 fewer such hospital admissions for that nation each year.

In a nutshell, the evidence demonstrates that belt laws reduce deaths, and

there is no longer any substantial scientific doubt of that proposition.

### **Public Policy Question: Should We Have Belt Laws Even If They Work?**

Opponents may, nevertheless, say that wearing a belt should be an individual matter not subject to governmental regulation. They may say, "If I

get killed, I am the only one who loses out." Thus, opponents make a distinction between traffic offenses where violation creates a risk of physical harm to others (such as drunk driving) and failure to wear a belt, which, in general, does not cause physical harm to others.

However, if an individual not wearing a seat belt is killed, emotional and economic harm is inflicted on others. Certainly the death devastates the immediate family as well as the wider circle of people who care about that person. Furthermore, deaths—and permanent injuries even more so—create a large economic burden on the community. This financial burden begins with the use of public funds that support ambulance and police services at the crash scene, and it continues at the hospital, in the rehabilitation clinics, and to the very end through insurance and welfare payments. The annual national cost of highway crash injury exceeds the annual cost of cardiovascular diseases.<sup>8</sup>

This distinction between endangering the lives of others and risking one's own life seems to be a key point in feelings about the seat belt laws. While opponents concede that it is appropriate to regulate acts that may cause *physical* harm to others, they seem not to be persuaded by the risk of *economic* harm to others.

Opponents argue that belt laws constitute an important and undesirable precedent, that being forced to wear seat belts "for your own good" may open up a flood of well-meaning regulation such as, they suggest, to outlaw salt or fried foods. However, there are already precedents for this type of regulation. The North Carolina Motor Vehicle Code (Chapter 20 of the General Statutes) includes laws regulating pedestrian movements (jaywalking, for example) that exist primarily to require the pedestrian to take self-protective measures against being struck by a motor vehicle.

In addition, there is a body of law and regulation addressing work-place safety, where a variety of self-protective measures are required, such as safety shoes, safety hats, ear defenders, and eye protection. In the national parks, hikers and climbers in certain areas are required to have certain equipment, partly to save themselves and partly to control the cost and hazards associated with rescue operations—the same

reason the Coast Guard requires the use of life vests.

Thus, the question of seat belt laws remains an issue of how much government regulation is appropriate in return for how much individual and community benefit. That is precisely the political choice. Most Americans believe there are certain freedoms worth dying for. The North Carolina General Assembly has decided that the freedom to ride unbelted is not one of them.

## North Carolina Results

Because the belt-use law is so new in North Carolina, it is not yet possible to provide complete evidence of its effectiveness. However, it is possible to examine early trends. The belt law is intended (1) to increase belt use and (2) to reduce the highway-crash injury and death toll. This article addresses both matters and covers both phases of the North Carolina law. Phase one, the education/warning phase, covered October 1, 1985, through December 31, 1986. During that time, enforcement was confined to an oral or written warning. Phase two, full enforcement with a \$25 fine, began January 1, 1987.

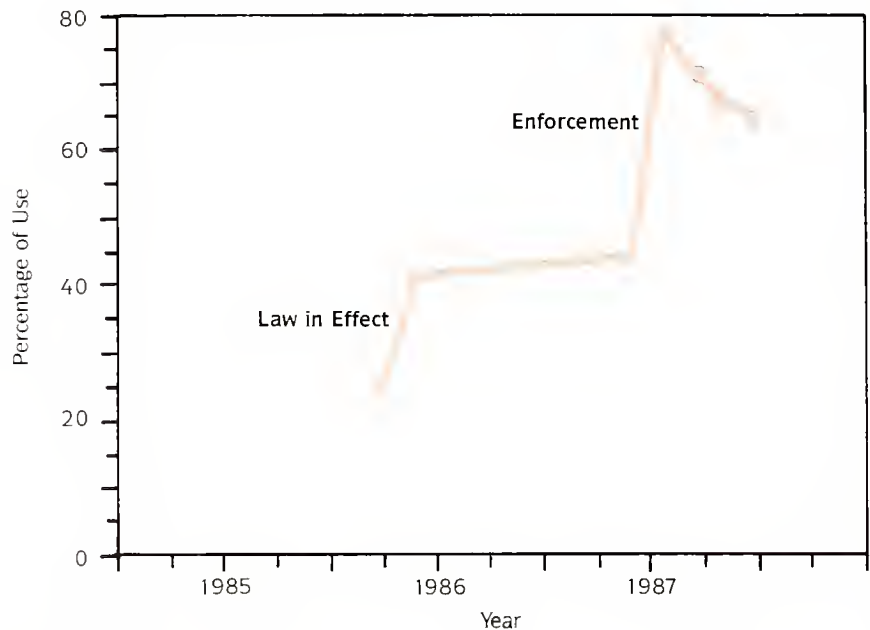
## Changes in Seat Belt Use

Belt use in North Carolina is measured by direct observation at seventy-two sites. Survey sites were selected so as to cover the geographic areas and road types seen in the state. Observers go to these sites and make counts of shoulder-belt use in vehicles covered by the law. The observers are trained and exhibit a high level of agreement when they count the same cars. The full survey is completed several times each year, and more than 20,000 observations are made each time. In between the major surveys, smaller-scale surveys are conducted at twelve sites chosen as being most representative.

Figure 2, which presents survey results, shows an initial large jump at the onset of the warning-ticket phase, and during that phase belt use remained relatively constant. At the onset of the enforcement phase, there was another increase, but this time there followed a steady decline.

During September 1985, just before the onset of phase one, the survey

**Figure 2**  
North Carolina Belt Use



showed that driver belt use was 25 percent (already elevated because of prelaw publicity). In January 1986, the fourth month of the law's warning phase, driver belt use was 42 percent at the same seventy-two sites. In November 1986, driver belt use was 44 percent at the same sites. Thus, during the warning-ticket phase, about an additional one driver in five began to buckle up. At 42 to 44 percent, belt use was the highest recorded in North Carolina to that point, though more than half were still not buckled up.

On January 1, 1987, police began issuing citations that had the potential for a \$25 fine. A further statewide survey was conducted during January. For drivers, belt use was 78 percent. That was the highest level ever seen in North Carolina and the highest statewide level ever recorded in the United States. Other driver belt-use breakdowns from January 1987 are:

### Type of Area

Rural 76%  
Urban 80%

### Region

Mountains 72%  
Piedmont 79%  
Coast 81%

### Time of Day

Commuting Hours 80%  
Noncommuting Hours 76%

### Type of Vehicle

Car 80%  
Van 73%  
Pickup Truck 69%

### Gender

Male 74%  
Female 84%

Since January 1987, additional surveys have been conducted, indicating a steady downward trend. Driver belt use was 71 percent in March, 67 percent in April, and 64 percent in June.<sup>9</sup> This decline is disappointing, but even so North Carolina still has one of the highest levels of belt use in the country.

## The Role of Enforcement

Common sense suggests that reasonable enforcement is a key to the success of any law, and seat belt laws are no different. The North Carolina law authorizes an officer to stop and cite a motorist on the basis of a belt-law violation alone. North Carolina is one of eight states with such a provision, which is called primary enforcement. Other states have what are called secondary enforcement laws. Under these provi-

sions, an officer may address a belt-law violation only if he or she has stopped a motorist for some other reason.

A recent research study has assembled enforcement and belt-usage figures from all belt-law states.<sup>10</sup> As might be expected, the data show that belt use is higher in states with a higher level of enforcement. In addition, belt use is higher in primary enforcement states than in secondary enforcement states. North Carolina law enforcement is in the upper ranges of that seen in the United States, as is our belt use.

## Casualty Reductions

The effects of the North Carolina law were estimated by comparing three time periods of crash injury and death data. First, prelaw trends were examined for each of fifty-seven months, beginning January 1981 and ending September 1985, the final prelaw month. Second, similar data were examined for the fifteen-month education/warning-ticket phase of the law (October 1985 through December 1986). Third, data for the full enforcement phase included January through June of 1987 (the most recent data available when this article was prepared).

Death and injury experience in two groups were examined: the covered group, which consisted of vehicle occupants covered by the law (front-seat occupants of cars, pickups, vans, small trucks, etc.); and the other group, which consisted of persons involved in a crash but not covered by the seat belt law. This latter group was separated into three subgroups: (a) rear-seat occupants of covered vehicles, (b) occupants of noncovered vehicles (older cars and larger trucks), and (c) nonoccupants, such as pedestrians and cyclists.

Time series models were used to analyze data for the covered group and the other group. These analyses addressed: (1) the percentage of accident-involved occupants suffering fatal injuries; (2) the percentage suffering serious or fatal injuries; and (3) the percentage suffering moderate to fatal injuries.

These time series analyses permit one to investigate relationships of monthly accident data during the time of the seat belt law, compared to similar data for several preceding years. Once the fifty-seven-month prelaw trends are described mathematically, a forecast is

**Table 5**  
Time Series Analysis: North Carolina Injury Changes  
Among Covered Occupants Relative to Belt Law Date

Type of Injury	Change	Statistical Significance	Forecast	Observed
Warning Ticket Phase				
Fatal	No significant change		No significant change	
Serious and Fatal	-6.9%	p < .10	20,050	18,675
Moderate to Fatal	-3.2%	p < .10	53,757	52,051
Full Enforcement Phase				
Fatal	-7.6%	p = .10	497	459
Serious and Fatal	-13.6%	p < .01	7,256	6,267
Moderate to Fatal	-9.8%	p < .01	19,548	17,671

made of what would be expected during the fifteen months of phase one if the prelaw trends had continued. This forecast is then compared to what actually happened. For phase two, the entire seventy-two months prior to that phase (fifty-seven plus fifteen) is used to predict what would have happened during January through June 1987. These forecasts are compared to what actually happened.

In evaluating the seat belt law, what might be expected? First, one would expect a reduction in injuries to take place among those covered by the law but not necessarily among others. Second, one would expect an abrupt initial reduction among those covered beginning in October 1985, when the belt law started. This expectation is bolstered by sharply increased belt use observed at that time. On the other hand, there is no reason to expect an abrupt change in the other groups at the onset of the law in October. Third, one might expect a further abrupt reduction among covered occupants in January 1987 with the onset of the full enforcement phase. This expectation, too, is bolstered by the further dramatic increase in belt use seen in January 1987. The reader should note that the term *reduction* is used to convey the change in casualty trend relative to that forecasted had there been no intervention. This means that the reduction relative to the trend might not always be an absolute lessening of casualties but might be a slowing in the rate of increase.

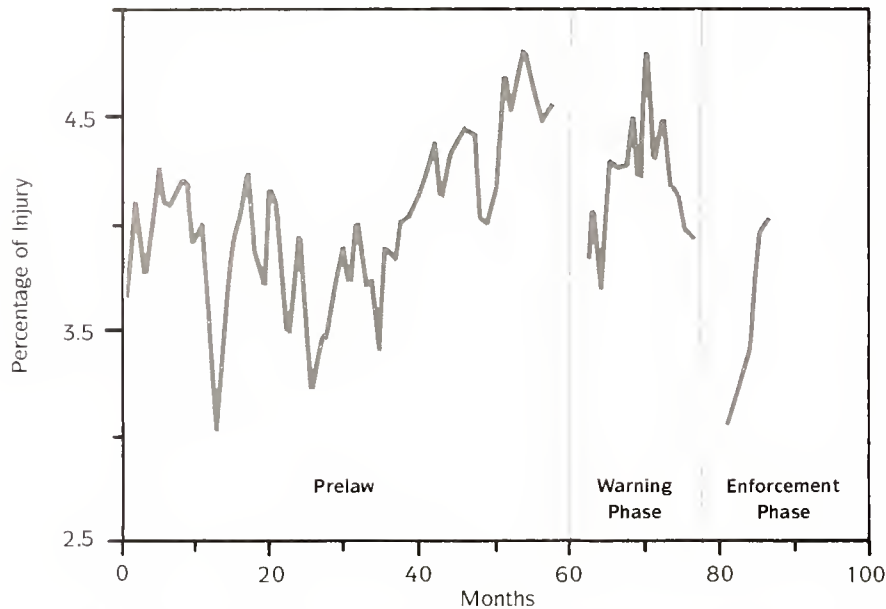
Table 5 presents the results for covered occupants during phases one and two. Phase one was marked by a

modest favorable shift in injury trends but no reduction in the fatality trend. A reduction of 6.9 percent in serious and greater injuries was seen, with a reduction of 3.2 percent in moderate or worse injuries. The intervention test was performed for the month of the law's onset (October 1985) and was statistically significant at the .10 level!<sup>11</sup> For the other group, the changes were of lesser magnitude, with no significant shift at the October onset of the law.

Phase two began in January 1987 and was marked by an abrupt and pronounced further reduction in death and injury among covered occupants. During the first half of 1987, fatal injuries were 7.6 percent below forecast, and the intervention effect was statistically significant at the .10 level. For moderate and greater injuries, the reduction was 9.8 percent below forecast. For serious and greater injuries, the reduction was 13.6 percent below forecast. The intervention effect was statistically significant at the .01 level in both categories of injury.

This contrasts to the behavior of data in the other groups. For nonoccupants and for rear-seat occupants, there was a modest reduction, but it was not significantly associated with the January onset of the law. Of greater interest is the behavior of the subgroup consisting of occupants of noncovered vehicles (older cars and certain trucks). In this group there appeared to be a reduction in both moderate and serious injuries. In the case of moderate and greater injuries, the reduction was 11.8 percent below forecast, and the January intervention effect was statistically signifi-

**Figure 3**  
**North Carolina Serious and Fatal**  
**Injuries Before and After Seat Belt Law**



cant. With regard to serious and greater injuries, the reduction was 6.8 percent below forecast, but the intervention test for January was not statistically significant.

Though the law did not cover these vehicle occupants, it may be that onset of full enforcement changed their belt use behavior. Given that the overall belt use reached 78 percent among covered occupants, it would not necessarily be surprising to see at least some increase in belt use even among occupants in noncovered vehicles. However, there is no immediate way of verifying whether this occurred. In any event, the reduction in this group is not counted as part of the overall estimate of belt law benefits for North Carolina.

All in all, the figures show a substantial reduction associated with the onset of the law's full enforcement (see Figure 3), and this reduction affected a large number of people. Based on the data collected during phase one, it is estimated that about 1,100 serious injuries were avoided per year. During phase two, the reduction was more pronounced because belt usage was much higher, and, based on the first half year, the benefit is estimated at about 2,000 serious injuries avoided per year—an amount that projects to about 75,000 such injuries

per year nationally. If the same projection is made with respect to moderate and greater injuries, the estimate is a reduction of 3,754 such injuries statewide, which projects to about 140,000 injuries per year nationally. In the case of fatalities, the first half-year benefit projects a 1987 statewide reduction of about 76 deaths.

### Discussion

North Carolina belt-law results to date show that the legislative intent is being met and that the pattern of benefits is consistent with the law's stages of implementation. During phase one, the law influenced the behavior of an additional one in five persons. Twenty-five percent were already using the belt before the law, and reduced casualties for that group were already present in the prelaw baseline date (hence, they cannot be separated out). When phase one of the law took effect, an additional 17 to 19 percent buckled up. Compared to the results seen during phase two, the phase-one casualty reduction was likewise relatively modest. No discernible change was seen in the fatality trend, and the reduction in serious injury was a small percentage—estimated to have benefited about 1,000 persons.

During the first six months of phase two (the sum total of data available as this article is being prepared), the experience was much more favorable. The first half of the year was marked by quite high belt-use rates. Consistent with this increased belt usage, favorable casualty reductions were seen, including a reduction in fatalities and a quite substantial reduction in serious injuries. These reductions should benefit 2,000 to 3,000 persons in North Carolina during the course of 1987, though further erosion in belt usage would diminish the projected benefits.

### What Can Government Do to Make Belt Laws A Success?

Seat belt laws are now a part of the code of government in North Carolina, twenty-eight other states, and the District of Columbia. Thus, the question is what can be done to make the law a success. Research and common sense both suggest that there will be higher levels of casualty reduction if belt use is raised and held at as high a level as possible.

As yet many North Carolina motorists clearly have not acquired a habit of routinely fastening the belt. Failure to wear a belt is an obvious violation that is easily spotted by a police officer, and reasonable enforcement demonstrably raises belt use.

Enforcement by the North Carolina Highway Patrol is under way, but enforcement at the local level is perhaps even more important. Most trips are relatively short and never take a town dweller out of the town area. Therefore, if enforcement is to play a key part in encouraging the regular use of seat belts on the typical, frequent short trips that all of us make, then enforcement by local officers is critical. Unfortunately, it appears that such enforcement is quite low in some areas.

Another key issue is the fact that government officials are role models. Police and other public officials riding in government vehicles are under public scrutiny, and the public is quick to report misbehavior of drivers of government vehicles. If the driver of a police or other government vehicle is unbelted, it is flagrantly apparent. Likewise, the sight of ambulance personnel driving unbelted to the scene of a crash is

jarring, to say the least. State and local officials can serve as important role models by being sure that they and all their associates are in compliance with this life-saving law.

## Conclusion

The North Carolina seat belt law will be two and a half years old by the time this article is published, and if current trends continue, 4,000 or more North Carolinians will have received benefit in terms of reduced crash injury. In this regard, the record so far in North Carolina compares favorably with that of any of the other states with such a law. Belt use in the state is near the top nationally, though with fully one third not buckled up, North Carolina enjoys only about half the benefit obtainable through high levels of belt use.

For the coming period, law enforcement and public information officials should do their best to keep the issue before the public so that a habit of regularly wearing a seat belt can be established. If so, the benefits should continue to accrue. Likewise, during the coming period it is appropriate to continue the examination of this law from the standpoint of public policy, weighing the thousands of casualties reduced against the degree of regulation the law entails. The record so far indicates that the belt law is sound public policy, of which North Carolina citizens have a right to be proud.

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5. For a more detailed discussion of these data, see B. J. Campbell, "The Effectiveness of Rear-Seat Lap-Belts in Crash Injury Reduction," in *Restraint Technologies: Rear Seat Occupant Protection*, SAE Special Publication, no. 691 (Warrendale, Penn.: SAE, 1987), 9-18.

6. The data in this table were taken, in order, from the following sources:

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11. When we say an observed difference is statistically significant at the .10 level, we mean that the probability of the observed difference occurring merely as an accident of sampling is less than 10 percent. Significance at the .01 level is defined analogously.

# Let's Talk Trash



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# RECYCLE NOW

## Mecklenburg County's Recycling Program

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**Betsy Dorn**

**G**arbage! Its presence is as certain as death and taxes. Wherever people live, they generate garbage—the only thing that varies from place to place is the amount and kinds of solid waste people generate and how they dispose of it.

Many countries do a better job of managing solid waste than the United States does. In most parts of the world, natural resources and vacant land are scarce. The tendency to waste material goods never developed in most countries as it did in the United States during the years following World War II.

Americans generally followed the principle of "waste not, want not" for most of the country's history. During World War II, saving resources and recycling everything possible became a patriotic duty. To help win the war, people saved newspapers, glass, scrap metal, and other materials, which were recast as war supplies. After the war, however, tremendous prosperity ushered in a more wasteful attitude. Consumers chose convenience at the expense of conservation and began to throw away items that once would have been reused. Disposable products, such as diapers, lighters, and razors, appeared on the market, and increasingly, items formerly sold in bulk form were packaged in smaller units, producing more refuse. Also, as the attitude toward waste changed, the population grew rapidly. This combination generated an ever-increasing amount of solid waste.

Huge volumes of garbage caused few problems at first because America had plenty of undeveloped and relatively cheap land. Open dumps were common and have been replaced with sanitary landfills only in the last forty years. Now

land disposal of solid waste rapidly is becoming impossible in many parts of this country because land is becoming less available and more expensive. Even when it can be found at affordable prices, an attitude of "not-in-my-backyard" inspires lawsuits that block local governments from establishing new landfills and from expanding existing ones.

In North Carolina twenty-one counties have less than five years of landfill space left, according to a report by the Energy Division of the North Carolina Department of Commerce.<sup>1</sup> Mecklenburg is one of those counties. In 1986 it closed two landfills, leaving only one operating in the county. This landfill was granted a permit in September 1987 for a thirty-acre expansion, which increased its life by four to five years at the current rate of fill. However, at present 50 percent of the waste generated in Mecklenburg County is disposed of in a private landfill outside the county; if all waste were disposed of in the county's landfill, its capacity would be exceeded after only two years. With landfill permits becoming harder and harder to obtain, it may take five years to obtain one for a new site. The county has been seeking approval for one site for the past three years and expects the process to take at least two more years.

If and when counties are able to find new landfill space and to obtain permits, landfill costs will be substantially higher for many reasons, including stricter state and federal regulations calling for the use of engineered devices, such as liners and leachate collection systems, to prevent groundwater contamination.<sup>2</sup> These higher costs, compounded by public opposition to landfills, are

*The author is manager of the Recycling Division of the Mecklenburg County Engineering Department.*

prompting most North Carolina communities to pursue alternatives to landfills.

The concept of burning waste and recovering energy in the form of steam or electricity is gaining a lot of attention.<sup>3</sup> But waste-to-energy incinerators and refuse-derived fuel plants cost millions of dollars and require long lead times to start up. Furthermore, concern over the release of potentially toxic emissions into the air has sparked strong public opposition and is prompting regulatory agencies to tighten permit requirements.<sup>4</sup> Recycling, once regarded by many as the foolish folly of environmentalists and "hippies," is rapidly gaining recognition as the preferred and most viable waste-management method. However, what remains controversial is how much and which types of waste can be recovered and recycled successfully.

Mecklenburg County, in response to its landfill crisis, has launched an aggressive recycling program that is drawing statewide as well as national attention. An article in the Spring 1985 issue of *Popular Government* described in depth Mecklenburg County's recycling projects and services under way at that time.<sup>5</sup> This article updates the county's progress toward reaching its goal of recycling 30 percent of its annual waste.

### Mecklenburg's Program

The push for recycling in Mecklenburg County began in 1975 when a group of citizens urged the county board of commissioners to establish some drop-off recycling centers at local high schools. Since that time, the county's program has grown to encompass:

- Four centers at high schools;
- Two centers staffed by employees of Goodwill Industries;
- A large recycling operation at the county's only landfill;
- An office-paper recovery program in all major county buildings;
- A curbside collection program for four materials in Davidson, Huntersville, Cornelius, and twelve Charlotte neighborhoods; and
- An extensive public-awareness and promotion program.

The county also plans to open a staffed "convenience center" in northern Mecklenburg for household waste and recycl-

ables and two unstaffed centers in shopping center parking lots. To administer and operate these recycling programs, the county employs twenty-one people full time and plans to hire four more field personnel in June 1988. The annual operating budget, funded through landfill user fees, is over \$1 million.

### Materials Recovery at the Landfill

Since 1980 Mecklenburg County has operated a recycling center at the Harrisburg Road Landfill that accepts newspapers, glass containers, aluminum and bimetal cans, plastic soft-drink and liquor bottles, corrugated boxes, used motor oil, and scrap metal. In the fiscal year ending June 30, 1987, recycling operations at the landfill brought in 2,156 tons of material and \$28,458 in sales revenues. To encourage use of the center, landfill users are allowed to dump their waste free of charge if they bring in a designated amount of recyclables (see Table 1). As a result of this economic incentive, few individuals arrive at the landfill without recyclables, and many businesses—particularly small companies that haul their own wastes—also recycle to avoid paying the landfill fee.

Despite this incentive to recycle, however, county staff noticed that a large amount of recyclable metal was still ending up in the landfill. In the summer of 1986, landfill and recycling staff members were assigned to identify the source of all loads containing a large amount of metal. They soon determined that most of the metal was coming from nonprofit agencies and organizations that, under county agreement, were exempt from paying disposal fees, such as the city of Charlotte. When contacted by county staff, these organizations agreed to separate the metal from other trash and deposit it in the scrap-metal bins at the recycling center. This step basically doubled the amount of metal being recovered, which accounted for 69 percent of materials recycled at the landfill during the past fiscal year.

In response to the declining price of mixed metals, the county began to sort recycled metals by type in the spring of 1987. Revenues from the metal-upgrading program have exceeded the salary of the primary worker assigned

to perform this function. One employee works full time and is assisted part time by a coworker to identify the type of metal, remove unacceptable materials, and deposit the item in the appropriate bin for its metal grade. Bolt cutters, screw drivers, and other simple hand tools are used to strip contaminants, such as rivets and bolts, off of non-ferrous scrap. The metal is sorted into the following grades: white goods (enameled metal appliances), ferrous scrap (steel, tin, iron, etc.), iron aluminum, clean aluminum scrap, brass, and copper.

In August 1987 the county implemented a corrugated-box recovery program involving the use of one employee, one front-loader truck, and one eight-cubic-yard container with the lid removed. Vehicles determined by the traffic director to be hauling a large amount of corrugated boxes for disposal are directed to dump at a designated site on the edge of the landfill.

This program is a pilot for a larger recovery operation to be conducted at the county's materials recovery facility (MRF) now under design and scheduled for completion in the winter of 1988. The MRF will accept loads containing over 50 percent corrugated boxes in return for a reduced dumping fee and a disposal site more convenient than the landfill. The material will be fed onto a sorting conveyor, where contaminants will be removed. After being cleaned, the material will be conveyed into an automatic baler and then shipped to a paper mill. The MRF will also house processing equipment for materials recovered through the county's curbside collection program and drop-off centers.

The county's tub grinder, which shreds waste brush and tree limbs brought in by landscapers and others, is also located at the landfill. The shredded product, called "Metro Mulch," is sold to the public for approximately \$4 per yard and is used by city and county departments to landscape public facilities. Recently, the county purchased a magnetic separator to facilitate the shredding of wooden shipping pallets. The magnet removes nails and other metal fasteners, making the final product acceptable for sale as mulch or fuel for wood-fired industrial boilers.

County staff estimate that approximately one fourth to one third of all residential waste is yard waste—leaves,



**Table 1**  
**Amount of Recyclable Material**  
**Required for Fee Exemption**

Vehicle Type	Amount of Material	Usual Charge
Nonpermitted Vehicles		
Household Waste		
Automobiles	3 bags	\$4 per load
Vans	6 bags	\$8 per load
Pickups (one ton or less)		
Trailers (under ten feet)		
Commercial & Industrial Waste	50% *	\$15 per load
Permitted Vehicles	50% *	\$18 per ton
All Other Vehicles	50% *	\$18 per ton

\* Half of the load must be recyclable material and separated from the other material.

brush, and grass clippings—making this material the single largest component in the waste stream and, hence, the most important to recover and recycle. In August 1987 the county hired consultants to design a separate collection, processing, and marketing system for yard wastes and selected other vegetative products. This project, once implemented, will involve the separate collection and recycling of yard wastes from Charlotte and other municipalities in the county. It is targeted to begin in the summer of 1988.

### Multi-Materials Curbside Recycling Program

In February 1987 the county launched the first phase of what is planned to be a weekly, curbside collection program for newspapers, glass containers, beverage cans, and plastic soft-drink and liquor bottles. By August approximately 9,100 homes in Davidson, Cornelius, Huntersville, and twelve Charlotte neighborhoods received this service.

The program provides residents with a red plastic container about the size of a laundry basket for storage and placement of their recyclables at the curb. The bottles, cans, and jars are placed directly into the container, and the bundled or bagged newspapers are placed on top. Three types of plastic containers are being tested, along with two types of collection vehicles. Both types of trucks are designed to be operated by one person and have dual-drive cabs and storage compartments for three

different materials. Mecklenburg County contracted with the city of Charlotte to drive these vehicles, since solid waste collection traditionally has been a municipal, rather than county, responsibility. The recyclables collected at the curbside are transported to a 12,000-square-foot building that the county is leasing while awaiting completion of the full-scale facility.

The interim facility contains a variety of processing equipment. Inclined and horizontal conveyors (one of which was donated by Owens-Illinois, Inc.) facilitate manual sorting of a plastic bottle and glass mixture into five components: polyethylene terephthalate (PET) plastic, green glass, brown glass, clear glass, and mixed-glass residue. Workers load the color-sorted glass into roll-off containers for shipment to market and the green and clear plastic bottles into the hopper of a PET granulator. As the plastic travels up the conveyor, a worker removes one color while the remaining bottles fall into the granulator and are shredded into tiny pieces. The granulator was donated by Coca Cola Bottling Company Consolidated, which persuaded the county to include plastic among the materials collected in return for over \$100,000 in free consulting services and a guaranteed market for the PET.

The facility also houses a can densifier that magnetically separates the bimetal cans from the aluminum cans and crunches the aluminum cans into 18-pound biscuits. The densifier is privately owned but is provided free to the county by a local metals buyer under an

agreement that the county sell to the buyer all of the cans it collects.

The curbside collection program has been well received in the community. Participation levels average between 65 and 75 percent, with around 90 percent participation in some neighborhoods. Over 65 percent of all telephone calls concerning the program are from residents outside of the service areas who want to participate. The county expects to extend the program throughout all of its municipalities by the end of 1988 and to recover approximately 12 to 15 percent of the residential waste stream.

### Public Awareness and Promotion

Achieving the desired results from curbside collection and the other programs requires extensive promotion. After collecting input from citizens and staff, the county board of commissioners decided in 1982 to begin allocating money for promotion of recycling. The county hired Epley Associates, a public relations and marketing firm that has advised the county for the past three years and has been retained for the 1987-88 year under a \$99,000 contract. The overall goals for recycling promotion are to inform the general public about the concept of and need for recycling, with emphasis on specific recycling programs implemented by the county, and to promote active involvement and participation in these programs.

In a meeting with commissioners and staff, one of Epley's first recommendations was that the program needed to be given a sense of urgency because the county rapidly was running out of landfill space. They recommended "Recycle NOW" as the theme to convey that urgency, and the color warm red, which carries connotations of warning and emergency, was chosen for printed materials.

Epley also counseled that the solid-waste management issue was newsworthy enough to obtain substantial coverage by television, radio, and newspapers. As a result of issuing numerous news releases, periodically holding media briefings, and creating special news opportunities, during fiscal year 1986-87 newspapers featured recycling favorably in a total of thirty-three headlines, eighteen of them in *The*



Residents put materials in special containers.

*Charlotte Observer.* Recycling topics were well covered by the three commercial television stations that have full news departments. In addition to news coverage, most of the local newspapers and several of the television and radio stations ran public service announcements on recycling and several editorials supporting recycling as well as other county waste-management activities. WTVI, the community-owned public television station, over the past five years has produced two thirty-minute documentaries on the solid-waste management crisis and the steps Mecklenburg County is taking to address the problem. In summary, television and radio stations and local newspapers supported recycling with public service space and news coverage worth an estimated \$30,000 during 1986-87.

The public relations program has staged various special events to obtain media coverage of recycling. For example, Mecklenburg County has sponsored three recycling conferences that have attracted business people and news



Recyclable materials are collected in trucks having storage compartments for three different materials.

coverage. The Recycling Committee annually presents awards to outstanding recyclers, both individuals and organizations, and those awards have attracted media attention. For example, the committee honored Food Lion for its recycling efforts. In one year Food Lion saved 65 million pounds of corrugated paper—enough to fill 1,200 rail cars.

Before the curbside recycling program was initiated, the consultants enlisted the cooperation of the United States Marine Corps Reserve, the Dilworth Elementary School PTA, the Dilworth Community Development Association, and the local Boy Scout troop in a one-day, neighborhood curbside collection demonstration project. This recycling drive brought in nearly 11 tons of newspapers, 1.5 tons of glass, and 114 pounds of aluminum. It also received television coverage from two stations and newspaper coverage, including a complimentary editorial about the project. The county also staged a "Trash Tour" for elected officials, interested citizens, and the news media. The media gave good coverage to the tour, which was led by the chairman of the county board of commissioners, who rummaged through curbside trash to show what could be recycled in a collection program.

While the mass media have been important to the communications effort, materials have been sent directly to some target audiences, such as those

living in the curbside collection areas, selected businesses, and people who might attend the county-sponsored recycling conferences. The county has used both direct mail and hand-delivered doorknob cards to reach people in the curbside recycling service areas. "Tee Off on Trash," a direct-mail piece, targeted every business in Mecklenburg County with twenty-five or more employees and drew more than 160 responses. The card came with two golf tees made of plant food and used golf jargon in its message about recycling. The reverse side of the card carried the heading "Spike The Trash Program" and used gardening terms to convey its message.

A crucial element of the public relations program has been the printed materials produced to support various programs and events. A comprehensive directory of available recycling services in Mecklenburg County was prepared and computerized and is updated as changes occur. A new edition of the directory will be released soon; however, the information is available now upon request in word-processed form. Other supporting materials have included fact sheets, news media kits, bumper stickers, information brochures for the various programs, decals, and posters.

A speakers bureau of volunteers, county officials, and staff members have preached the gospel of recycling in civic

clubs, churches, and business and professional organizations. The consulting firm produced a sound and slide program, titled "An Environmental Time Bomb," to provide the speakers with a dramatic way of emphasizing the land-fill problem and the need for recycling.

Mecklenburg County wanted a recycling exhibit for the annual meeting of the National Municipal League, and Epley designed the exhibit in a way that made it effective for use in various public places in the county. Also, at the consultants' suggestion, recycling committee volunteers created a "recyclers' garden" exhibit for the Southern Spring Show, an annual home and garden exposition attracting people from throughout the region. Volunteers handed out information about recycling, back-yard composting, and the county's "Metro Mulch" program.

Finally, county staff members have devised ways to broaden citizen involvement in planning and implementing recycling programs. The Recycling Ventures Task Force was created recently to funnel private-sector resources towards implementing the county's recycling plan. Task force membership includes representatives of the glass, aluminum, newspaper, and other recycling industries; two major soft-drink bottlers; a

locally based food-store chain; Duke Power Company; and many other businesses and organizations.

### Public Support

Has the county's investment in public awareness and promotion been worthwhile? It appears so. Mecklenburg County residents, through numerous opinion polls, have expressed strong support for recycling. The high participation levels in the curbside recycling service areas indicate that Mecklenburg citizens will carry through on their verbal commitments if given a convenient opportunity to recycle. The public also has approved over \$76 million in bond funds for the construction of waste-energy incinerators, landfills, and other waste-management facilities—the largest bond package ever put before the voters in Mecklenburg County history. In addition, recycling and waste management have become such popular issues in the county that candidates for public office frequently vow to support recycling if elected.

Will Mecklenburg County reach its recycling goals? The county has:

- A sound recycling plan;

- The commitment of elected officials in providing funding and staff;
- Good recycling markets;
- A public that is supportive and eager to participate; and
- A running start with its ten-year history in operating recycling services.

With this much going for it, the county should meet, or even exceed, its goal of recycling 30 percent of its annual waste stream.

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1. "Presentation of Local Government Survey Results as They Pertain to Municipal Solid Waste Management" (Report presented at a conference on Municipal Solid Waste Management. High Point, North Carolina, 28-29 January 1987).

2. North Carolina Department of Human Resources, Solid and Hazardous Waste Management Branch, memorandum dated 7 September 1987 to consulting engineers, permit applicants, and other interested parties regarding new sanitary landfill permitting procedures.

3. William A. Campbell, "Resource Recovery in North Carolina," *Popular Government* 52 (Summer 1986): 1-10.

4. For example, see Mecklenburg County Department of Health and Environmental Protection, "Air Quality Permit to Construct/Operate," issued for the Mecklenburg County Northeast Waste-to-Energy Facility, 27 February 1987.

5. Betsy Dorn, "Recycling Pays Off—Savings in Money and Landfill Space," 50: 23-28.

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# Property Tax Questions and Answers

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From time to time this column will feature questions that have arisen in property tax administration and responses to them that have been given by Institute faculty members working in that field. This issue's column was prepared by Joseph S. Ferrell. Mr. Ferrell is an attorney who specializes in the legal aspects of property tax listing and assessing.

**Q.** An elderly individual who was receiving the \$12,000 exclusion from the value of his residence pursuant to G.S. 105-282.1 died on March 15, 1986. Title to the house and lot that had been taxed at reduced value passed to an individual who does not qualify for the \$12,000 exclusion. The owner's death was not reported to the county assessor until November 15, 1987. The county uses a permanent listing system for real property. What additional taxes, penalty, and interest are now due on this property?

**A.** Several sections of the Machinery Act bear on this question. G.S. 105-285(d) provides that when real property that was exempt from taxation as of January 1 is acquired after January 1 and before July 1, it shall be listed for taxation by the new owner as of the date of acquisition, shall be appraised at true value as of the preceding January 1, and shall be taxed for the fiscal year that begins in the year of acquisition. This is an exception to the general rule that ownership is determined annually as of January 1. G.S. 105-309(f) and (g) provide that when a person who received the exclusion in a previous year dies, the current owner must report the former owner's death to the county assessor, subject to the penalties provided by G.S. 105-312 and 105-310 for failure or willful refusal to do so. G.S. 105-312 defines "discovered property" as property that was not properly listed "during a regular listing period." In the stated case, G.S. 105-285(d) requires that the house and lot be listed for 1986

taxes in the name of the individual who inherited it, since the date of the transfer of title, March 15, occurred between January 1 and July 1. G.S. 105-309(f) made it the duty of the new owner to report the former owner's death during the 1987 listing period, subject to the penalties prescribed by G.S. 105-312 for failure to do so. Although the law is not entirely clear on this point, I think the most reasonable interpretation of the applicable statutes is that no penalty should be assessed for failure of the current owner to report the former owner's death in calendar 1986. G.S. 105-285(d) clearly defines the new owner's duty to list exempt property acquired between January 1 and July 1 but says nothing about *when* the listing must be made. Both G.S. 105-309(f) and 105-312(a)(1) imply that the owner may discharge his duty to list by doing so during the next regular listing period. Since a penalty is involved, the courts would probably resolve any serious doubt as to the meaning of the statutes in the taxpayer's favor. If this interpretation is correct, the additional amount due on the property is the total of 1986 and 1987 tax levied on the improperly excluded value, in this case \$12,000 in each year, plus a penalty of 10 percent of each year's additional tax for failure to report the former owner's death during the 1987 listing period. G.S. 105-309(g) implies that the additional tax and penalty should be charged to the tax collector as a current year item pursuant to G.S. 105-312(j).

The Ad Valorem Tax Section offers another interpretation of G.S. 105-285(d) in this context with which I do not agree. Henry Lewis drew a distinction between classifications and exemptions going to the property and those going to the individual owner that led him to conclude that G.S. 105-285(d) did not apply to transfers of property whose owners were qualified for partial tax relief under G.S. 105-277.1 (elderly and disabled excluded) or G.S. 105-275(21) (disabled veterans' housing). While this interpretation reaches a

desirable result and rationalizes the customary administrative practice, it rests on a dubious distinction. Many classifications and exemptions are accorded only if the owner of the property in question meets certain criteria. For example, not all property used for religious purposes is exempt from taxes. To qualify, the owner must be a local congregation or regional organization of a church or religious body. It is just as reasonable to say that churches are accorded tax exemption with respect to property used for religious purposes as it is to say that property used for religious purposes is accorded exemption so long as it is owned by a church. Does this mean that G.S. 105-278.3 (exemption of religious property) goes to the owner rather than to the property and that therefore G.S. 105-285(d) does not apply to transfers of church-owned property? Surely not.

**Q.** What if the property in question had been a mobile home?

**A.** The special rule contained in G.S. 105-285(d) applies only to *real* property. Ownership of personal property is determined as of January 1 without exception. Therefore, if the property in question had been a mobile home, its tax status for 1986 would have depended on whether it was real or personal property. For 1988 and subsequent tax years, G.S. 105-273(15) defines a manufactured home as real property if it is a multi-section residential structure; has the moving hitch, wheels, and axles removed; and is placed on a permanent foundation on its owner's own land. Most assessors were already treating as real property mobile homes meeting these criteria. On the other hand, if the mobile home were determined to be personal property, it would have continued to qualify for the \$12,000 exclusion for 1986. Taxes and penalty for 1987 would have been handled the same as if the property had been real property.

**Q.** What if the former owner had died between July 1 and December 31?

**A.** In that case, the property would have continued to qualify for the exclusion for 1986 taxes.

**Q.** What if the county had not had an approved permanent listing system?

**A.** Under a permanent listing system the duty to list real property rests on the county assessor, not the property owner. The property owner's duty is limited to reporting changes that affect the tax status of the land, such as new construction and loss of eligibility for exemption or exclusion from taxes. In the stated case, presence of a permanent listing system meant that the penalty for failing to report loss of eligibility was assessed only on the \$12,000 in value that had been improperly excluded from taxation due to the owner's failure to report the former owner's death. In the absence of a permanent listing system, it would have been the current owner's duty during the 1987 listing period to list the entire property in his own name, and the penalty for not listing would be assessed against the entire taxable value of the house and lot.

**Q.** A church owns an automobile that is made available to the minister for his exclusive personal use. Is this vehicle exempt from taxes?

**A.** G.S. 105-278.3 exempts personal property owned by a church if it is "wholly and exclusively used by its owner for religious purposes" and defines "religious purposes" as including ownership and maintenance of parsonages. Surprisingly, the statute says nothing about church-owned personal property made available to the minister as a form of compensation. Most county assessors would probably exempt a church-owned automobile under these circumstances, but there is room for a contrary view.

**Q.** In reviewing parcels assessed at present-use value for 1987, the assessor determined that a parcel that had been approved for use value assessment in 1980 as agricultural land had lost its eligibility in June

1981, when the owner died and title to the land passed by will to the owner's nephew, who is the current owner. The current owner did not report the disqualification at the time of the transfer or subsequently, and the property has been improperly accorded use value assessment in each of the intervening years. How are deferred taxes, penalty, and interest on this parcel figured?

**A.** G.S. 105-277.4 provides that when property assessed at use value loses eligibility, taxes for the fiscal year that begins in the calendar year in which the disqualification occurs shall be recomputed as if the property had not been classified for that year, and deferred taxes for the preceding three fiscal years shall immediately be due and payable with interest from the original due date. G.S. 105-277.5 provides that when some change occurs that would disqualify all or part of a tract for use value assessment, the owner must report complete information regarding the change to the county assessor not later than the close of the next listing period. The penalty for failing to make that report is "ten percent (10%) of the total amount of the deferred taxes and interest thereon for each listing period for which the failure to report continues." These provisions require a somewhat complex computation. First, determine the amount of deferred taxes that became due and payable as of the date of disqualification, and figure interest on these taxes from the original due date to the date of payment. For each of these years, add a penalty of 10 percent of the total of tax and interest for each listing period that has passed after the date of disqualification. Next, determine the amount of taxes that have been unlawfully deferred for the year of disqualification and each year thereafter, figure interest on those taxes from the original due date to the date of payment, and add a penalty on the total of tax and interest at the rate of 10 percent per elapsed listing period. The formula is  $T = (D \times (1+r)) \times (1+p)$ , where  $D$  = amount of deferred tax,  $r$  = interest rate, and  $p$  = penalty rate. The following example is based on the stated case

and assumes that the amount of deferred taxes for each year in question was \$500 and that the tax liability of the property was determined as of December 5, 1987.

Year	Deferred Tax	Interest Multiplier	Total	Penalty Multiplier	Total Due
1980	\$500.00	1.6425	821.25	1.60	1,314.00
1981	\$500.00	1.5525	776.25	1.60	1,242.00
1982	\$500.00	1.4625	731.25	1.60	1,170.00
1983	\$500.00	1.3725	686.25	1.50	1,029.38
1984	\$500.00	1.2825	641.25	1.40	897.75
1985	\$500.00	1.1925	596.25	1.30	775.13
1986	\$500.00	1.1025	551.25	1.20	661.50
1987	\$500.00	1.0000	500.00	1.10	550.00

**Q.** The current owner became eligible for use value assessment for 1985 and subsequent tax years, assuming that the property met all other eligibility requirements, since he had then owned the property for the preceding four years. Why have you assessed deferred taxes, interest, and penalty for 1985, 1986, and 1987?

**A.** G.S. 105-277.4(a) provides that property is eligible for use value assessment only if "a timely and proper application is filed with the assessor of the county in which the property is located." The current owner has never filed a timely and proper application.

**Q.** May the current owner now file a late application for this property with respect to 1987 or any prior year?

**A.** No. For all of the tax years in question, the Machinery Act made no provision for approval of applications for present use value assessment after the close of the listing period for the current year. Effective for the 1988 and subsequent tax years, an applicant who can show "good cause" for failing to make a timely application may petition the county commissioners, board of equalization and review, or municipal governing board, as appropriate, to approve a late application with respect to taxes levied in the current calendar year. The board may approve such late applications in its discretion. This authority does *not* extend to any tax year before 1988.

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# Around the State

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## North Carolina's Prison Population Growth Some Good News for a Change

Stevens H. Clarke

While there is no cause for complacency among those concerned about the growth of the state's prison population, there is some encouraging news. North Carolina's prison population growth has greatly slowed in the 1980s.

According to United States Department of Justice statistics, from 1980 to 1986 North Carolina's prison population was the third-slowest growing among all the states and the second-slowest growing among the southern states (after Tennessee's, which is limited by court order). During that period, the number of state prisoners grew by 66 percent in the United States as a whole, by 47 percent in the southern states, and by 15 percent in North Carolina. The per capita incarceration rate (defined as the number of state prisoners serving sentences of more than one year per 100,000 state residents) grew by 55 percent in the nation, by 32 percent in the South, and by only 6 percent in North Carolina.

The growth of North Carolina's per capita incarceration rate has greatly slowed in the 1980s. From 1975 to 1980, this rate increased by 16 percent (from 210 to 244), compared with its more recent 6 percent growth (from 244 to 254).<sup>1</sup> In 1975, when the first federal statistics became available, North Carolina had the highest incarceration rate of any state. By 1986, however, North Carolina's rate had dropped to twelfth highest.

**Why has prison population growth slowed in the 1980s?** There may be a variety of explanations for the slowing of growth, including a heightened awareness of the problem during the late 1970s and early 1980s, which led to legislation in 1981 to provide alternatives to prison sentences, such as in-

tensive probation. The Fair Sentencing Act of 1981 undoubtedly has contributed to the slowdown by reducing average felony sentences by 16 percent or more during the 1981 to 1986 period, compared with the previous five years, and by reducing the percentage of the sentence actually served in prison. (The act did not change the likelihood of receiving probation for a felony.) But the effects of the act on sentences appear to be wearing off at the end of its first five years so that its effects on the growth of the prison population may have been only temporary.<sup>2</sup> The prison population is now in the 17,000-to-18,000 range, while the prison system's legal capacity—measured in accordance with new per-inmate standards set in recent litigation—is probably several thousand less than the actual population.

**Litigation over prison overcrowding and conditions.**<sup>3</sup> As of September 1987, four main lawsuits had been filed against the state concerning overcrowding of prisons and related conditions of confinement. *Hubert v. Ward*, concerning prisons in the southern piedmont area of the state, ended in 1985 in a consent judgment that ended the practice of triple-bunking inmates and established standards calling for more space, facilities, and staff per inmate than were provided in the prison system at that time. The state has virtually completed the construction and additions to staff necessary for implementing the consent judgment. The lawsuit in *Stacker v. Woodard*, involving Caledonia Prison, ended in a settlement agreement approved by the United States District Court on July 14, 1987, which was similar to the consent judgment in *Hubert*. This agreement is now being implemented. In *Epps v. Martin*, involving Cragge Prison, the par-

ties have reached a settlement that was considered by the United States District Court on September 21, 1987. *Small v. Martin*, concerning conditions in the forty-nine field prison units not covered by *Hubert*, is now in its preliminary stages.

The standards set in *Hubert* and its companion cases have increased the state's cost of imprisonment substantially and have limited the number of inmates that can be housed at a given prison unit with given staff and facilities. Nevertheless, without the General Assembly's good faith efforts to limit the prison population, the state might have to settle the lawsuits on less favorable terms.

**The General Assembly's response to the prison overcrowding problem.** To reduce prison overcrowding, the General Assembly, in the 1987 session as well as previous sessions, attempted to reduce prison admissions and the length of stay of prisoners, to create and encourage the use of alternatives to prison commitment, and to build more state prison space. Perhaps the most significant action in 1987 was enactment of legislation to limit the prison population.

Chapter 7 of the 1987 Session Laws, effective March 11, 1987, has been called a "prison cap" bill. But a better name for it would be "parole speed-up." The bill provides that when the number of prisoners exceeds 17,460 for fifteen consecutive days, the Secretary of Correction must notify the Governor and the Parole Commission. Thereafter, within sixty days the commission must parole enough inmates to reduce the number of prisoners to 17,280. The prisoners paroled must already be legally eligible for parole. The General

Assembly also funded positions for seven parole investigators, seven probation/parole officers, and five two-person intensive parole teams to handle the increase in emergency paroles.

1. For a description of the rapid growth of the prison population in the 1970s and some of the reasons for it, see Stevens H. Clarke and William P. Pope, "Recent Developments in North Carolina's Prison Population," *Popular Government* 48 (Summer 1982): 1-7.

2. Stevens H. Clarke, "The Fair Sentencing Act: Have

Its Effects Lasted?" *Popular Government* 53 (Fall 1987): 45-57.

3. This summary of the status of prison litigation was provided by Special Deputy Attorney General Lucien Capone III of the North Carolina Attorney General's Office.

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# Control of Pit Bulls and Other Vicious Animals

L. Poindexter Watts

Pit bull attacks have been making news, and many people are asking what legal controls we have over pit bulls and over vicious animals in general. This article will treat the laws of North Carolina on vicious animals, but first it may help to discuss why there is such recent concern.

I asked an expert on animals recently whether pit bulls were inherently more vicious than chows or doberman pinschers. He said, "No," but explained that pit bulls are getting attention because there are so many more of them now being bred. They are popular with people who engage in dog fighting and also with drug dealers and other persons who wish to use them as guard dogs and attack dogs. The overall number of dog bites in the United States has fallen in recent years, but serious or fatal dog attacks are on the rise.

Some localities, in response to highly publicized attacks by pit bulls, have attempted to outlaw them or to place specific controls on them as a breed. There are a number of problems with this approach. First, when an individual dog has displayed vicious or dangerous behavior, it is often not possible to determine what the dog's breed is—or partly is, if the pit-bull law specifies mixed breeds. Second, the several organizations that recognize breeds in the United States have no classification for "pit bulls." There are several terriers whose blood lines are found in the dogs generally thought of as pit bulls, and the United Kennel Club (UKC) recognizes the "American Pit Bull Terrier." Dogs that meet the UKC standard, however, can vary widely in appearance. Finally, if the law tries to be inclusive and recognizes bull terriers and Staffordshire bull terriers as well as American pit bull terriers (and mixed breeds that are in part one of these), one ends up with a con-

trol provision on supposedly vicious or dangerous dogs that will unquestionably cover a large number of gentle, well-socialized individual dogs. The test cases in other states where there was an attempt to place special controls on pit bulls have been mixed in their outcome, and several ordinances have been struck down as unconstitutional. The Humane Society of the United States (HSUS) advises that it is preferable to have laws that address the problems of vicious animals in general, with perhaps special provisions for guard dogs and security dogs, rather than laws dealing with just the problem of pit bulls.

## North Carolina Statute

Most animal control is governed by city and county ordinances, but there is a statute setting out a statewide procedure for coping with vicious animals. There are enough problems in using the statute, though, that most communities will want to have local ordinances that provide alternative controls for vicious animals. It is likely that the 1988 or 1989 General Assembly will consider proposals to expand the statewide law on vicious animals.

The present statute on vicious animals reads as follows:

### § 130A-200. Confinement or leashing of vicious animals.

A local health director may declare an animal to be vicious and a menace to the public health when the animal has attacked a person causing bodily harm without being teased, molested, provoked, beaten, tortured or otherwise harmed. When an animal has been declared to be vicious and a menace to the public health, the local health director shall order the

animal to be confined to its owner's property. However, the animal may be permitted to leave its owner's property when accompanied by a responsible adult and restrained on a leash.

## Problems with this Statute

In many localities local health directors primarily restrict themselves to rabies control and leave general animal control matters to city and county animal control officers. Such local health directors are often reluctant to involve themselves in controversial disputes regarding whether an animal attack was unprovoked and whether the attacking animal deserves to be classed as "vicious and a menace to public health." Many local ordinances on vicious animals either allow animal control officers to make the determination and declare animals to be vicious—with formal notice to the owners—or provide a definition for determining that an animal is vicious, which automatically applies and which everyone must abide by. In the latter instance, if there were a dispute over an alleged vicious animal that reached court, the prosecution in any criminal case or the plaintiff in a civil case would have to prove that the animal was in fact vicious and that the owner or person responsible for the animal was aware of enough facts to know that the animal fell into the category of being vicious.

Under the statute, the threshold requirement for determining that an animal is vicious is an attack on a person that results in bodily harm. Many animals demonstrate their vicious propensities by attacks on persons that may not cause bodily harm or by attacks on other domestic animals. These factors often are set out in local ordinances

as criteria for determining whether an animal is vicious.

The local health director's only power is to order that an animal be confined to its owner's property and that it be leashed when off that property. Many local ordinances require vicious animals to be kept within a secure enclosure on the owner's premises and require that the animal be both leashed and muzzled when off the premises. Furthermore, local ordinances may provide for destruction of the animal if there are repeated attacks, serious injury to or death of a person, or other circumstances indicating that the animal is extremely dangerous or cannot be controlled.

There is a question as to the penalty for violating the local health director's order that a vicious animal be confined to the owner's premises. The statute quoted above is silent on the point, and there is no general provision in the health laws setting out the penalty for violating a local health director's orders. G.S. 130A-25(a) makes it a misdemeanor to violate provisions of (1) Chapter 130A itself, (2) rules of the Commission for Health Services, or (3) rules of a local board of health. Even though the statute states what the local health director's order must be once he determines that an animal is vicious, it does not specifically state that it is a criminal offense to violate the order. Many judges, therefore, would not find it a criminal offense to violate the order. Theoretically, a local health director could go to civil court and get an injunction against a person violating the order—and then use the penalty for contempt of court if there were further violations. However, this is such a cumbersome procedure that it would rarely be used. The Institute of Government has recommended to local health directors that they request their local boards of health to adopt rules making a violation of an order of the health director a rules violation. This would then trigger the provisions of G.S. 130A-25(a), and the violation would be a general misdemeanor. A general misdemeanor is punishable by a fine in the discretion of the court, imprisonment up to two years, or both. (This, incidentally, is a much stiffer penalty than could be imposed for a violation of a local ordinance. The maximum penalty for an ordinance violation is a fine of \$50 or thirty days in jail.)

## HSUS Guidelines

The Humane Society of the United States has recently published a set of guidelines for regulating dangerous or vicious dogs. Although the guidelines are for dogs only, many of their provisions would apply in drafting a vicious-animal statute or ordinance. The guidelines try to distinguish between levels of dangerousness or viciousness to prevent unnecessary death penalties for dogs, because most often it is the owner rather than the dog that is at fault. The guidelines suggest that any dog that is kept or trained for fighting or attack or that commits certain serious, *unprovoked* acts should be classed automatically as dangerous and subjected to the special controls for dangerous dogs. In addition, they suggest hearings and a procedure for deciding whether the controls should apply when the dog exhibits vicious propensities or repeatedly is not properly controlled.

The guidelines recommend that a dog should be humanely euthanized if it severely injures a person in an unprovoked attack. Otherwise, the dog should be destroyed only if the owner is unwilling or unable to comply with the special controls for dangerous dogs.

The special controls include five mandatory provisions plus a number of optional ones. The mandatory provisions are:

1. Licensing, Registration, and Rabies Innoculation. The dog should meet all regular provisions of the animal control law on licensing, registration, and rabies innoculation, including minimum confinement periods after biting someone. Also, the controls may include a special registration category for dangerous dogs.
2. Positive Identification of the Dog. There should be a positive way of identifying dangerous dogs. The guidelines suggest tattooing certain spots on dogs. An additional control might be to require the use of a conspicuously colored collar that would identify the dog as dangerous.
3. Notification of Change of Status. The owner should be required to notify animal control authorities within twenty-four hours after a dangerous dog gets loose or is unconfined, has attacked another animal or a human

being, has died, or has been sold or given away.

4. Proper Confinement of the Dog. The guidelines set standards for secure enclosure of dogs on their owners' premises. They also suggest that warning signs should be posted—plus signs with a symbol warning children of the presence of a dangerous dog.
5. Control and/or Muzzling While Off Owner's Property. The guidelines suggest standards for leashing and muzzling of dogs while they are off their owners' premises.

The guidelines add a number of optional provisions that jurisdictions may wish to consider in controlling dangerous dogs. Some of the more interesting ones are:

- Spaying or neutering animals that are classed as dangerous.
- Requiring that the owner of a vicious dog carry a minimum amount of liability insurance (perhaps \$100,000) or post a bond for the minimum amount.
- Requiring animal control officers to inspect the premises where dangerous dogs are kept, and the conditions under which they are kept, at least twice a year.
- Making the parent of a minor who owns a dangerous dog responsible for any damages caused by the dog and for compliance with all applicable control provisions.

The final substantive guidelines relate to penalties. The guidelines state:

The HSUS strongly recommends that felony level penalties be applied in cases of fatal or severe attacks or non-compliance with requirements for actions to be taken by owners of animals that have been designated vicious or dangerous. Failure to comply with rules relating to the keeping of dangerous dogs should result in a fine of no less than \$500, with a second failure resulting in felony penalties and possible confiscation of the animal(s) in question.

For North Carolina to follow the penalty recommendations would require legis-



lation. As noted above, the maximum penalty for ordinance violations is only a \$50 fine or imprisonment for thirty days.

The second penalty recommendation

in the guidelines calls for felony-level punishment for violation of animal fighting laws. The HSUS includes this recommendation because the widespread breeding of fighting dogs is one of the

sources of our current problems. North Carolina recently amended its law on animal fighting and baiting to include a felony-level punishment for certain repeat offenders.

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## The Orange County Joint Planning Agreement

Richard D. Ducker

One county commissioner called it historic. A city council member called it a major accomplishment in negotiation. What they were referring to was a remarkable agreement adopted this past fall by the cities of Chapel Hill and Carrboro and Orange County, an agreement indicating the way growth should proceed in southeastern Orange County, providing the way the three units will share their land-use control jurisdiction, and requiring regulatory decisions to follow a mutually adopted land-use plan. This joint planning agreement culminates at least a decade of discussion and negotiation between the three units and is the first of its kind in the state. Because the agreement limits the exercise of legislative discretion by the three units, they sought and obtained local legislation specifically authorizing the agreement's provisions (1987 Session Laws, Chapter 233).

The joint planning area is located within Chapel Hill Township in the far southeastern corner of Orange County. It includes the two cities, the relatively small areas outside the cities' limits that are subject to their respective extraterritorial planning jurisdictions, and almost 45,000 acres of land classified as "rural buffer" or "transition" by the joint land-use plan. For some years Orange County has enforced zoning, subdivision regulations, and the State Building Code in most of the area now designated rural buffer or transition. Since state law prevents a city from unilaterally extending its extraterritorial planning jurisdiction into areas where a county exercises all three of these powers, Chapel Hill and Carrboro have seen their extraterritorial jurisdiction diminish as their corporate limits have expanded through annexation. The joint agreement calls for the county to share or relinquish

planning jurisdiction in some of these unincorporated areas.

No joint planning agreement would have been possible, however, without agreement over the growth policies that will guide the exercise of power. Fortunately, all three units developed land-use plans in the late 1970s and early 1980s that were based on a format derived from the Land Classification System, developed in 1975 and advocated for use statewide by the now-defunct North Carolina Land Policy Council. Furthermore, each unit made some commitment to conforming its regulatory decisions to the policies of its land-use plan even though such consistency is not clearly required by state law. However, the development of a *joint* land-use plan that would serve as the basis for *joint* regulatory decisions and power sharing required extensive negotiation and revision of the plans of the individual units.

The key to the joint planning effort has been the rural buffer area to the west of Carrboro. Part of the rural buffer includes the watershed of University Lake, the primary source of drinking water for the greater Chapel Hill-Carrboro area. A pattern of low-density development still remains there. In the past few years Orange County has become increasingly willing to protect the watershed from development by zoning much of the area for lots with a two-acre minimum. Chapel Hill has supported this effort and has tended to view the area as a natural open-space buffer complementing its own controlled growth policy. However, Carrboro has been less enthusiastic about major restrictions on watershed development in those areas to its west that served as natural corridors for the city's expansion. The joint planning agreement hinged upon Carrboro's will-

ingness to recognize the watershed protection and low-density development objectives of the rural buffer areas to the west and upon Orange County's and Chapel Hill's willingness to recognize Carrboro's growth plans and influence by designating transition areas for Carrboro to the north. The joint agreement allows the county to retain jurisdiction within the rural buffer areas. However, it requires the county to refer all applications for development permits or petitions for ordinance amendments to one or both of the towns (depending on the location within the rural buffer).

The most intricate provisions apply to the three transition areas, two assigned to Carrboro and one to Chapel Hill. Urban services (including public utilities) are either already provided in these areas or they are projected to be soon. The two towns are to prepare zoning map and text amendments for their respective transition areas that are consistent with the joint land-use plan. The agreement then requires Orange County to adopt and incorporate by reference into its own ordinance each set of these and subsequent amendments prepared and adopted by a town. The one key power that Orange County retains in the transition areas is a special power to block ordinance amendments adopted in this fashion. If the county files a timely objection to an amendment that is adopted by a city, then Orange County is not compelled to incorporate the amendment into its own; the amendment is effective only if the county chooses to adopt it. Each town administers the regulations that apply within its respective transition area(s).

The agreement also places limitations upon annexation by Chapel Hill and Carrboro. Unless all three units agree,

neither town may annex territory within the rural buffer. Unless the other town consents, neither town may annex territory within the other town's transition area(s). Also, the towns are prohibited from annexing any part of the watershed (including lands within a

town's existing extraterritorial area), and no unit may approve or encourage the extension of water or sewer lines into the area until at least ninety days after completion of the University Lake watershed study commissioned by the Orange Water and Sewer Authority.

The joint planning agreement proves that committed local governments can develop and agree upon detailed growth policies and inspires hope that other such cooperative local planning efforts may be successful.

## City-County Consolidation Rejected in New Hanover

*Warren Jake Wicker*

Voters in Wilmington and New Hanover County rejected the proposed consolidation of the city and county governments in a referendum held on October 6, 1987. A majority vote both by Wilmington voters and by county voters outside the city would have been necessary for approval. While city voters approved the proposed merger, it lost heavily outside the city. The proposition carried in thirteen of nineteen city precincts but lost in seventeen of eighteen outside the city. The final vote was as follows:

	For	Against	Total
Wilmington	5,013 (57%)	3,763 (43%)	8,776 (100%)
Outside Wilmington	2,038 (24%)	6,574 (76%)	8,612 (100%)
Countywide	7,051 (41%)	10,337 (59%)	17,388 (100%)

The October defeat marked the end of the fourth major effort in New Hanover to achieve city-county consolidation.

### Past Efforts

In 1933 the General Assembly enacted a detailed plan for combining the city and county governing boards and for creating a single administration for Wilmington and New Hanover County. The two governments would have been continued as separate legal entities in order to maintain separate taxing levels for functions that were performed countywide or only within the city. The proposed governing board would have had seven members: five elected from residents of the city and two elected from county residents outside the city. All seven would have voted on county mat-

ters; but only the five elected from the city would have voted on city matters. A single city-county manager would have headed the administration, and a countywide police department would have been established under the city-county manager and the sheriff. The proposal called for a 10 percent reduction in both units' budgets. The countywide referendum on the plan's adoption, held on March 28, 1933, rejected the plan by a vote of 4,128 (78 percent) to 1,189 (22 percent).

The second formal effort was marked by the April 1947 act of the General Assembly authorizing the creation of a charter commission to study the possible merger of functions or governments in New Hanover County (1947 Session Laws, Chapter 768). The commission's product, if it recommended a consolidated government, was to have been submitted to a referendum. Local opposition stopped the effort, and no proposal was ever produced.

The third effort started in 1969 with a report from the Greater Wilmington Chamber of Commerce, urging consolidation of a number of city and county functions and suggesting that full consolidation be considered. The local governments responded in July 1970 by appointing a charter commission of fourteen members, supported by a citizens' review committee of forty-two persons. After more than two years of work, a charter was submitted to the voters in a referendum held on February 27, 1973. A single countywide majority was required for approval. In a moderate turnout, the vote was 4,040 (26 percent) for consolidation and 11,722 (74 percent) against. While coun-

tywide support was only 26 percent, voters inside Wilmington were more favorable—44 percent favored consolidation, compared with only 13 percent outside the city.

### The Fourth Attempt

The recent three-year effort got its formal start in June 1984, when the local governments in the county established the New Hanover Governmental Units Consolidation Study Commission, a twenty-nine-member group whose chairman was Karen E. Gottovi, former chairman of the New Hanover Board of County Commissioners. The study commission spent a year examining the functions and organization of the existing governments, the desirability of consolidation, and the political feasibility of attempting to achieve consolidation. In a comprehensive report delivered to the local governing boards in June 1985, the study commission found that consolidation was desirable and recommended that a charter commission be established to draft a charter. The full study commission recommended that the consolidation include the county, Wilmington, and the three beach communities—Wrightsville Beach, Carolina Beach, and Kure Beach. Commission members from the beach communities, however, supported consolidation only for Wilmington and New Hanover.

The county and four municipal governments accepted the report, and the Wilmington and county governments, acting without the beach towns, created a Governmental Consolidation Charter Commission in December 1985.

This commission, headed by Walter L. Baker, a local engineer and civic leader, had fifteen members, none of whom had served on the Gottovi group. It finished its work in November 1986 and presented a proposed charter to the Wilmington City Council and the New Hanover Board of County Commissioners.

The charter proposed by the commission included a detailed organizational structure. The two major areas of controversy in the commission's deliberations involved questions about the composition of the governing board and the arrangements for law enforcement. The commission's proposal called for a mayor and four board members to be elected at large, countywide, and four board members to be elected by districts. On law enforcement, the commission recommended that patrol and investigative functions be placed under a single, countywide metropolitan police, removing these functions from the sheriff.

In January 1987 the board of county commissioners and the city council

created a joint committee of their members to study the charter as submitted. After several months of study and numerous revisions, the charter that went to the referendum was enacted by the General Assembly in July (1987 Session Laws, Chapter 643). This charter called for all board members and the mayor to be elected at large and left law enforcement largely under the police chief, although some change in the language of the charter was made in an attempt to meet the objections of the sheriff.

In other respects, the proposed charter followed the pattern of the 1973 charter in using service districts to match taxation with the extent and level of services. The beach communities would have continued as independent municipalities but with a right to merge with the consolidated government in the future. The proponents stressed that consolidation would result in more economical government, better planning for public facilities, improved management of growth, taxation fairly matched to services received, and the elimination

of municipal annexation without representation.

Why was the charter rejected? Commissioner Fred Retchin, the only official to work actively for the consolidation, told the *Wilmington Star-News* after the vote that fear of higher taxes, the loss of autonomy by the sheriff and the volunteer fire department, and change in general were the chief factors. Tricia Robertson of the *Star-News* speculated that apathy also could have been a factor. Only a few groups, including the Chamber of Commerce, endorsed the proposal, and campaigning for its adoption was limited and late. On the other hand, the opposition was also loosely organized and did not mount an intensive effort to defeat the charter.

After the defeat, officials would not speculate whether and when another effort at consolidation might be made. Wilmington, which had been holding annexation moves in abeyance, was expected to move for additional annexations in the near future.

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## MINDEX: A New Minutes Indexing System

Lee Mandell

Minutes indexing has long been a problem for North Carolina's municipal and county clerks. Many clerks either have no indexing system at all or must index their minutes manually. Also, a new clerk may not understand the previous clerk's method of indexing and may have to develop a new system. "Having a working index so that you can retrieve data and supply information efficiently is a long-standing goal for most clerks," says Garner Town Clerk Mary Lou Rand, CMC. Soon this goal will be within reach. A minutes preparation and indexing system tailored to the needs of North Carolina municipal and county clerks is being developed. This system, which has been named MINDEX, will run on the IBM PC and compatible microcomputers.

Clerks using MINDEX will have a choice of method for preparing and indexing their minutes. They can prepare

the minutes with PC-Write, a word processing program included in the MINDEX package, or they can continue to prepare the minutes with their current program. A clerk using MINDEX with PC-Write will be able to generate an index by designating key words and headings *as the minutes are being prepared*. A clerk using another word processing program would do indexing with MINDEX as a separate step after the minutes are prepared. MINDEX will allow clerks to index by subject, department, type of action, or other reference and to use headings or specified key words to generate up to ten category indexes.

The MINDEX system is now being developed as a joint effort of the North Carolina associations of municipal and county clerks with the aid of the Center for Urban Affairs and Community Serv-

ices of North Carolina State University. A Development Design Committee, composed of five municipal and five county clerks, is working with Suzanne Taylor of the center to develop the specifics of the software. The North Carolina League of Municipalities, the North Carolina Association of County Commissioners, and the Institute of Government are providing funding for the project. The MINDEX software package will be sold to local governments, and the proceeds will be used to reimburse the organizations that provided funding and to fund future system enhancements.

The idea of an integrated minutes preparation and indexing system began with the Center for Urban Affairs. Because a number of clerks had asked the center to design indexing software for their individual local governments, the

center approached the municipal and county clerks associations with the idea of developing a system that could be used by clerks throughout the state. To determine interest, the associations conducted a survey, which revealed that there was a high level of interest in an indexing system and that many clerks would be willing to purchase such a system as soon as it could be made available.

MINDEX will be distributed by the North Carolina League of Municipalities and should be available by April 1988. Clerks can order the system now, however, for a prerelease price of \$350. The postrelease price will be \$385. When ordering, clerks should specify whether they want 3½- or 5¼-inch diskettes. Those purchasing MINDEX before its release will be sent immediately a copy of the PC-Write software so that they can begin using it to prepare their minutes; when they receive the full MINDEX system, they can then index these minutes. Clerks who will not be using PC-Write can continue to prepare minutes using their current method and can index them when they receive MINDEX. North Carolina clerks who purchase MINDEX will receive training and technical support by telephone from the Center for Urban Affairs for one year after purchase.

For more information, contact Mary Lou Rand, (919) 772-4688. To purchase MINDEX, contact the North Carolina League of Municipalities, (919) 834-1311.

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## UPCOMING in PG

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## Albert Coates Inducted into Law Officers Hall of Fame



Albert Coates instructs a class of law enforcement officers in the old Institute of Government building during the early 1940s.

During ceremonies celebrating the 50th anniversary of the State Bureau of Investigation, Albert Coates, founder and former director of the Institute of

Government, became one of the first four persons to be honored with membership in the North Carolina Law Officers Hall of Fame. Coates received this honor for his pioneering efforts in training law enforcement officers. Those efforts began in the late 1920s when, as a teacher at the Law School of The University of North Carolina, Coates began holding schools for sheriffs, policemen, and highway patrolmen from the newly created State Highway Patrol. An extensive program of law enforcement training continued under the auspices of the Institute of Government, which Coates founded in 1931.

In addition to Coates, three law enforcement officers were inducted into the Hall of Fame: the late Malcolm McLeod, long-time sheriff of Robeson County; retired Chief of Police William Powers of Hendersonville; and Colonel David Lambert, an original member and former commander of the State Highway Patrol.

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## Scholarship Fund Honors Elmer Oettinger



The North Carolina Association of Government Information Officers (NCA-GIO) has honored Elmer Oettinger, who

retired from the Institute of Government faculty in 1979, by establishing a scholarship fund in his name for NCAGIO members and their children. Dr. Oettinger joined the Institute's staff in 1939 and was a member of the faculty continuously from 1960 until his retirement, specializing mainly in the area of communications law. In addition to working with information officers, he was instrumental in organizing and leading the North Carolina News Media-Administration of Justice Council. He served as consultant to several legislative study committees, and from 1961 to 1974 he was editor of *Popular Government*. Dr. Oettinger continues to serve as North Carolina's Commissioner to the National Conference on Uniform State Laws, a position he has held since 1973.

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## Off the Press

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Although North Carolina has had a comprehensive public records statute since 1935, the statute has had very little judicial gloss, and questions regarding its application continue to arise. *Interpreting North Carolina's Public Records Law* seeks to help local government attorneys and administrators deal with those questions.

The book has three parts. The first discusses several aspects of public records law: the definition of public records, exceptions to the requirements of access, and the substance of the right of access. The second lists those North Carolina statutes that cover specific local government records. And the third catalogs cases from other states that consider whether specific kinds of records should be open to access.

The Institute of Government, 45 pages, \$4.50.

This new edition of *Legal Aspects of Building Code Enforcement in North Carolina* presents updated governmental and legal background information about the state's building regulation system. It details the duties of local enforcement officials and explains legal pitfalls that may confront these individuals. An appendix contains the full text of pertinent, major North Carolina statutes.

This book is designed as a text to be used in training courses for state and local code enforcement officials in North Carolina. These officials include code administrators and building, plumbing, electrical, and mechanical inspectors. The training courses are held at community colleges and technical institutes across the state under the auspices of the North Carolina Code Officials Qualification Board.

The Institute of Government, 188 pages, \$11.00.

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### Interpreting North Carolina's Public Records Law

*David M. Lawrence*

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### Legal Aspects of Building Code Enforcement in North Carolina, Second edition

*Philip P. Green, Jr.*

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Orders and inquiries should be sent to the Publications Office, Institute of Government, CB #3330 Knapp Building, The University of North Carolina at Chapel Hill, Chapel Hill, N.C. 27599-3330. Please include a check or purchase order for the amount of the order, plus 3 percent sales tax (5 percent for Orange County residents). A complete publications catalog is available from the Publications Office on request, (919) 966-4119.



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