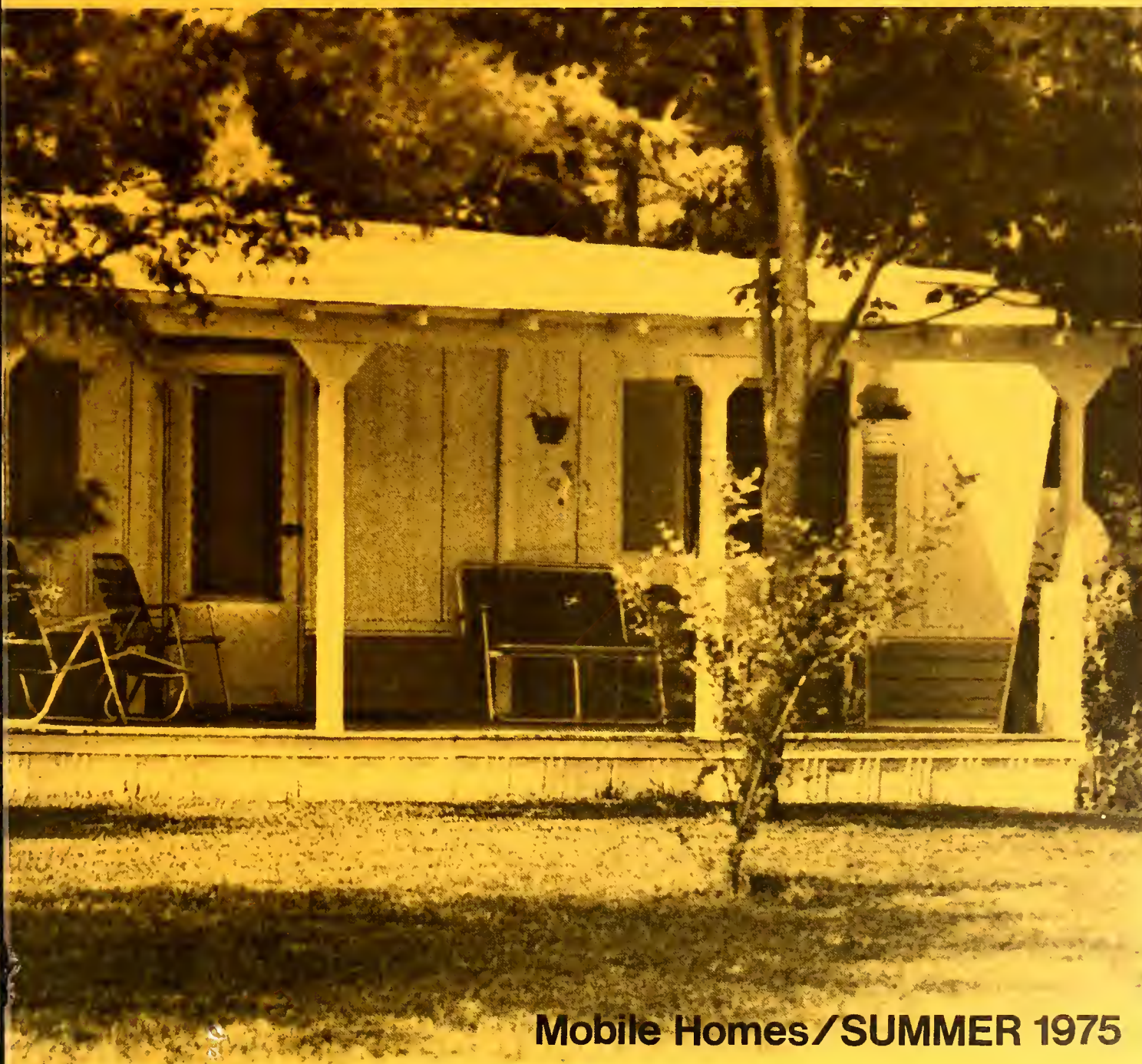


POPULAR GOVERNMENT

PUBLISHED BY THE INSTITUTE OF GOVERNMENT / UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL



Mobile Homes / SUMMER 1975

POPULAR GOVERNMENT

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VOLUME 41

SUMMER 1975

NUMBER 1

Mobile homes can provide attractive and relatively inexpensive housing. This month's issue deals with the topic of mobile homes and local governments.



Published four times a year (summer, fall, winter, spring) by the Institute of Government, the University of North Carolina at Chapel Hill. Change of Address, editorial business, and advertising address: Box 990, Chapel Hill, N. C. 27514. Subscription: per year, \$6.00. Advertising rates furnished on request. Second-class postage paid at Chapel Hill, N. C. The material printed herein may be quoted provided that proper credit is given to POPULAR GOVERNMENT.

THE IMPACT OF MOBILE HOMES ON THE HOUSING MARKET

Barbara Noble Smith

WHEREVER PEOPLE interested in housing problems gather, sooner or later the subject of mobile homes will come up. Mobile homes are controversial, and perhaps the only thing that can be said about them without dispute is that they cannot be ignored as part of the national — and North Carolina — housing picture. In recent years, the public has turned to mobile homes to such a degree that this form of housing now represents nearly one-third of all new single-family homes (Table 1). The primary reason for this growth seems pretty clearly to be economic (Tables 2 and 3). The median price of site-built homes in September 1974 was \$36,900; many people simply cannot afford to buy a house at that price. Mobile homes, on the other hand, cost \$7,770 on the average in 1973. One reason for the steady rise in the popularity of mobile homes is that the cost per square foot of site-built houses has climbed steadily, while the cost per square foot of mobile homes has held steady for several years (Table 3). On-site labor costs increased about 44 per cent between 1967 and 1972, compared with a 26 per cent increase in wages for all manufacturing workers (*Construction Review* [September 1972], p. 5).

Between 1970 and 1974, the mobile home portion of the under-\$20,000 new market has increased from 70 per cent to 97 per cent (Table 4). Even at higher prices, mobile home dominance of the market is impressive. In 1973, mobile homes accounted for 69 per cent of the under-\$30,000 market and 48 per cent of the entire market of new homes for sale (Table 5).

A second reason for the increased sales of mobile homes is that mobile homes have grown in size during the last several years (Table 6). Until about 1969, few states permitted the movement by highway of mobile homes measuring more than 12 feet in width. As of mid-1974, 39 states permitted homes as wide as 14 feet to be transported on their highways. By 1973, the 14-foot size accounted for 21.6 per cent of all production. Double-wides (defined as mobile homes consisting of two sections combined horizontally at the site while still retaining their individual chassis for possible future movement) have also increased their share of the mobile home market, reaching 18.4 per cent in 1973.

Still another reason for increased sales is that mobile

homes are now better looking than in the past. The older, smaller mobile homes tended to perpetuate, by design, the tradition of streamlining left over from the days when mobile homes were towed behind automobiles. New double-wides have higher roof pitches, larger windows, and more attractive siding that makes them look more like conventional housing.

A fourth reason is that the quality of mobile homes has improved greatly over the last two decades, under the impetus of the Mobile Home Manufacturers Association's standards for plumbing, heating, and electrical installation (known as American National Standards Institute A119.1), which have been adopted or improved upon by more than 30 states.

Recently, the industry has been concentrating on the serious problem of mobile home fires. According to the National Fire Protection Association, as quoted in *Mobiletalk*, a publication of the North Carolina Manufactured Housing Institute, the number of mobile home fires is decreasing as the older, more fire-prone homes are replaced by newer ones, as Table 7 shows.

Finally, mobile homes are somewhat easier to finance than they once were. They are still financed under installment loans similar to those used in automobile purchases, and the interest rates still tend to be higher than for standard home loans, but under the encouragement of the federal government, lenders are more willing to make longer-term mobile home loans than they were a few years ago. One side benefit of a mobile home purchase is that it involves none of the "closing" costs and legal fees customary in standard home loans.

The mobile home industry is important in North Carolina for two reasons — first, because the state is rural and mobile homes are particularly popular and usable in rural areas; and second, because almost 10 per cent of the mobile home manufacturers in the United States are located in North Carolina. In 1970, the state ranked third in the country (after California and Florida) in the number of mobile homes in use as year-round units. A little more than half of the nation's 2.1 million mobile homes in 1970 were located in the South and West, particularly in the warmer states (although the 1970 Census also shows that 11.4 per cent of Alaska's all-year-round housing units were mobile homes).

Table 1
Shipment of Mobile Homes and Construction of
Single-Family Homes, United States, 1968-74

Year	Number of mobile homes shipped*	Percentage change over previous year	New single-family structures completed	Mobile homes shipped plus new 1-family homes built	Mobile homes as percentage of new 1-family homes
1968	318,000		858,600	1,176,600	27.0%
1969	412,700	+29.8	807,500	1,220,200	33.8
1970	401,200	- 2.8	801,800	1,203,000	33.3
1971	496,600	+23.8	1,014,000	1,510,600	32.9
1972	575,900	+16.0	1,143,300	1,719,200	33.5
1973	566,900	- 1.6	1,174,100	1,741,000	32.6
1974	371,400	- 34.5	938,700*	1,310,100	28.3

Source: *Construction Review* (December 1974), Tables B-7 and B-4, pp. 21 and 23.

These figures do not include mobile homes shipped for use as classrooms, branch banks, or other commercial, industrial, or educational purposes, according to the Mobile Homes Manufacturers Association.

* December estimated at 85,000.

Table 2
Sales of New Houses in March 1973 and September 1974

	Sold		For sale	
	3/73	9/74	3/73	9/74
Number	66,000	38,000	417,000	416,000
Median asking price	\$31,400	\$36,900	\$29,400	\$35,700
Change in number over one year earlier	+2%	-13.6%	+35%	-8.4%
Change in price over one year earlier	+15%	+11.1%	+13%	+11.2%

Source: U.S. Department of Housing and Urban Development, *Housing and Urban Development Trends*, Vol. 27, No. 3, Sept. 1974.

Table 3
Comparison of Mobile Home Shipments
and Site-Built Homes Sold*

	1971	1972	1973
MOBILE HOMES			
Average retail price (all lengths and widths, excludes 4-ft. hitch)	\$6,640**	\$6,950**	\$7,770**
Average size (living space) exclusive of 4-ft. hitch	12' x 65' 780 sq. ft.	12' x 65' 780 sq. ft.	14' x 63' 882 sq. ft.
Price per square foot	\$9.07**	\$8.73**	\$8.84**
SITE-BUILT HOMES SOLD*			
Median sales price	\$25,200†	\$27,600†	\$32,500†
Cost per square foot	\$14.55††	\$15.35††	\$17.30†† (est.)
Median sq. footage (living space)	1,415 sq. ft.	1,460 sq. ft.	1,580 sq. ft.

*Excludes homes built for rent or by individuals (source: U.S. Dept. of Commerce).

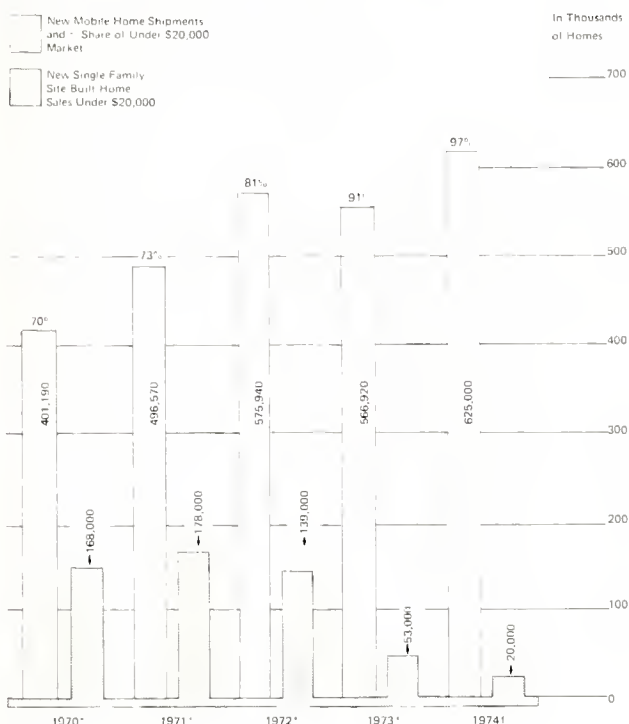
**Includes furniture, draperies, carpeting, and appliances but excludes land as well as costs of steps, skirting, anchoring, and any other applicable set-up charges (approximately 15% of home cost).

†Excludes all furnishings; includes land.

††Excludes furnishings, appliances, and land.

Source: Mobile Home Manufacturers Assoc., *Flash Facts*, 1974.

Table 4

The Under \$20,000
New Home Market

*Construction Reports C25-12 Bureau of Census

†Estimated: Elrick & Lavidge, Inc.

Source: Mobile Homes Manufacturers Assoc., *Flash Facts*, 1974Table 5
1973 Comparison, Shipments of Mobile Homes
and Single-family, Site-built Homes**

	Under \$20,000	Under \$30,000	All Prices
Site-built homes*	53,000	258,000	620,000
Mobile homes	566,920	566,920	566,920
Total	619,920	824,920	1,186,920
Mobile home share	91%	69%	48%

*U.S. Dept. of Commerce, Bureau of Census Data Conventional Homes Construction Reports (C25-74-1) issued 4/74.

**Contractor and owner-built homes and homes built for rent are excluded (total 1973 exclusions, 512,000 units).

Source: Mobile Homes Manufacturers Assoc., *Flash Facts*, 1974.Table 6
Price Range and Dimensions of Mobile Homes

Width	Retail price range	Average price (1973)	Average length	Percentage of total shipments		
				1971	1972	1973
12'	\$5,000-\$14,000	About \$ 6,900	60' to 70'	69.6%	64.7%	58.6%
14'	\$5,000-\$14,000	About \$ 6,900	60' to 75'	16.2	17.8	21.6
Other*	—	—	35' to 70'	1.2	0.5	0.1
Expandable	\$9,000-\$15,000	About \$11,200	50' to 70'	1.0	2.2	1.3
Double-wides	\$9,000-\$21,000	About \$11,300	50' to 70'	12.0	14.8	18.4
Average, all sizes	—	About \$ 7,770	—	—	—	—

*8-10 or 16-wide

14 Wides: 39 states permit 14-wides to be transported on their highways. More states are expected to follow.

Source: Mobile Homes Manufacturers Assoc., *Flash Facts*, 1974Table 7
Fire Statistics for Residences, United States

	1972	1973
Residential	735,600	795,800
Apartment	109,000	138,000
Dwelling	562,000	587,200
Hotel and motel	21,400	21,700
Summer cottages	5,000	—
Other residential	9,800	23,800
Mobile homes	27,400	25,100

Source: N.C. Manufactured Housing Institute, *Mobiletalk*, No. 66 (November 15, 1974).

Table 8
Social and Economic Characteristics of U.S. Families
Living in Mobile Homes, 1970

	Owner- Occupied	Renter- Occupied	All Mobile Home Families
Occupation			
Professional, technical, or kindred workers	9.0%	9.6%	
Managers and administrators (nonfarm)	7.5	5.5	
Clerical, sales, and kindred workers	12.3	11.3	
Craftsmen and kindred workers	26.7	22.0	
Other blue-collar workers	32.4	34.2	
Farm workers	3.4	7.3	
Service workers (including private household)	8.7	10.1	
Total percentage	100.0%	100.0%	
Total number	1,227,059	206,439	
Median years of school of household head	11.8	12.0	
Income in 1969			
Less than \$2,000	12.2%	19.4%	13.3%
\$2,000-\$2,999	6.8	10.0	7.3
\$3,000-\$3,999	7.0	10.6	7.5
\$4,000-\$4,999	7.3	10.1	7.7
\$5,000-\$5,999	8.4	9.9	8.6
\$6,000-\$6,999	8.6	8.9	8.7
\$7,000-\$9,999	24.1	17.7	23.1
\$10,000-\$14,999	19.4	10.2	18.1
\$15,000-\$24,999	5.4	2.6	5.0
\$25,000 and over	0.8	0.5	0.7
Total percentage	100.0%	100.0%	100.0%
Median income	\$7,000	\$5,000	\$6,632
Total number	1,752,577	321,417	2,073,994

Source: U.S. Department of Commerce, Bureau of the Census, *Mobile Homes*, HC(7)-6, Tables A-1, A-2, and A-3.

Table 9
Economic Characteristics of North Carolina Families Living in Mobile Homes, 1970

	Owner-Occupied	Renter-Occupied	All Mobile Home Families	All N.C. Families
Income in 1969				
Less than \$2,000	10.8%	18.2%	12.4%	14.6%
\$2,000-\$2,999	4.7	10.2	5.9	
\$3,000-\$3,999	7.1	12.8	8.3	13.7
\$4,000-\$4,999	8.6	12.9	9.5	
\$5,000-\$5,999	11.1	11.0	11.1	15.8
\$6,000-\$6,999	10.2	9.5	10.0	
\$7,000-\$9,999	27.6	16.7	25.2	22.2
\$10,000-\$14,999	17.0	7.3	14.9	22.2
\$15,000-\$24,999	2.5	1.2	2.2	9.0
\$25,000 and over	0.4	0.3	0.4	2.5
Total percentage	100.0%	100.0%	100.0%	100.0%
Median income	\$6,800	\$4,700		\$7,770
Total number	77,132	21,135	98,267	1,292,466

Source: U.S. Department of Commerce, Bureau of the Census, *Mobile Homes*, HC(7)-6, Table H-1, and *County and City Data Book 1972*, p. 333.

Table 10
Gross Rent and Gross Rent As a Percentage of Income, Renter-Occupied Mobile Homes, 1970.

Gross rent (monthly)	United States			North Carolina		
	Percentage	Rent as percentage of income	Percentage	Percentage	Rent as percentage of income	Percentage
Less than \$50	7.5%	less than 10%	10.7%	5.4%	less than 10%	6.2%
\$50-\$59	5.3	10-14	16.0	4.0	10-14	14.6
\$60-\$79	14.3	15-19	16.5	11.8	15-19	16.2
\$80-\$99	17.3	20-24	12.5	19.3	20-24	14.3
\$100-\$149	31.7	25-34	16.5	42.9	25-34	19.0
\$150 or more	6.9	35 and over	27.8	3.0	35 and over	29.7
No cash rent	16.9			13.6		
Total percentage	100.0%		100.0%	100.0%		100.0%
Median	\$97			\$103		
Total number	321,417		261,290	21,162		17,984

Source: U.S. Department of Commerce, Bureau of the Census, *Mobile Homes*, HC(7)-6, Tables A-1, H-1.

Table 11
Age of Head of Household for Households Living in Mobile Homes, 1970

Age of head	United States			North Carolina		
	Owner-Occupied	Renter-Occupied	Total	Owner-Occupied	Renter-Occupied	Total
Less than 25	15.3%	33.5%	18.1%	24.5%	47.0%	29.4%
25-29	15.1	15.8	15.2	22.5	16.7	21.3
30-34	9.2	8.3	9.1	12.4	7.7	11.4
35-44	12.9	11.4	12.7	14.1	9.7	13.1
45-54	13.9	9.2	13.2	10.9	7.0	10.1
55-64	15.4	9.0	14.4	8.2	5.3	7.5
65 and over	18.0	12.7	17.2	7.4	6.6	7.2
Total percentage	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total number	1,752,577	321,417	2,073,994	77,132	21,135	98,267

Source: U.S. Department of Commerce, Bureau of the Census, *Mobile Homes*, HC(7)-6, Tables A-1, H-1.

Table 12
Plumbing Facilities in Mobile Homes, 1970

Plumbing Facilities	United States				North Carolina			
	Owner-Occupied	Renter-Occupied	Total	All U.S. Housing	Owner-Occupied	Renter-Occupied	Total	All N.C. Housing
With complete plumbing	96.2%	93.8%	95.8%	94.5%	95.8%	95.6%	95.7%	86.1%
Lacking some or all plumbing	3.8	6.2	4.2	5.5	4.2	4.4	4.3	13.9
Number of Mobile Homes	1,752,577	321,417	2,073,994	63,445,192	77,132	21,135	98,267	1,509,564

Source: U.S. Department of Commerce, Bureau of the Census, *Mobile Homes*, HC(7)-6, Tables A-1 and H-1 and *County and City Data Book 1972*, pp. 7, 335.

Table 13
Water and Sewer Facilities in Mobile Homes, 1970

	United States			North Carolina		
	Owner-Occupied	Renter-Occupied	Total	Owner-Occupied	Renter-Occupied	Total
WATER						
Public system or private company	60.0%	62.3%	60.3%	28.8%	42.5%	31.7%
Individual well	36.0	33.8	35.6	64.5	53.3	62.1
Other	4.0	3.9	4.0	6.7	4.2	6.2
Total percentage	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SEWER						
Public sewer	41.0%	43.2%	41.3%	16.3%	26.6%	18.5%
Septic tank or cesspool	54.6	51.7	54.2	78.3	68.8	76.3
Other	4.4	5.1	4.5	5.4	4.6	5.2
Total percentage	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
TOTAL NUMBER	1,752,577	321,417	2,073,994	77,132	21,135	98,267

Source: U.S. Department of Commerce, Bureau of the Census, *Mobile Homes*, HC(7)-6, Tables A-4, H-4

Table 14
Overcrowding in Mobile Homes, 1970

Persons Per Room	United States			North Carolina		
	Owner-Occupied	Renter-Occupied	Total	Owner-Occupied	Renter-Occupied	Total
0.50 or less	46.7%	44.9%	46.4%	38.0%	43.4%	39.2%
0.51-1.00	45.3	44.7	45.2	52.4	47.9	51.5
1.01-1.50 ^a	6.1	7.3	6.3	7.8	7.0	7.6
1.50 or more ^b	1.9	3.1	2.1	1.8	1.7	1.7
All mobile homes	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Number of mobile homes	1,752,577	321,417	2,073,994	77,132	21,135	98,267

Source: U.S. Department of Commerce, Bureau of the Census, *Mobile Homes*, HC(7)-6, Tables A-1, H-1.

^aDefined as overcrowded.

^bDefined as severely overcrowded.

Table 15
Overcrowding^a and Plumbing Facilities in Mobile Homes and Conventional Occupied
Year-Round Housing Units, by Income and Tenure, United States, 1970

Family Income	Percentage of owner-occupied that:				Total		Percentage of renter-occupied that:				Total	
	have all plumbing		lack some plumbing				have all plumbing		lack some plumbing			
	Not over-crowded	Over-crowded	Not over-crowded	Over-crowded			Not over-crowded	Over-crowded				
Less than \$4,000	88.8%	3.4%	7.0%	0.9%	Families Living in Mobile Homes		83.2%	6.1%	9.4%	1.3%	100%	128,795
\$ 4,000- 6,999	88.4	7.8	3.0	0.8	100%	455,351	85.0	11.0	3.1	0.9	100	92,814
\$ 7,000- 9,999	88.9	9.0	1.6	0.4	100	426,098	85.8	11.6	2.0	0.7	100	56,852
\$10,000-14,999	89.5	9.0	1.1	0.3	100	422,897	85.7	12.3	1.4	0.5	100	32,955
\$15,000 or more	88.1	10.4	1.1	0.3	100	340,577	83.1	14.5	1.7	0.7	100	10,001
Total	88.8	7.4	3.2	0.6	100	107,654	84.4	9.4	5.2	1.0	100	
Total number	1,556,801	128,957	56,251	10,568		1,752,577	271,399	30,150	16,652	3,216		321,417
Median income	\$7,000	\$8,200	\$3,300	\$4,900		\$7,000	\$5,000	\$6,100	\$2,200	\$3,700		\$5,000
Families Living in Conventional Year-Round Housing												
Less than \$4,000	84.9%	2.2%	11.5%	1.4%	100%	7,098,725	78.1%	6.4%	12.7%	2.8%	100%	7,467,786
\$ 4,000- 6,999	87.9	5.9	4.6	1.6	100	5,331,138	82.0	10.6	5.2	2.2	100	5,322,595
\$ 7,000- 9,999	89.6	7.8	1.9	0.7	100	6,914,253	85.7	10.5	2.7	1.1	100	4,558,937
\$10,000-14,999	91.8	7.1	0.8	0.3	100	10,073,610	88.5	9.5	1.4	0.6	100	3,895,832
\$15,000 or more	94.4	5.0	0.5	0.1	100	8,714,789	90.8	7.9	0.9	0.4	100	1,993,091
Total	90.1	5.7	3.5	0.7	100		83.3	8.8	6.1	1.8	100	
Total number	34,376,856	2,160,911	1,320,959	273,789		38,132,515	19,360,967	2,048,313	1,416,846	412,115		23,238,241

^aOvercrowding is defined as 1.01 or more persons per room.

Source: Derived from United States Department of Commerce, Bureau of the Census, Special Reports, *Mobile Homes*, HC(7)-6, Table A-3; and *Space Utilization of the Housing Inventory*, HC(7)-3, Table A-5.

Table 16
New Housing Starts in the United States^a
by Type of Structure, Location, and Region, 1968-74

Year	Percentage change over previous year	Total number of new starts	Percentage that are structures with			Percentage that are		Percentage that are in the			
			1 unit	2-4 units	5+ units	Inside SMSAs	Outside SMSAs	North-East	North-Central	South	West
1968		1,545,400	58.3	6.1	35.6	72.2	27.8	15.3	24.4	41.0	19.3
1969	- 3.0	1,499,500	54.1	6.5	39.4	73.1	26.9	14.2	23.8	40.2	21.8
1970	- 2.0	1,469,000	55.5	6.5	38.0	70.4	29.6	15.3	20.5	42.8	21.4
1971	+39.3	2,084,500	55.3	6.4	38.3	72.8	27.1	13.0	21.1	42.4	23.5
1972	+14.1	2,378,500	55.1	6.3	38.6	72.8	27.2	14.0	18.7	44.9	22.4
1973	-13.5	2,057,500	55.1	6.0	38.9	73.0	27.0	13.5	21.5	44.0	21.0
1974	-34.3	1,351,000	65.8	5.7	28.6	68.9	31.1	13.6	23.7	41.5	21.3

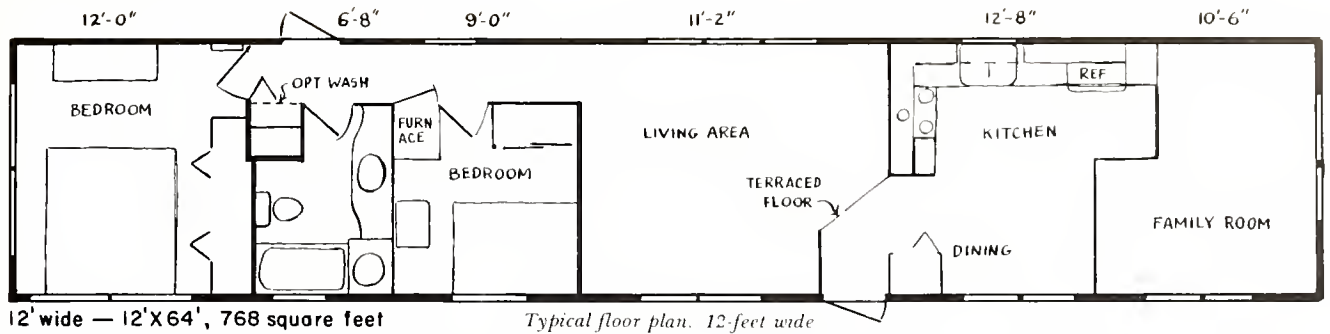
Source: *Construction Review* (December 1974), Table B-1, p. 16.

^aDoes not include mobile homes.

Table 17
Construction of Housing in March 1973 and September 1974

	Private				Total U.S. including public housing	
	South		United States			
	3/73	9/74	3/73	9/74	3/73	9/74
Number of new starts	107,100	33,400	199,700	95,400	201,200	97,700
Change over one year earlier	+10%	-44%	-2%	-36%		-35%
Inside SMSAs			152,200 47,500	59,900 35,500		
% in 1-unit structures			52.3	74.9		
% in 2-4 unit structures			5.4	4.2		
% in 5-unit structures or more			42.3	20.9		
Mobile home shipments					57,000	30,100
Change over one year earlier					+16%	-31%
New housing starts plus mobile home shipments					258,200	127,800
Change over one year earlier					+1%	-34.2%

Source: U.S. Department of Housing and Urban Development, *Housing and Urban Development Trends*, Vol. 27, No. 3, Sept. 1974.



SOCIAL AND ECONOMIC CHARACTERISTICS OF MOBILE HOME HOUSEHOLDS

Table 8 shows the occupation and income distribution of mobile home families in the United States, and Table 9 shows the income of mobile home families in North Carolina. Only about one out of seven mobile home families rents its home in the United States, and only about one out of five in North Carolina is a renter. The median income of renters is much lower than that of owners in both the United States and North Carolina.

The rent paid by North Carolina mobile home renters is higher than the national average (Table 10). Nearly half the North Carolina renters spent 25 per cent or more of their income for rent in 1970, a somewhat higher proportion than for the country as a whole.

The household heads of North Carolina mobile home families tend to be younger than the heads of mobile home families in the nation as a whole (Table 11). Almost half of all North Carolina renter families are headed by people under 25 years of age, and almost a quarter of all owners are less than 25.

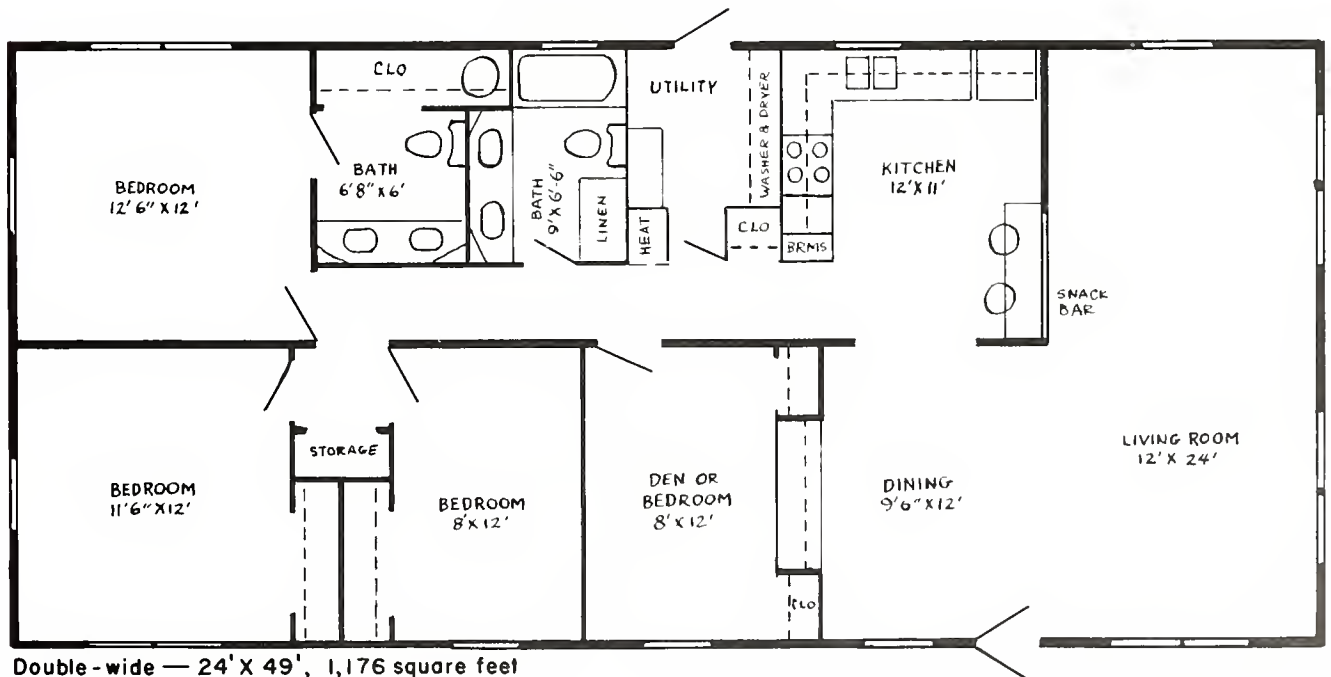
The proportion of North Carolina household heads who are 65 and over is about half the national percentage for both owners and renters.

HOUSING CHARACTERISTICS OF MOBILE HOMES

The proportion of United States owner-occupied mobile homes with complete plumbing (96.2%) is higher than that for all United States housing units (94.5%). For renter-occupied mobile homes, the proportion is slightly less than the national over-all average (93.8%) (Table 12). In North Carolina, the differences are more dramatic. Almost 96 per cent of all mobile homes in the state, both owner- and renter-occupied, have complete plumbing, while only 86 per cent of all North Carolina housing units have complete plumbing facilities.

The water and sewer facilities used by mobile home households in North Carolina (primarily individual wells and septic tanks, as opposed to public systems) are evidence of the state's rural nature (Table 13). In 1970, 55 per cent of North Carolina's population lived in places of less than 2,500 population, and 48 per cent lived in the

Typical floor plan: 24 feet wide



open countryside, away from population concentrations of any kind. Public water and sewer facilities are unlikely to be available, therefore, for many rural mobile home dwellers, and most mobile home dwellers live in rural areas, because of zoning restrictions imposed by municipalities.

Overcrowding in mobile homes is even less of a problem in North Carolina than it is for the country as a whole (Table 14). Less than 2 per cent of North Carolina mobile home families can be said to suffer severe overcrowding (defined as 1.51 or more persons per room), and only 7.6 per cent have as many as 1.01 persons per room.

Table 15 combines income and housing quality information for the United States. Only 0.6 per cent of all owners and 1 per cent of all renters of mobile homes suffer from both a lack of some or all plumbing facilities and overcrowding. For both owners and renters, these percentages are lower than for families living in conventional, year-round housing. It seems fair to say that the housing quality available to mobile home households is higher than these families could otherwise afford at current prices.

DESPITE THE ENORMOUS GROWTH OF MOBILE homes as a source of housing in recent years, the mobile home industry now finds itself in the doldrums, along with the rest of the housing industry. The number of conventional housing starts (the standard for measuring the health of that industry) has dropped off drastically since 1972, which was the most productive year ever in homebuilding (Table 16). The slump in production that began in 1973 is partially attributable to the decision by President Nixon in January of 1973 to impose an 18-month moratorium on federally assisted housing programs for low- and moderate-income families. A few federal housing programs have since been reinstated or renovated, but by 1974 inflation and recession had dealt an even more serious blow to housing production, particularly to multifamily housing and particularly in SMSAs.

The mobile home industry also suffered declines in 1973 and 1974 (Table 1), but because not many mobile



Mobile homes can also be sardines.

home buyers were affected by the housing moratorium, a sharp decrease in mobile home shipments from the previous year did not show up until 1974—at almost exactly the same rate of decline as that shown for new housing starts (Table 16).

Table 17 shows housing starts and mobile home shipments for two months—March of 1973, when both industries were still growing, and September of 1974, when both were declining. The table shows that the South has been more seriously affected by the housing slump than the nation as a whole.

Table 2 shows two things: (1) many fewer houses were sold in September 1974 than in March 1973, but (2) the number of houses for sale was almost the same for the two sample months. The \$2,000 tax credit for the purchase of a home in the tax bill passed in March of this year is designed to help sell some of this massive inventory of houses.

The mobile home industry has recognized and is serving a segment of the housing market that conventional homebuilders have had to neglect. It has earned serious consideration by local decision-makers as an ally in improving the housing of low- and moderate-income families.

HOME IS WHERE THE MOBILE IS

Becky L. Griffin

WHAT IS A MOBILE HOME? To the thousands of North Carolinians who live in one, it is *Home!* The 1970 Census showed that 6 per cent of the state's population live in mobile homes. Between 1970 and the end of 1974, 112,073 mobile homes were purchased in North Carolina.

To the state, a mobile home means a portable manufactured housing unit designed for transportation on its own chassis and placement on a temporary or semipermanent foundation having a measurement of over 32 feet in length and over eight feet in width. To the industry itself, a mobile home represents the only form of low-cost nonsubsidized housing that can be found. According to statistics, mobile homes now represent 48 per cent of all single-family housing starts; 91 per cent of housing under \$20,000; and 69 per cent of housing under \$30,000.

In addition to being housing itself, the mobile home includes major appliances, furniture, draperies, lamps, and carpeting. Optional features are available such as air conditioning, automatic dishwashers, and automatic garbage disposals. The average size of a mobile home is 12' x 65'. The average cost is only \$8.75 per square foot. With site-built homes costing \$18 to \$20 per square foot minus furniture, a mobile home is indeed the best buy on the market.

Mobile homes are manufactured in 34 locations in North Carolina, and they are sold from over 500 dealer locations in the state. North Carolina ranks second in the nation in the sale of mobile homes and eighth in the Southeast in their production.

No mobile home constructed after July 1, 1970, can be sold in North Carolina unless it has been assembled to a "construction standard." Every mobile home manufactured after September 1, 1971, and offered for sale must bear the label of a recognized independent testing laboratory approved by the State of North Carolina. This means that each home has been inspected and approved during its production. The mobile home industry itself was responsible for introducing the legislation that made this possible.

After more than twenty years of development and refinement, mobile homes have come of age as authentic housing. Savings and loan associations as well as banks can lend on them. Mobile homes are also eligible for Federal Housing Authority (FHA) and Veterans Administration (VA) loan guarantees and have just recently

become eligible under Farmers Home Administration regulations.

The standard method of financing is through a dealer with a chattel mortgage loan. The dealer arranges for finance sources for purchase through a conditional sales contract agreement. Mobile home financing is subject to the "truth-in-lending" regulations, and the customer must be told the annual rate of interest being charged.

ZONING REGULATIONS plague the industry. With over 50 per cent of the homes being placed on individual lots, the North Carolina Manufactured Housing Institute has worked constantly with local officials to develop ordinances and environmental standards that will create mobile home developments that are a credit to the community and a pleasure to the mobile home owner. Several cities and towns have now created "subdivisions" in which individual mobile homes may be placed on individual locations, and they have also updated their mobile home park ordinances. The industry hopes that planners will seek its help in writing these ordinances.

The subject of taxation always arises when mobile homes are mentioned. Contrary to belief, a mobile home owner does pay his "fair share." The amount of tax paid per thousand is the same for both real and personal property. Although mobile homes are classified as personal property, the real problem in taxing them seems to be in getting them listed for taxation. A bill has been introduced in the 1975 General Assembly that allows counties to require a "decal" to be placed on each mobile home showing that the unit has been listed for taxes. The industry supports this legislation wholeheartedly.

THE PRESENT "ECONOMIC CRUNCH" has affected the mobile home industry almost as much as it has the site-built industry. Production and sales have been down, so that fifteen manufacturing plants and over 400 dealer locations have closed in North Carolina. Nevertheless, the industry remains optimistic. Nationwide, it has the capacity to produce more than a million homes annually by 1978. The mobile home offers the best solution to the ever-increasing demand for housing. The statement that mobile homes are the only form of low-cost nonsubsidized housing available bears repeating. They will continue to demand their rightful place in today's housing market.

STATE LAWS AND THE REGULATION OF MOBILE HOMES

Michael B. Brough

WHEN MOBILE HOMES begin appearing in a community, local citizens are often concerned that this form of housing may have adverse effects on the community's public health, safety, or welfare, and they seek some sort of ordinance to guard against these dangers. In cities or counties that have adopted zoning ordinances, the location of mobile homes and the design of mobile home parks can be regulated as part of the comprehensive zoning scheme. Where subdivision regulations are in force, mobile home subdivisions can be controlled just like more conventional developments, and communities that have adopted minimum housing codes can assure the upkeep of mobile homes and surrounding grounds through the same enforcement mechanisms that are applicable to other types of housing. But in cities or counties that have not taken advantage of the zoning, subdivision, and minimum housing enabling legislation, the situation is different. These communities must rely on the general grant of police power given to cities and counties¹ or the broad authority delegated to local boards of health² in order to adopt regulations governing the location of mobile homes and the design of mobile home parks. However, even in areas without zoning, subdivision, or minimum housing enforcement programs, mobile homes are still subject to a substantial body of (primarily) state regulations. This article summarizes this body of state law.

1. Cities are authorized by G.S. 160A-174 to "define, prohibit, regulate, or abate acts, omissions, or conditions detrimental to the health, safety, or welfare of its citizens and the peace and dignity of the city, and may define and abate nuisances." A similar delegation of authority to counties is found at G.S. 153A-121. While this grant of authority is certainly broad enough to sustain regulations covering the location and design of mobile home parks, a community should be advised that attempts to regulate mobile homes on individual lots without placing similar restrictions on site-built homes may raise constitutional problems. Certainly, mobile home parks are sufficiently different from other forms of development to justify separate treatment, even in the absence of zoning. But it may be more difficult to overcome equal protection objections to a local ordinance that, for example, imposes minimum lot size or set-back requirements on mobile homes when conventionally built houses in the same neighborhood are not subject to similar restrictions.

2. County or district boards of health are authorized by G.S. 130-17(b) to "make such rules and regulations, not inconsistent with law, as are necessary to protect and advance the public health." Note that these regulations must be related solely to public health; consequently this grant of authority is not as broad as that made to city and county governing boards by the language quoted at note 1, *supra*.

The relationship between local health departments and Commission

WHERE MOBILE HOMES CAN BE LOCATED

State law³ now declares that the channel and a portion of the floodplain of all of the state's streams will be designated as a floodway and provides that "no artificial obstruction" may be placed within a delineated floodway (except for certain specified uses such as farming, golf courses, parking areas, etc.) unless a permit is obtained from the responsible city or county. The initial responsibility for delineating floodways is placed upon units of local government, but if they fail to act, the Environmental Management Commission (EMC), within the Department of Natural and Economic Resources, is authorized to step in and delineate the floodways. This law operates as a restriction on mobile home developments, as well as other types of development, even in areas that have no zoning.⁴

The Coastal Area Management Act⁵ may also place limitations on where mobile homes and mobile home parks can be located within the 20 counties affected by the act. This act provides that no development can be undertaken in an "area of environmental concern,"

for Health Services (CHS) regulations, as well as the relationship between local health department regulations and city and county ordinances should also be noted. G.S. 130-17(b) provides that to the degree that CHS rules and local health rules are in conflict, the former prevail. When state and local regulations cover the same ground and a peculiar local condition, circumstance, or emergency exists that justifies the differing local treatment, the local regulations prevail to the extent that they are more stringent than the Commission's regulations. G.S. 130-17(c) authorizes local health boards to adopt regulations uniformly applicable throughout the county or district, including territory located within incorporated municipalities. When local health regulations and municipal (the statute is not clear whether this term refers to counties as well as cities) ordinances conflict, the former are controlling. Municipal ordinances covering the same matters as local health regulations are enforceable only when the ordinance provisions can be justified by the existence within the municipality of an emergency or peculiar conditions or circumstances, and only then to the extent that provisions of the ordinance are more stringent than similar provisions in the health regulations.

3. N.C. GEN. STAT. §§ 143-215.51 *et seq*

4. In addition, under the terms of the federal Flood Insurance Act, (42 U.S.C. 4001 *et seq*) local communities in flood-prone areas will have to adopt land-use control regulations limiting development in those flood-prone areas, or else federal flood insurance cannot be provided. And without flood insurance, federal agencies cannot approve financial assistance, and lending institutions subject to federal regulation cannot finance construction in such areas.

5. N.C. GEN. STAT. §§ 113A-100 *et seq*

designated as such by the Coastal Resources Commission, unless a permit has been obtained from the appropriate city or county (for "minor development" as defined in the act) or from the Secretary of Natural and Economic Resources (for "major development").

As noted below in the section discussing sewage disposal systems, the Ground Absorption Sewage Disposal Act may also operate to place restrictions on where mobile homes can be located.

MINIMUM LOT SIZE

The Commission for Health Services (CHS), in the Department of Human Resources, is directed by state statute⁶ to adopt rules and regulations governing the sanitation of watersheds. Pursuant to this authority, the Commission has provided by regulation that

No septic tank system shall be approved for a residence (including a mobile home), place of business, or place of public assembly except on a lot containing at least 40,000 square feet of area suitable for septic tank system location and operation when the lot is on a watershed of a Class I or II reservoir or on the watershed of the portion of a Class A-II stream extending from a Class I reservoir to a downstream intake to a water purification plant. This requirement does not apply to those portions of the reservoir watershed which are drained by Class B, C, or D streams.⁷

The Secretary of Human Resources is authorized to vary the minimum lot size requirement when warranted by particular local conditions. Reservoir classification is made by the Commission for Health Services, and the Environmental Management Commission (EMC) classifies the streams.

CONSTRUCTION AND USE OF MOBILE HOMES

The Uniform Standards Code for Mobile Homes Act⁸ is now the principal law governing the construction of mobile homes. It requires that all mobile homes manufactured in this state after July 1, 1970, be constructed in accordance with the very detailed set of regulations (covering design and construction requirements for body and frame installation of plumbing, heating, and electrical systems) put out by the American National Standards Institute⁹ (ANSI) and adopted (with slight modification) for North Carolina by the Commissioner of Insurance. No mobile home manufactured after September 1, 1971, can be sold in this state unless an inspector licensed by the North Carolina State Building Code Council has attached to the home a label or certificate

indicating that it was constructed in conformity with these standards. (Normally these inspections are by national testing organizations. Local building inspection departments may be licensed by the Council to make inspections, but their certificates of compliance are valid only within the jurisdiction of the issuing department. To date, no local inspection department has been licensed.) And it is unlawful for any person or company to furnish electricity to any mobile home unless it first ascertains that the home has been properly certified or was constructed before September 1, 1971.

Title VI of the federal Housing and Community Development Act of 1974,¹⁰ also known as the National Mobile Home Construction and Safety Standards Act of 1974, will have important consequences for state legislation in this area. Title VI requires the Secretary of HUD to issue, by August 22, 1975, an initial set of mobile home construction and safety standards that must be met by all manufacturers of mobile homes. These standards will supersede any state standards dealing with the same aspect of mobile home performance. States are allowed to administer the law, with approval of HUD, if the state programs meet certain requirements set out in the law. Among other requirements, a state program must: (1) require mobile home manufacturers to submit plans for every model of mobile home produced before production begins; (2) obligate manufacturers to notify dealers and retail purchasers of mobile homes when defects relating to federal construction or safety standards or defects constituting imminent safety hazards are subsequently discovered; (3) provide that in specified circumstances manufacturers must correct or have corrected at no expense to the owner defects in the mobile homes they produce; (4) require manufacturers, distributors, and dealers to keep the same records and make the same reports as would be required if the act were administered by federal officials.

While the standards set by the State Building Code¹¹ governing construction of buildings are superseded with respect to mobile homes by the Uniform Standards Code for Mobile Homes Act,¹² Volume I of the State Building Code (General Construction) is still relevant. It sets requirements concerning location, height, floor areas, ventilation and lighting, means of ingress and egress, etc., all of which vary according to the use made of a particular building. These requirements are important because mobile homes are now frequently used for non-

6. N.C. GEN. STAT. § 130-163.

7. Reference Manual, Water and Sewerage Systems, Ch. 2, § 6L (1966, as amended).

8. N.C. GEN. STAT. §§ 143-144 *et seq.*

9. ANSI No. A 119.1 (1973), National Fire Protection Association No. 501B (1973).

10. P.L. 93-353 (1974).

11. The State Building Code is adopted by the State Building Code Council pursuant to authorizing legislation found at G.S. 143-138. The code applies to all types of buildings and is uniformly applicable throughout the state, except where modified by local ordinance with the approval of the Council. The code does not have to be adopted locally although it is administered and enforced by locally appointed building inspectors.

12. The local building inspector has no authority to enforce the state residential building code with respect to mobile homes displaying a label of compliance certifying that the home has been constructed in accordance with the ANSI standards. Opinion of the Attorney General, October 3, 1974, in reply to Mr. William P. Pope.

residential purposes, and when so used, these regulations still apply. For example, a mobile home used as an automotive service station must comply with the special occupancy requirements of the code, and a mobile home used as a school must meet the appropriate standards concerning means of egress.

ELECTRICAL, HEATING, AND AIR CONDITIONING CONNECTIONS

The standards adopted pursuant to the Uniform Standards Code Act apply almost exclusively to the internal construction of the mobile home. Consequently, those aspects of the State Building Code dealing with utility transmission lines and external connections are still enforceable with respect to mobile homes. For example, all aspects of the electrical distribution system from the power lines maintained by the utility company to the point where the individual mobile home is connected to the supply of electricity are covered by the Electrical Code,¹³ and the Heating Code¹⁴ contains regulations governing any sort of equipment that is external to the mobile home and connected to or involved with the heating, ventilation, air conditioning, or refrigeration systems. Of particular importance here is section 1405.0 of this code, "Gas Piping in Mobile Home and Travel Trailer Parks," which contains regulations governing such things as the protection of piping, prohibited locations, location of shutoff valves, connections to mobile homes, etc., and also includes a table that relates the capacity of the gas piping system to the number of mobile homes supplied.

FOUNDATION, TIE-DOWN, AND ANCHORING REQUIREMENTS

The ANSI standards adopted pursuant to the Uniform Standards Code Act include sections covering the nature and design of tiedown devices that must be fastened to the body of the mobile home, but they do not specify either the types of foundations that must be placed on the ground or the types of anchoring devices that must be used to secure the unit to the foundation. However, the standards do provide that the mobile home manufacturer must include "printed instructions with each mobile home specifying the location and required capacity of stabilizing devices (tiedowns, piers, blocking, etc.) on which the design [of the fastening devices attached to the home] is based."¹⁵ The Commissioner of Insurance¹⁶ takes the position that if this tiedown system is designed

by a registered architect or engineer, then the local building inspector is to use the manufacturer's set of instructions as the standard of proper tiedown procedures.¹⁷ If no such set of instructions is available or if the system has not been designed by a licensed architect or engineer, then the building inspector is to enforce standards listed in the booklet of mobile homes regulations issued by the Insurance Department.¹⁸ Basically, these standards are taken from the State Building Code, with appropriate modifications for mobile homes made by the Commissioner of Insurance pursuant to statutory authority.¹⁹

SITE PREPARATION AND SEDIMENTATION CONTROL

The Sedimentation Pollution Control Act²⁰ was passed to regulate "land disturbing activity" that may result in pollution from "sedimentation." The act defines "land disturbing activity" as "any use of the land by any person in residential, industrial, educational, institutional or commercial development, highway and road construction and maintenance that (1) results in a change in the natural cover or topography and (2) that may cause or contribute to sedimentation" (emphasis and numbers added). It then defines "sediment" as "solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity, or ice from its site or origin." Clearly, many mobile home parks and subdivisions constructed after the effective date of this act (July 1, 1973) will fall within the reach of its provisions. Those that do must comply with certain mandatory standards (both those set out in the act itself and those adopted pursuant to the act by the Sedimentation Control Commission) governing such matters as required ground cover and maximum angles for graded slopes and fills. Violation of these standards can result in criminal penalties or a civil suit for damages or injunctive relief brought by the Secretary of Natural and Economic Resources or any private citizen who is injured by the violation.

The act also authorizes local governments to establish sedimentation control programs and requires that the Commission assist cities and counties in this effort by developing a model local erosion-control ordinance. Local programs must be reviewed and approved by the Commission. The principal difference between the state-administered program and locally administered programs is that local governments are authorized to require developers engaged in land-disturbing activity to submit erosion-control plans before the developmental activity begins. (State authority to require advance submission of plans, except with respect to certain types of develop-

13. NORTH CAROLINA STATE BUILDING CODE (NFPA No. 70-1975).

14. NORTH CAROLINA STATE BUILDING CODE, Heating, Air Conditioning, Refrigeration and Ventilation (1971).

15. ANSI No. A 119.1, § 6.5.15 (1973).

16. While G.S. 143-146(b) specifies that the Commissioner of Insurance shall adopt regulations pertaining to mobile homes, in fact this authority is delegated to the Chief Engineer, who also is the Secretary to the Building Code Council and head of the division that administers the State Building Code.

17. See NORTH CAROLINA DEPARTMENT OF INSURANCE, STATE OF NORTH CAROLINA REGULATIONS FOR MOBILE HOMES (1972).

18. *Id.* at 20-22.

19. See *supra*, n. 16.

20. N.C. GEN. STAT. §§ 113A-50 *et seq.*

ment, such as that conducted by the state or local governments, was eliminated by the 1974 amendments to the act.)

WATER SUPPLY SYSTEMS

With respect to water supply systems, problems arise not from a lack of regulations but from an abundance of overlapping and sometimes conflicting regulations. At least three state agencies are involved—the Environmental Management Commission, the Commission for Health Services, and the Building Code Council.²¹ Each has been authorized by legislation to adopt regulations governing some aspect of water supply systems. However, the legislation leaves the jurisdictional boundary lines of these three agencies in some dispute, and the regulations adopted reflect this ambiguity. In addition, local health board regulations may also complicate the picture. The result is that virtually all forms and sizes of mobile home developments are regulated with respect to water supply systems, but it is seldom easy to discover precisely which regulations are applicable.

The State Plumbing Code,²² adopted by the Building Code Council, contains regulations governing such matters as the size and type of pipe that must be used to serve different load requirements, the number of connections that can be made onto different sized pipes, storage facilities, pressure requirements, etc. It also contains provisions relating to the protection and disinfection of the water supply system.²³ In addition, the code contains an Appendix entitled "Plumbing Installation Standards for Mobile Homes and Travel Trailers and Parks," which provides recommended (not mandatory) standards concerning the water distribution system.

The Well Construction Act²⁴ authorizes the Environmental Management Commission to adopt rules and regulations governing the location, construction, repair, and abandonment of wells and establishes certain requirements to assure the wholesomeness of the water obtained from wells. The act specifically excludes from its coverage wells "constructed by an individual on land which is owned or leased by him, appurtenant to a single family dwelling, and intended for domestic use."²⁵ The Division of Environmental Management interprets this to mean that only those wells physically constructed by an individual himself on land owned or leased by him, as opposed to wells constructed by a contractor, are exempt. Advance approval must be obtained from the Division of Environmental Management before a well system de-

signed to serve ten or more dwellings may be constructed.²⁶ Advance approval must also be obtained for any well (except one serving a single dwelling) installed in a capacity-use area designated as such by the Environmental Management Commission.²⁷ In all other cases, the act is enforced by periodic inspection by the Division of Environmental Management, and violators are subject to criminal penalties and injunctive orders.

G.S. 130-160.1 authorizes the Department of Human Resources (in which the Commission for Health Services is located) to adopt standards for the design and construction of "public water supply systems," defined as "any water supply furnishing potable water to 10 or more residences or businesses or combination of residences or businesses"²⁸ Pursuant to this section the Department has adopted and published STANDARDS AND CRITERIA FOR DESIGN AND CONSTRUCTION OF PUBLIC WATER SUPPLY SYSTEMS TO SERVE RESIDENTIAL COMMUNITIES.²⁹ Section 11 of this publication, entitled "Mobile Home Park Water Supply Systems," contains regulations covering such topics as the source of the water supply system, purification of the water, and the water distribution system. The Department is also authorized to require that plans prepared by a licensed engineer be submitted to and approved by the Commission for Health Services before construction or the awarding of any contract for construction of a public water supply system, whichever is sooner.

The net effect of all of these laws and regulations appears to be as follows: (1) When an individual installs a well or draws upon surface water to serve a single mobile home on an individual lot, only the State Plumbing Code and local health board regulations (if any) apply, assuming the individual does the work himself. (2) If the same individual hires a contractor to install the well system, the work (assuming the source of the water is a well) must also be in compliance with the Well Construction Act standards. (3) When a mobile home park operator puts in a water supply system designed to serve at least two but fewer than ten mobile homes, the Well Construction Act standards (assuming again that the source of the water is a well), the Plumbing Code, and local health regulations apply. (4) When a mobile home park owner installs a water supply system designed to serve ten or more mobile homes, he must obtain advance approval

26. The act provides that advance approval must be obtained where the well system has a designed capacity of 100,000 gallons per day (N.C. GEN. STAT. § 87-88). The Division of Environmental Management has decided that a system serving ten or more dwellings (i.e., a public water supply system) must have a capacity of that magnitude. See NORTH CAROLINA WELL CONSTRUCTION REGULATIONS AND STANDARDS, (N.C. Board of Water and Air Resources [now Environmental Management Commission], 1971).

27. See N.C. GEN. STAT. § 87-88 and REGULATIONS ON CAPACITY-USE AREAS (N.C. Board of Water and Air Resources [now Environmental Management Commission], 1969). To date, only one such area has been designated—an area encompassing all or part of Martin, Beaufort, Craven, Pamlico, Carteret, Hyde, Tyrrell, and Washington counties.

28. N.C. GEN. STAT. § 130-161.1(e) adopts the definition of "public water supply system" found at N.C. GEN. STAT. § 130-31.

29. Department of Human Resources, Division of Health Services, Sanitary Engineering Section (1974).

21. If a mobile home park operator supplies water to (or collects sewage from) ten or more homes within a park and charges his tenants separately for this service, then he may also be subject to regulation as a public utility. [See N.C. GEN. STAT. § 62-3 (23) 9.2]

22. NORTH CAROLINA STATE BUILDING CODE, Plumbing (1968 ed.).

23. Like the other parts of the building code, the Plumbing Code is superseded with respect to the internal plumbing system of the mobile home by the ANSI standards.

24. N.C. GEN. STAT. §§ 87-83 *et seq.*

25. N.C. GEN. STAT. § 87-85 (14).

from the Commission for Health Services and comply with its regulations; if the water is drawn from an underground source, he must also obtain advance approval from and comply with the regulations of the Environmental Management Commission. The Plumbing Code also applies, and health department regulations may be relevant. (5) Wells that have been steadily in use since before July 6, 1967, are not subject to the requirements of the Well Construction Act, and public water supply systems installed before January 1, 1972, need not comply with the standards outlined in G.S. 130-161.1 (although the Commission for Health Services may still require disinfection of systems introduced before that date when impurities are discovered). These pre-existing wells and supply systems are subject only to the State Plumbing Code and local health board regulations, if any.

SEWAGE DISPOSAL SYSTEMS

Because of recent cooperative efforts by the Environmental Management Commission and the Commission for Health Services, jurisdictional problems are not as severe with respect to sewage disposal systems as they are with respect to water supply systems. However, some difficulties remain.

The State Plumbing Code contains a variety of requirements concerning the size and type of piping that must be used in sewage disposal systems, where and how pipes may be installed, and how they are to be connected. In addition, the set of recommended "Plumbing Installation Standards for Mobile Homes and Travel Trailers and Parks" contained in the code's appendix has a section on park sewage disposal systems.

G.S. 130-160, which divides the responsibility for sewage disposal system regulation between the Commission for Health Services and the Environmental Management Commission, reads as follows:

Any person owning or controlling any single or multiple family residence, place of business or place of public assembly shall provide a sanitary system of sewage disposal consisting of an approved privy, an approved septic tank system, or a connection to a public or community sewerage system. Any such sanitary sewage disposal system with 3,000 gallons or less design capacity serving a single or multiple-family residence, place of business, or place of public assembly, the effluent from which is not discharged to the surface waters, shall be approved under rules and regulations promulgated by the Commission for Health Services. All other such sanitary sewage disposal systems with more than 3,000 gallons design capacity shall be approved under rules and regulations promulgated by the Environmental Management Commission pursuant to the applicable provisions of Article 21 of Chapter 143.

By a joint memorandum of understanding, the Department of Natural and Economic Resources (wherein the Environmental Management Commission is located) and the Department of Human Resources (wherein the Com-

mission for Health Services is located) have agreed that where eight or fewer mobile homes are connected to a septic tank, CHS regulations apply (and approval must be obtained from the local health department), and where more than eight mobile homes are attached, the Division of Environmental Management must approve the system.³⁰ In either case, by mutual agreement, the same substantive standards will be enforced.³¹ As indicated in the statute quoted above, all systems that discharge into surface water are subject to the exclusive jurisdiction of EMC.

The other major piece of legislation dealing with the sewage disposal problems of mobile homes is the Ground Absorption Sewage Disposal Act of 1973.³² This act provides that "No person shall . . . locate, relocate or cause to be located or to be relocated any mobile home intended for use as a dwelling, *other than one in a mobile home park*,"³³ on a site in an area not served by a public or community sewage disposal system without first obtaining an improvements permit from the local health department having jurisdiction.³⁴ The local health department issues the permit after making a determination—following a site examination of the character and porosity of soil, percolation rate, depth to water table, etc.—that a septic tank or other ground absorption sewage disposal system can be installed in accordance with local health regulations.³⁵ After the improvements permit has been issued and the work has been completed on the ground absorption sewage disposal system, the local health department makes a final inspection. If it determines that the system has been properly installed, it issues a certificate of completion. It is unlawful to occupy a mobile home until this certificate has been issued.

In addition to the criminal penalties imposed for violating the act, two other enforcement mechanisms are available. The act provides: "Where location or relocation is proposed for a mobile home, no permit required for electrical, plumbing, heating, air conditioning, or other construction, local or relocation activity under any provision of general or special law shall be issued until after a certificate of completion has been issued."³⁶ Also, the act makes it unlawful for any person to supply elec-

30. Local health departments may be authorized by the Division of Environmental Management to approve septic tank systems of up to 10,000 gallons. See Memorandum to Local Health Directors and Sanitarians from Marshall Staton, Chief, Sanitary Engineering Section, February 17, 1975.

31. As of this writing, these standards have been agreed upon by both EMC and CHS, but have not yet been legally adopted by both agencies.

32. N.C. GEN. STAT. §§ 130-166.22 *et seq*

33. Unfortunately, the term "mobile home park" is not defined in the act, and consequently it is not clear in many cases whether the act applies.

34. N.C. GEN. STAT. § 130-166.25(a).

35. For reasons explained at note 2, *supra*, the local health departments will have to enforce the CHS standards mentioned at note 31, *supra*, in determining whether a ground absorption sewage disposal system can safely be installed, unless local conditions demand more stringent standards.

36. N.C. GEN. STAT. § 130-166.27(b).

tricity to a mobile home covered under the act until the local electrical inspector certifies to the supplier that the required certificate of completion has been issued.³⁷

The cumulative effect of these laws appears to be as follows: (1) Mobile homes located or relocated outside of mobile home parks after October 1, 1973, must comply with the requirements of the Ground Absorption Sewage Disposal Act and the Plumbing Code. (2) Owners of new mobile home parks or developments providing on-site sewage treatment facilities must obtain a permit from the Division of Environmental Management if sewage is discharged to surface waters or if more than eight mobile homes are connected to one ground absorption disposal system. Otherwise, approval must be obtained from the local board of health (in any case, the Plumbing Code applies). (3) Existing mobile homes and parks that do not meet the sewage treatment standards that they would have to meet if they were to be located or developed today need not, in most cases, be brought up to current standards (except for federal and state effluent standards in the case of systems discharging to surface waters) unless the disposal systems fail or become health hazards.

IN CONCLUSION, existing state law already deals with many of the health, sanitation, and safety problems that mobile homes might otherwise cause. With respect to these matters, greater attention is needed to clarify the law and coordinate the regulations and regulatory responsibilities of the various state agencies involved, but certainly no additional ordinances are needed. The two subject areas not extensively covered by state law—where mobile homes can be located within a community, and the design of mobile home parks and developments—can be dealt with locally through zoning, subdivision, and minimum housing ordinances as part of a coordinated program of development control. Finally, where no development control ordinances are now in effect, the general ordinance-making power of local governing bodies or the regulatory power of local boards of health is available to regulate mobile homes to the extent necessary.

37. N.C. GEN. STAT. § 130-166.28.

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DO MOBILE HOMES PAY THEIR OWN WAY?

Michael B. Brough

EVERYONE AGREES that mobile home dwellers, like all residents of the community, should pay their fair share of taxes to help support local services. But *do* they pay their fair share? Before we can discuss that question, we need to break it down: (1) Do mobile home residents actually pay the amount of taxes they are legally bound to pay (a question of tax administration)? (2) If so, is the tax burden so imposed appropriate from the standpoint of social and economic policy (a question of tax philosophy)?

The philosophical question is of course the more difficult one. Such issues as whether taxes should be progressive, proportional to income, or regressive; whether the burden of taxation should be imposed primarily upon property or income; and whether sales taxes should be an important source of revenue (and if so, what items should be taxed) involve basic questions of public policy. However, it is important to recognize that these questions have been at least temporarily resolved by the whole set of tax-related laws now on the statute books. Therefore, assuming that these laws are correctly administered, one cannot argue that mobile home owners do not pay their fair share of taxes unless one first concludes that the basic philosophy written into the tax law is wrong. For example, the established policy with respect to the property tax is that the owner pays the tax in proportion to the assessed value of his property, and not necessarily in proportion to the amount of local services consumed by the property or those who occupy it. Consequently, even assuming that mobile home dwellers represent a "drain" on the community in the sense that they generate less property tax revenue under a system

administered properly under current law than they consume in services financed by property tax revenues, one cannot argue that they do not pay their "fair share" of property taxes unless he concludes that the whole property tax system itself is "unfair" because it does not require all citizens to pay for the full measure of services they receive. It is certainly legitimate to question the merits of the property tax or any other tax and, in fact, to question the inherent "fairness" of the entire taxing system. But one should not lose sight of the fact that, approached from the standpoint of the law as it exists, whether mobile home occupants pay their "fair share" of taxes cannot be divorced from the more fundamental problem of whether the current network of tax statutes fairly allocates the burden of supporting local government.

Whether mobile home dwellers pay the full amount of tax that they are legally bound to pay under existing statutes is another matter entirely. For obvious reasons, it is only with respect to the administration of the *property* tax that mobile home owners are the source of peculiar problems of taxation. Certainly, if owners of mobile homes are generally able to escape payment of property taxes, this avoidance is a legitimate cause for concern. While no hard data exist, many local officials feel that this immunity to property taxation is a problem. The issues involved with the taxation of mobile homes are covered in the article on property taxation of mobile homes on page 24, but it is important here to explore briefly some of the reasons why mobile homes might not generate their "fair share" of property tax revenue.

THE PRINCIPAL CONTROVERSY in the field of mobile home taxation swirls around whether to treat mobile homes as real or personal property. But advocates of both positions are after the same goals—i.e., the best means of (1) locating and listing mobile homes, (2) properly assessing them, and (3) collecting the tax from the property owner. The first goal and part of the third stem from problems associated with the mobility of this type of housing. Since mobile homes can be literally set up on a lot overnight, tax assessors may not always know of their existence within the jurisdiction; and since they can be moved, the possibility of avoiding the collection of the tax exists. These problems are real but not insurmountable: First, studies have shown that today mobile homes are considerably less mobile than in former years when the term "trailer" was a more accurate description of this type of housing. No longer can mobile homes be hauled by the ordinary passenger vehicle, and the trend toward larger and more site-oriented mobile homes indicates that the problems associated with mobility will continue to diminish. Second, an increasing majority of mobile homes are located in mobile home parks, where they are subject to statutory reporting requirements. Finally, communication between local tax officials and the following individuals, agencies, or groups would be extremely helpful: (a) the Department of Motor Vehicles, since all mobile homes must be registered before they can be transported on the highways; (b) local public health departments, since under the Ground Absorption Sewage Disposal Act of 1973¹ no mobile home can be located outside a park in an area not served by a public or community sewage disposal system without first obtaining an improvements permit from the local health department; (c) companies supplying electricity, since these utilities are aware of the location of almost all mobile homes and since they are already recognized as part of the enforcement mechanism under both the Ground Absorption Act and the Uniform Standards Code for Mobile Homes;² (d) mobile home transport companies, since they must now be utilized whenever a mobile home moves into or out of an area (it has even been suggested that the law should require the home owner to provide to the transport company a certificate of payment of property taxes

before the move).³

With respect to the second goal, proper assessment, it is quite possible that local governments may be losing revenue by underassessing both mobile homes and mobile home park spaces. For example, the so-called "blue book," which shows very rapid depreciation in the early years of mobile home life and is used for assessment purposes by some tax assessors, may seriously understate the true market value of many mobile homes. This problem is exaggerated by passage of the Uniform Standards Code, since, according to the Deputy Commissioner of Insurance, units that comply with this code may be expected to remain safe and durable for at least twice as long as is commonly believed—or about 20 to 25 years.⁴ Further, studies of mobile homes in Guilford County and the Research Triangle area have revealed a tendency toward underassessment of mobile home park sites (the Triangle study showed that some park spaces carried on the books at \$1,000 per unit for land and improvements may actually have cost as much as \$3,500 per unit to develop, not including the cost of the land).⁵ Fortunately, if underassessment is a problem, it is one of the easiest to correct.

The third problem, collecting the tax from the property owner, is made difficult in some cases by a federal statute known as the Soldiers and Sailors Civil Relief Act, which is also discussed in the article on property taxation of mobile homes.

IN SUMMARY, whether mobile home residents pay their way in a community involves questions of both tax philosophy and tax administration. Quite naturally, most communities would like to attract only high-income residents and prosperous, pollution-free industries that yield the greatest amount of tax revenue and demand the least amount of governmental services. But mobile home residents cannot be accused of failing to pay their "fair share" of taxes unless one is prepared to re-evaluate the current taxing structure or unless one means that the current laws are not being properly administered. — B.

1. N. C. GEN. STAT. § 130-166.22 *et seq.*

2. N. C. GEN. STAT. § 143-144 *et seq.*

3. Legislation to a similar effect has been introduced in the 1975 session of the General Assembly as House Bill 251.

4. Triangle J Council of Governments, "Mobile Homes as a Housing Resource in the Research Triangle Region," November 1972, p. III-1.

5. *Id.* at IV-23.

LEGAL CONSTRAINTS UPON THE REGULATION OF MOBILE HOMES

Michael B. Brough

Few housing issues today can arouse more debate than the regulation of mobile homes. While state law provides some guidelines, local governments have considerable discretion in this area. This article examines the current state of the law concerning the power of local governments to regulate mobile homes,¹ and then suggests a possible trend of some significance.

When speaking about regulating mobile homes, it is important to distinguish between the regulation of single mobile homes on individual lots and the regulation of mobile home parks. The following discussion is subdivided to take this distinction into account.

1. REGULATIONS THAT CAN BE IMPOSED ON MOBILE HOMES IN GENERAL

(a) *Can Mobile Homes Be Entirely Excluded from the Regulatory Jurisdiction of a Unit of Local Government?* The general rule is that they cannot. When confronted with this question, most courts have held that a local ordinance that tries to exclude mobile homes completely bears no substantial relationship to the public health, safety, or general welfare and therefore is unconstitutional as an arbitrary exercise of the police power in violation of the due process clauses of the state and/or federal constitutions. Apparently, in such cases, the plaintiff can overcome the formidable presumption of validity that normally attaches to a local legislative enactment merely by showing the complete exclusion of a type of land use that does not amount to a nuisance. The burden of justifying the ordinance is then shifted to the municipality, which usually has been unable to sustain it. In this state, this precise issue has not been decided as a matter of constitutional law, but a recent case indicates quite clearly how the North Carolina Supreme Court would go, should the question arise. In *Town of Conover v. Jolly*,² the city enacted an ordinance, separate from its zoning ordinance, prohibiting the use of a mobile home as a

permanent residence anywhere within the city. The Court ruled this ordinance invalid on the narrow ground that, since a mobile home was not a nuisance per se, neither the section of the General Statutes authorizing cities to abate nuisances nor any other statute had delegated to the city authority to exclude mobile homes. The Court specifically did not reach the "serious question of whether such an ordinance, if authorized by statute, would violate Art. I, Sec. 17, of the Constitution of North Carolina, providing that no person may be deprived of his liberty or property but by the law of the land."³ But it did quote with approval from the dissenting opinion of Justice Hall in *Vickers v. Township Committee of Gloucester Township*⁴ to the effect that "trailer living is a perfectly respectable, healthy and useful kind of housing, adopted by choice by several million people in this country today,"⁵ and it noted the recognition given by the General Assembly to the existence of the mobile home by passage of the Uniform Standards Code for Mobile Homes Act⁶ in 1969. The whole tenor of the case suggests, though it does not hold, that a complete prohibition against residential use of mobile homes by a city or a county, through zoning or otherwise, would not withstand judicial scrutiny.

(b) *Can Mobile Homes Be Excluded from Single-Family Residential Districts and/or Limited to Mobile Home Parks?* These two questions are grouped together here because the issues involved in their resolution are generally the same and because the usual way that mobile homes are excluded from single-family residential districts is by an express provision in the zoning ordinance limiting placement of mobile homes to mobile home parks.

The vast majority of courts that have considered these twin questions have answered them in the affirmative. Unlike the cases in which mobile homes are excluded altogether, in cases in which mobile homes are merely prohibited in single-family districts or restricted to mobile

1. This article discusses only those regulations that relate to where mobile homes and parks can be located. Regulations that pertain to the non-locational aspects of mobile homes (e.g., building regulations, lot size and set back requirements, park design standards, etc.) are covered in a forthcoming Institute publication dealing with the development of a mobile home ordinance.

2. 277 N.C. 439, 177 S.E.2d 879 (1971).

3. *Id.* at 444, 177 S.E.2d at 882 (1971).

4. 37 N.J. 232, 181 A.2d 129 (1962).

5. *Town of Conover v. Jolly*, 277 N.C. 439, 443, 177 S.E.2d 879, 882 (1971), quoting from *Vickers*, 37 N.J. 232, 181 A.2d 129 (1962).

6. N.C. GEN. STAT. § 143-144 *et seq.*

home parks, courts generally entertain the standard presumption of validity and impose upon the plaintiff the heavy burden of showing that there is no reasonable justification whatever for the ordinance. Courts then generally uphold the ordinance on the basis of either or both of the following justifications: (1) the health and sanitation problems connected with mobile homes require periodic inspection, and control can be more easily maintained if such dwellings are grouped together in one area; (2) mobile homes lower neighboring property values and disrupt the orderly development of land, and this is contrary to the public welfare. The classic statement of this latter view is found in the leading case of *Napierkowski v. Gloucester Township*:

Two of the most basic concepts of sound zoning, encouragement of the most appropriate use of land and conservation of property values, may be undermined by the indiscriminate location of trailers within a municipality. There can be little doubt that the maintenance and use of a trailer in a particular locale would tend to stifle development of the area for residential purposes. And from the point of view of aesthetic considerations (which are inextricably intertwined with conservation of the value of property) trailers may mar the local landscape.⁷

No North Carolina case has considered this issue. It is possible that, if faced with a challenge to an ordinance prohibiting mobile homes in residential districts or restricting them to mobile home parks, our Supreme Court would accord to the ordinance the standard presumption of validity and uphold it. On the other hand, a strong case could be made (perhaps using some of the arguments discussed near the conclusion of this article) that such an ordinance would amount to a deprivation of property without due process of law or constitute a denial of the equal protection of the laws. The *Conover* case, discussed above, provides little real guidance as to how the Court would resolve such a case, and counsel for both sides would probably cite it in support of their arguments. In other words, one is forced to the not very helpful conclusion that communities that want to keep mobile homes out of ordinary residential districts and restrict them to parks might be able to do so legally, and then again they might not.

A local government that does not wish to risk having its regulation declared unconstitutional and yet is unwilling to allow mobile homes in all residential districts may find it useful to follow the course advocated by some and allow mobile homes in at least one residential district. This tactic lessens the likelihood that the ordinance will be challenged (because, among other things, it destroys the argument that might otherwise be made that there is no property in any residential district within the local government's jurisdiction where a property owner can place a mobile home on his own land). Furthermore, it puts the

local government in a more sympathetic position if the ordinance is challenged.

(c) *Is It Permissible to Allow Mobile Homes Only As a Special Use or Special Exception, or Must a Jurisdiction Maintain Some District Wherein Mobile Homes Are Permitted As of Right?* Resolution of this issue might well depend on whether the community uses the special-use or special-exception device in good faith or whether the community in fact uses these devices to exclude mobile homes from the jurisdiction completely. In theory, at least, our Court views the special exception as a device vesting little discretion in the permit-issuing body, i.e., when all the stated conditions have been satisfied, the permit must be granted. If the ordinance imposes sufficiently definite and realistically attainable conditions on the granting of a permit, such a system would probably be upheld. However, to be on the safe side, a community would be well advised to allow mobile homes as a use by right in at least one of the districts where mobile homes are permitted.

2. REGULATIONS THAT CAN BE IMPOSED ON MOBILE HOME PARKS

(a) *Can Mobile Home Parks Be Completely Excluded from a Jurisdiction?* While courts are not quite so closely agreed on this issue as they are with respect that the complete exclusion of individual mobile homes, the clear majority view is that a local government has no authority to exclude mobile home parks completely. The reasoning used is quite similar to that discussed under Question I (a) above—i.e., total exclusion of a use that does not amount to a nuisance per se bears no substantial relationship to the public health, safety, or general welfare. Some cases rely on the related ground that total exclusion is an abuse of the zoning power, since the zoning enabling legislation grants no power to prohibit absolutely the operation of a legitimate business enterprise. In states that have statutes regulating mobile home parks, courts sometimes look to these laws as legislative recognition of the legitimacy of mobile home park operations. (North Carolina has no such legislation.)

There are no North Carolina cases directly on point. In *Town of Conover v. Jolly*, the Court did state that "this case does not involve the authority of a city or town to prohibit the establishment of a trailer camp or trailer park within territory subject to its zoning jurisdiction,"⁸ and it cited *Raleigh v. Morand*.⁹ One could argue that this statement constitutes implicit approval of the exclusion of mobile home parks. However, the argument is severely weakened by the fact that the *Morand* case, cited in support of the court's statement, stands only for the

7. 29 N.J. 481, 150 A.2d 481 (1959).

8. 277 N.C. 439, 442, 177 S.E.2d 879, 881 (1971).

9. 247 N.C. 363, 100 S.E.2d 870 (1957).

proposition (as noted below) that mobile home parks may be prohibited in residential districts, not that they may be excluded altogether from a jurisdiction. Considering this fact and the majority view in other jurisdictions, a local government would be very ill advised to exclude mobile home parks completely.

(b) *Can Mobile Home Parks Be Prohibited in Residential Areas and Limited to Business or Industrial Zones?* For reasons discussed in connection with Question I (b) most courts today would uphold regulations proscribing the operation of mobile home parks in residential districts. *Raleigh v. Morand*¹⁰ put North Carolina in accord with this view. In this case, the Court simply relied upon Yokley's *Zoning Laws and Practice* that "The right of a municipality to regulate trailers and trailer camps by placing them in certain zones and by excluding them from other zones is well settled,"¹¹ and then concluded that appellant's mere assertions that the restrictions were not sufficient to overcome the presumption of validity attaching to an act of the local legislative body.

It is worth noting that, in analyzing cases that involve mobile home parks, courts generally focus on the rights of the park owner to run a business, rather than on the rights, if any, of those seeking a location for a mobile home to have a place to live. The combined effect of the general tendency to uphold both regulations restricting mobile homes to mobile home parks and regulations prohibiting mobile home parks in residential areas is that communities seem to have the legal authority at the present time to require those who wish to live in mobile homes to locate them in business or industrial districts.¹²

(c) *May Mobile Home Parks Be Allowed Only As a Special Use Or Special Exception, Or Must They Be Permitted As of Right in Some District?* As indicated in the answer to Question I (c) above, a provision in an ordinance allowing a mobile home park to be operated only after a special-use permit is obtained would probably be upheld, if it is not used indirectly to exclude all such parks. Certainly, a city or county that allows individual mobile homes as a use by right in some districts would be in a much better position to defend such a provision in the zoning ordinance than a unit that does not.

OTHER REGULATIONS AND RESTRICTIONS ON INDIVIDUAL MOBILE HOMES AND MOBILE HOME PARKS

The foregoing discussion makes it clear that most courts are now willing to tolerate considerable restrictions on

mobile homes and mobile home parks. Certainly, restrictions less onerous than those described above as approved by most courts would be upheld. For example, since most courts sustain prohibitions on mobile homes in single-family residential districts, no problem would arise with a regulation setting durational limitations on use of mobile homes in such districts. On the other hand, it is a cardinal principle that courts are quick to see through mere subterfuge and will not allow a community to do indirectly what it cannot do directly (e.g., prohibit mobile homes altogether). Thus, it will avail a city or county little to describe a mobile home district in the zoning ordinance if no land is actually allocated to that district. Borderline cases (e.g., where the city allows mobile homes only in parks and designates land where parks are permissible, but no such parks are actually in operation) are difficult, but the good faith of the zoning authority is always relevant.

THE FUTURE DEVELOPMENT OF THE LAW

No one has a reliable crystal ball when it comes to the future development of the law. But communities should be aware of and sensitive to two ideas or doctrines expressed in recent cases, doctrines that suggest that communities should exercise caution in regulating mobile homes with the full restrictiveness apparently permissible under current precedent.

The first idea involves a new approach to a very familiar concept—that any ordinance must bear a reasonable and substantial relationship to the public health, safety, morals, or welfare. The variation on this theme is that a number of courts today are interpreting the word "public" in the foregoing statement to refer to a community greater than the particular jurisdiction that enacts the challenged ordinance. In other words, these courts are agreeing with the dissent in the *Vickers* case that said that "general welfare transcends the artificial limits of political subdivisions and cannot embrace merely narrow local desires."¹³ Therefore, ordinances that exclude or severely restrict "undesirable" uses such as mobile homes, while perhaps in the "public interest of a particular community, may be held invalid because they bear no substantial relation to the larger, more broadly conceived public interest of the entire area or region."

This idea is hardly very startling or revolutionary. Indeed, in the venerable case of *Euclid v. Ambler Realty*, the United States Supreme Court, after upholding the principle of zoning, added this caveat:

It is not meant by this, however, to exclude the possibility of cases where the general public interest would so far outweigh the interest of the municipality that the municipality would not be allowed to stand in the way.¹⁴

10. *Id.*

11. *Id.* at 367, 100 S.E.2d at 873 (1957).

12. See ANDERSON, *AMERICAN LAW OF ZONING* § 11.52 (1968).

13. 37 N.J. 232, 181 A.2d 129, 146 (1962).

14. 272 U.S. 379, 390, 47 S.Ct. 119, 71 L. Ed. 303, 311 (1926).

However, even though the principle is not novel, some courts are using it to reach conclusions that constitute a significant departure from established precedent. For example, this broader view of the "public interest" is at the root of many cases striking down so-called "exclusionary zoning," particularly in a well-known line of Pennsylvania cases.¹⁵ And more to the point of this discussion, the Michigan Court of Appeals has used this idea as the foundation for its doctrine that where a zoning ordinance has a restrictive effect on a "preferred use" (including mobile homes), the burden of going forward with evidence to justify the restriction is on the *municipality*, not the individual challenging the ordinance.¹⁶ The importance that developments like these have for North Carolina is simply this: as mobile homes become more akin to conventional homes in appearance and durability and capture a larger and larger percentage of the housing market, and as conventionally built homes are priced beyond the range of an increasing percentage of North Carolina consumers, it is possible that regulations that severely discriminate against mobile homes may be subjected to more searching scrutiny by our Court.

The second relevant doctrine has been developed in recent cases by the United States Supreme Court and is commonly called the "conclusive presumption" doctrine. This doctrine was given its clearest exposition in *Vlandis v. Kline*. The Court, in striking down Connecticut's system of charging higher tuition fees to nonresident university students, reasoned that: "... it is forbidden by the Due Process Clause to deny an individual the resident rates on the basis of a permanent and irrebuttable presumption of non-residence, when that presumption is not necessarily or universally true in fact, and when the state has reasonable alternative means of making the crucial determination."¹⁷

The essence of this doctrine is that, where the legislative body enacts legislation designed to achieve stated objectives and the legislation establishes criteria or categories designed to separate those persons and situations intended to be reached by the legislation from those intended to be excluded, the legislation may be held invalid if the criteria or categories established do not *in fact* and *necessarily* achieve the stated objectives, at least where the objectives could be more closely and consistently achieved through a case-by-case examination of individual persons or situations.

The application of this doctrine to zoning restrictions on mobile homes is not hard to see. As indicated above, most regulations that treat mobile homes differently from conventional housing are justified on the basis of either public health and safety or public welfare (property values). The prevailing and generally accepted argument

is that, since some or many mobile homes are inadequately constructed or pose sanitation problems or mar the landscape, restrictive regulations on all mobile homes are rationally justified. (It should be noted in passing that the arguments based on public health and safety have been substantially undermined in North Carolina by passage of the Uniform Standards Code for Mobile Homes Act¹⁸ and the Ground Absorption Sewage Disposal Act¹⁹). However, clearly not *all* mobile homes are subject to these deficiencies and, conversely, many conventionally built homes are equally vulnerable to these objections. Under the conclusive presumption doctrine, a landowner denied permission to place a mobile home on his lot due to a restriction in the zoning ordinance could argue that such a restriction is invalid since it establishes a conclusive presumption against *all* mobile homes, when the local government's legitimate objectives could be equally well served by a case-by-case examination of each situation.

The "conclusive presumption" doctrine has been heavily criticized and probably cannot be sustained in its present form. As commentators have pointed out, however, the doctrine is really grounded on ideas not of due process but of equal protection. The real objective of the doctrine is to provide a vehicle whereby the court can prevent legislative discrimination against individuals when an important right or interest is at stake, without unduly interfering with legitimate legislative prerogatives. It is likely that the conclusive presumption doctrine is merely a way-station on the road to a more logically defensible doctrine. If all elements of the gap between conventionally built and factory-built houses continues to diminish, those charged with regulating mobile homes would do well to keep this judicial development in mind as they seek to insure that the laws bear equally on those in substantially similar situations.

18. N.C. GEN. STAT. §§ 143-144 *et seq*

19. N.C. GEN. STAT. §§ 130-166.22 *et seq*

15. See *National Land Investment Co. v. Kohn*, 419 Pa. 504, 215 A.2d 597 (1965); *Appeal of Girsch*, 437 Pa. 237, 263 A.2d 395 (1970); *Appeal of Kit Mar Builders*, 439 Pa. 466, 268 A.2d 765 (1970).

16. *Bristow v. City of Woodhaven*, 35 Mich. App. 205, 192 N.W.2d 322 (1971).

17. 412 U.S. 441, 37 L. Ed.2d 63, 93 S.Ct. 2230 (1973).

PROPERTY TAXATION OF MOBILE HOMES

William A. Campbell

THE LEGAL AND ADMINISTRATIVE PROBLEMS that arise in the property taxation of mobile homes stem basically from the fact that the mobile home is used as shelter and in many ways resembles a conventional house on a foundation, yet it is relatively easy to move. Briefly put, the movability of mobile homes gives them the characteristics of personal property, but their attachment to the land and their use as shelter gives them the characteristics of real property. Most of the tax problems flow from this dual nature of the property. Problems are created because under the North Carolina property tax statutes, different appraisal schedules are used for real and personal property; personal property is appraised annually, but real property is not; attachment of the tax lien is different for real and personal property; and the taxing unit's remedies for collecting delinquent taxes are different for real and personal property.

The property tax statutes themselves give no clear indication whether mobile homes are to be treated as real or personal property. Real property is defined as ". . . not only the land itself, but also buildings, structures, improvements, and permanent fixtures thereon. . . ."¹ Tangible personal property, on the other hand, is defined as "all personal property that is not intangible and that is not permanently affixed to realty."² Under any of the critical terms of these definitions—"buildings, structures, improvements, or permanent fixtures"—if a mobile home is to be considered real property, there must be indications that it has been permanently attached to the ground.³ This requirement has two elements: First, such physical indicators as a foundation, utility connections, or additions must be present. Second, the owner must intend to affix the structure to the land permanently. In some cases both of these elements are easy to find—for example, when the owner of a mobile home also owns the land on which it is situated, has placed the home on a foundation, and receives outside water and electric services. In other cases, however, one of the elements—

usually the intent—is difficult if not impossible to prove. An example of such a case is the student or construction worker who leases a space for his mobile home in a park and receives outside water and electric services, but is reasonably certain that he will be moving to a new location in a few months or years.

Statutory provisions that treat mobile homes as personalty rather than realty are G.S. 105-316, which requires annual reports from certain lessors of spaces for personal property, including mobile homes, and G.S. 20-50 and G.S. 20-4.01 (49), which require that mobile homes be registered as motor vehicles.

In this state of affairs, with no guides in the statutes concerning when and under what circumstances mobile homes should be treated as real property and with the common law of fixtures and the property tax statutes indicating that they should usually be treated as personal property, local tax officials appear to be faced with one of two possible procedures: First, they can treat all mobile homes uniformly as personal property, or second, they can start from the position that most mobile homes will be taxable as personal property but some can be classified as realty, and tax each mobile home according to its classification. Because of the administrative costs of the second procedure, most counties probably treat mobile homes uniformly as personal property.⁴

FOUR SIGNIFICANT PROPERTY TAX CONSEQUENCES flow from the treatment of mobile homes as personal property: (1) Mobile homes must be appraised annually, and as a result they can be depreciated fairly rapidly; (2) the tax collection remedy for use against mobile homes is levy and sale rather than foreclosure; (3) if a mobile home is owned by one person and the land upon which it is situated is owned by someone else, the lien for the taxes on the mobile home does not attach to the land; and (4) mobile homes that belong to non-resident servicemen are exempt from taxation by virtue of the Soldiers' and Sailors' Civil Relief Act of 1940.⁵ Along with other personal property, mobile homes must be

E. Garrett Walker, a third-year student at the University of North Carolina School of Law and associate editor of *THE NORTH CAROLINA LAW REVIEW*, helped in the research for this article.

1. N.C. GEN. STAT. § 105-273 (13).

2. N.C. GEN. STAT. § 105-273 (14).

3. See, B. HODES AND G. ROBERSON, *THE LAW OF MOBILE HOMES* 110 (2nd ed., 1964); and R. POWELL, 5 *THE LAW OF REAL PROPERTY*, 651 at 654 (1971).

4. In a six-county survey conducted by the Institute of Government in 1974, two counties stated that they treated double-wide mobile homes as realty, and a third said that double-wides were classified as realty at the request of the owner. The rest treated all mobile homes as real property.

5. 50 U.S.C. APP. § 574

listed and appraised annually.⁶ Real property, on the other hand, is generally reappraised only once every eight years.⁷ As a result, a depreciation schedule can be applied to a mobile home to reflect its loss of value each year. It is sometimes said that mobile homes do not pay their fair share of taxes. Those who make this statement usually do not have a clear idea of what they mean, but they may well have in mind this annual appraisal feature that is different from the appraisal of conventional homes. So long as mobile homes are treated as personal property, however, the charge is not valid, because the appraisal standard for all property is fair market value,⁸ and each year that a mobile home is reappraised, the tax supervisor is required by law to base his appraisal on the market value of the property.

The remedy for enforcing collection of delinquent taxes against tangible personal property is levy and sale⁹ of the property rather than a suit to foreclose the tax lien. Even though taxes are delinquent on the mobile home itself, the tax collector is not required to levy on the home; he may instead proceed against the taxpayer's wages or bank account with the less cumbersome remedy of attachment and garnishment.¹⁰ If the collector does proceed against the mobile home itself, he must take custody of it, advertise it, and finally sell it to the highest bidder.¹¹ This procedure is considerably cheaper and more convenient than the lien foreclosure procedure that the collector would have to use if the home were treated as real property. The property owner, however, receives greater protection under the foreclosure procedures.

When real property is subject to the property tax, the taxing unit's security for its tax claim is the tax lien, which attaches to all of the taxpayer's real property in the taxing unit on January 1 of the year in which the property should be listed.¹² No tax lien attaches to personal property until after a levy or attachment is made.¹³ When land is owned by one person and improvements or separate rights in the land are owned by someone else, the lien for the taxes on the improvements or separate rights becomes a lien on the land as well as being a lien on the improvements.¹⁴ If mobile homes were treated as real property, the effect of the lien statutes would be to impose a lien for the taxes on the home against the land where the home is situated—a mobile home park, for example—and thereby give the taxing unit security for the tax claim. If mobile homes are treated as personal property, then they become liens on land only if the person who owns the land also owns the mobile home.¹⁵

The Soldiers' and Sailors' Civil Relief Act of 1940 pro-

MOBILE HOMES AND NEIGHBORING PROPERTY VALUES

The effect of mobile homes on neighboring property values is a volatile question whenever the subject of regulating mobile homes arises. Of all the issues raised about mobile homes, this is the most intractable. Apparently no hard data are available to substantiate or repudiate the commonly held belief that property values decline when mobile homes move into the neighborhood, but this example seems to be a clear demonstration of the proposition that thinking makes it so: If people generally believe that mobile homes lower neighboring property values, then the neighboring property does in fact become less desirable, and consequently less valuable.

The heat can somewhat be reduced, however, by identifying the specific elements of the controversy. For example, objections to a mobile home park in a neighborhood may be based not on mobile homes per se but on the increased density and traffic that will result—i.e., the same type of objections that would arise if the proposed development were an apartment complex. In this case, the wise move may be to regulate the location of mobile home parks in the same manner as other high-density residential developments rather than relegate them to industrial or commercial districts. Or the objection to individual mobile homes in a residential area may be based on the grounds that their presence would destroy the "character" of the neighborhood. To the degree that preserving neighborhood character is a legitimate basis for exercising the local police power, this objective might be achieved by establishing minimum floor space and setback requirements, rather than by making a complete, blanket exclusion of mobile homes. The point is that when dealing with the emotional issue of mobile homes and neighboring property values, isolation of the particular issue involved makes the problem somewhat more manageable and the answer easier to find.

—Michael Brough

6. See N.C. GEN. STAT. § 105-285.

7. See N.C. GEN. STAT. §§ 105-285 through -287.

8. N.C. GEN. STAT. § 105-283.

9. N.C. GEN. STAT. § 105-367.

10. N.C. GEN. STAT. § 105-366.

11. N.C. GEN. STAT. § 105-367.

12. N.C. GEN. STAT. § 105-355(a).

13. N.C. GEN. STAT. § 105-355(b).

14. N.C. GEN. STAT. § 105-355(a)(2).

15. See N.C. GEN. STAT. § 105-355.

hibits the imposition of a state or local property tax on personal property of nonresident servicemen that is not used in a trade or business.¹⁶ Thus, for North Carolina cities and counties to have any chance of taxing mobile homes that belong to nonresident servicemen, the mobile homes—or at least some of them—would have to be treated as real property. It would be possible, of course, for the General Assembly to require that all mobile homes, or those meeting certain conditions of attachment to land, be taxed as real property. Many states have enacted statutes classifying mobile homes as real property.¹⁷ This device has not, however, met with success under the Soldiers' and Sailors' Civil Relief Act. Although there has been no definitive decision on the issue by either the U.S. Supreme Court or a circuit court of appeals, two federal district courts have held that state statutes classifying certain mobile homes as real property do not enable the states to tax mobile homes belonging to nonresident servicemen.¹⁸ In a Pennsylvania case, a county sought to impose a property tax on mobile homes owned by nonresident servicemen pursuant to the Pennsylvania statute that classified as real property those mobile homes that either were permanently attached to land or received electric, water, and sewerage services. The mobile homes in question were not permanently attached to land but were connected to water, electric, and sewerage facilities. The federal district court granted the motion of the United States for summary judgment. In so doing, the court stated that determination of the scope of a federal statute is a federal question and state labels are not conclusive. The court found the real property classification to be an artificial designation because the property still retained the basic characteristic of personal property—mobility.

In the other case, a county in Tennessee attempted to tax mobile homes of nonresident servicemen pursuant to a state statute that classified as improvements to land, and therefore as real property, mobile homes that are "on a foundation, or underpinned, or connected with any one utility."¹⁹ Reasoning in the same fashion as the Pennsylvania court, the Tennessee federal district court held that the mobile homes in question remained personal property within the meaning of the Soldiers' and Sailors' Civil Relief Act, regardless of the Tennessee statute. The lesson of these two cases would appear to be that even a real property classification will not succeed in subjecting

the mobile homes of nonresident servicemen to local property taxes.

Efforts to remove the mobile homes of nonresident servicemen from the property tax base entirely and to tax them through some form of excise or license tax would also appear to be foredoomed. A state or local license tax could be imposed upon all mobile homes, including those belonging to nonresident servicemen, but if the amount of the tax is based wholly or in part upon the value of the mobile home or is more than the amount actually necessary to cover the cost of licensing and registering the property, the tax would almost certainly be held an attempt to circumvent the Soldiers' and Sailors' Civil Relief Act.²⁰ The 1974 Joint Legislative Committee on the Tax Structure of the Local Units of Government concluded that if mobile homes of nonresident servicemen are to be made subject to local taxation, Congress must amend the Soldiers' and Sailors' Civil Relief Act;²¹ this conclusion appears to be unimpeachable.

FROM THE STANDPOINT of local tax officials, the two major problems involved in taxing mobile homes are getting the homes listed for taxes in January, and then collecting the taxes on the homes that have been listed. Both of these difficulties are caused by the ease with which mobile homes can be moved without the knowledge of the local tax officials. To assist local governments in listing mobile homes for taxes, G.S. 105-316(a)(1) requires every operator of a park or storage lot who rents space for three or more house trailers or mobile homes to give the county tax supervisor, as of January 1 each year, a roster listing the description and owner of each mobile home situated in his park or lot. The 1974 Joint Legislative Committee on the Tax Structure of the Local Units of Government has proposed two bills that would help local governments list mobile homes and collect taxes on them.²²

The first bill²³ would add a new G.S. 153A-138 authorizing counties to enact ordinances to provide for the annual registration of mobile homes. As part of the registration process, counties could require the display of a sticker or other device as evidence of registration. No fee could be charged for registration. Through enactment of an ordinance pursuant to this statute (if it becomes law), a county could better determine where unlisted mobile homes are located and maintain a record of where new mobile homes brought into the county are situated.

The second bill²⁴ would add a new G.S. 105-316.1 *et seq.* to require a permit before a mobile home may be

16. See 50 U.S.C. App. § 574.

17. See, for example, Maine [MAINE REV. STAT. ANN., Title 36 § 551], Maryland [MD. CODE ANN., Art. 81, § 19(c)], Michigan [MICH. STAT. § 7.2(1)], New York [N.Y. R. PROP. TAX LAW, § 102(12)(g)], PENNSYLVANIA [PA. STAT., Title 72, § 5453.201], Tennessee [T.C.A. § 67-612], and Texas [TEX. STAT., Title 122, Taxation, Art. 7146].

18. *United States v. Chester County Board of Assessment and Revision of Taxes*, 281 F. Supp. 1001 (E.D. Pa. 1968); and *United States v. Shelby County*, C.C.H. State Tax Review, Nov. 19, 1974 (W.D. Tenn. Oct. 10, 1974).

19. T.C.A. § 67-612.

20. See, *California v. Buzard*, 382 U.S. 386 (1966).

21. REPORT OF THE JOINT LEGISLATION COMMITTEE ON THE TAX STRUCTURE OF THE LOCAL UNITS OF GOVERNMENT (Jan. 9, 1975), p. 6.

22. *Id.* at 6 and 7.

23. H 250-S 212 (1975 General Assembly).

24. H 251-S 191 (1975 General Assembly).

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BOOK REVIEWS

LAND-USE PLANNING: CASES AND MATERIALS, by E. F. Roberts. New York: Matthew Bender & Co., 1971. 1363 pp. looseleaf. \$17.50

A "casebook" is essentially a collection of materials from which a law school course is taught. It includes the opinions of outstanding or controversial cases, the text of some statutes and ordinances, and possibly some relevant background materials. Depending upon the professor's approach, the casebook may be organized either in terms of problems or in a logical subject-matter sequence and may include digests of other cases of interest, or simply give citations. As such, it is not the type of book that anyone would read through but instead is an organized collection of "ideas" and "leads" for everyone who is not using it in a course.

Until comparatively recently, very few casebooks have been available in the area of land-use planning and regulation. With increased public interest in the environment, however, there has been a veritable explosion of such works. Among the better ones are Jacob Beuscher and Robert Wright, *Land Use* (1969); Charles Haar, *Land-Use Planning* (2nd ed., 1971); Donald Hagman, *Public Planning and Control of Urban and Land Development* (1973); Jan Krasnowiecki, *Housing and Urban Development* (1969); George Lefcoe, *Land Development Law* (1966); and Daniel Mandelker, *Managing Our Urban Environment* (2nd ed., 1971). Professor Roberts' collection can be added to this list.

Only a law professor would be interested in having a collection of such books, but practicing lawyers and planners will find at least one of them a valuable addition to their libraries. — P.P.G.

HOUSING IN AMERICA: PROBLEMS AND PERSPECTIVES, edited by Daniel R. Mandelker and Roger Montgomery. New York: Bobbs-Merrill, 1973. 523 pp. \$9.95.

HOUSING SUBSIDIES IN THE UNITED STATES AND ENGLAND, by Daniel R. Mandelker. New York: Bobbs-Merrill, 1973. 226 pp. \$9.50.

One of the most difficult problems confronting governments and economic systems is how to provide adequate

shelter at reasonable costs for all their citizens. Society seems to lurch from public housing to mobile homes to new towns to new factory-produced units to rent supplements to housing code enforcement to condominiums, with no consensus as to where it should be going, much less as to how best to get there.

The problem's intractability, of course, results from the incredible maze of sub-issues that make it up. Some of these issues focus on "adequacy" of the individual housing unit. Some focus on its environmental setting. Some focus on appropriate roles of government and the private sector. Some focus on measures to reduce costs: of construction, of land, of financing. Some focus on the merits and effects of various methods of distributing subsidies. Some focus on social implications and the "self-image" mystiques associated with housing.

This being the nature of the field, it is hardly surprising that the newcomer has difficulty recognizing issues and their interconnection. It is for that person that Mandelker (a law professor) and Montgomery (a professor of architecture and urban planning) have gathered their book of readings, *Housing in America*. They have set a goal for themselves of producing a basic "reader" for use in undergraduate urban studies programs, graduate courses in city planning, and professional courses in law, architecture, or social work. Obviously this diverse anticipated audience requires that the selections presented avoid "jargon" and undue complexity, and this relative simplicity is the value of the book for the layman who is no longer engaged in formal studies.

Old-timers in the housing field will find little new, but the book is well organized and useful as a quick "refresher." It is not exhaustive as to any issue, but it covers many issues well. The professors must be awarded an "A" for their effort.

Mandelker's comparative analysis of housing subsidies in the United States and England takes one set of issues from the general reader and develops it in much more detail. Those seeking a quick and easy solution to housing problems will be dismayed, because Mandelker's thoroughness turns up many complexities. Perhaps this is to be expected. As he points out in his introduction,

It is a political paradox that, even as housing conditions improve in both England and the United States,

housing problems are attacked with greater initiative and housing issues more than ever receive public attention. This increasingly political debate on housing policy, and the involvement of a wider range of interest groups in the policy-making process, have combined to make decision-making on housing issues more difficult to achieve than ever before.

And in his conclusion,

Unfortunately, the rhetoric of public debate and argument often calls for an approach to housing subsidy programs which the legal and administrative system is not capable of delivering, and which national budgets are unable to finance. The more realistic look at our housing subsidy programs which we have undertaken should point the way to less dramatic but, in the long run, more effective approaches to the housing subsidy question. There are no easy solutions, although our discussion has suggested that the path of change lies in the direction of more and not less centralization of housing subsidy and related programs, and more and not less government intervention in the housing market.

Withal, Mandelker is to be commended for a major contribution, which should be read by all who are charged with finding new approaches to this old problem.

— P.P.G.

LABOR RELATIONS LAW IN THE PUBLIC SECTOR, by Russell A. Smith, Harry T. Edwards, and R. Theodore Clark, Jr. Indianapolis: Bobbs-Merrill, 1974. Pp. xxvii, 1206. \$18.50. Statutory Supplement: Pp. 155, \$4.00.

In recent years, the impact of federal law on state and local governmental personnel management has increased enormously. During the past decade, thousands of suits have been brought under the Civil Rights Act of 1871 against state and local governments by public employees alleging violations of their federal constitutional rights. For years, various health and welfare grant programs have made federal funds contingent upon development of merit system personnel policies, and the general revenue-sharing and community development block-grant revenue-sharing laws also contain provisions that prohibit discrimination (including employment discrimination) in the use of federal funds. Title VII of the Civil Rights Act of 1964—which forbids employment discrimination on the basis of race, color, religion, sex, or national origin—was extended to local governments in 1972. And in 1974, the Fair Labor Standards Act (governing minimum wages and overtime pay), the Equal Pay Act, and the Age Discrimination in Employment Act all were made applicable to state and local governments. In light of this recent history, it is hardly surprising that Congress is now considering legislation that would guarantee collective-bargaining rights to all public employees.¹

1. During the last session of Congress, two bills mandating collective bargaining in the public sector were considered—H.R. 8677 and H.R. 9730. The first established a comprehensive federal regulatory system governing public employee labor relations, a system analogous to but separate from the system governing labor relations in the private sector. The second bill removed the exemption of public employees

Most observers believe that the question is not if but when such legislation will pass.

If federal legislation mandating public employee collective bargaining is passed, this text by Smith, Edwards, and Clark² may become an important resource in North Carolina. It is written principally as a law school casebook, but the exhaustive treatment of the subject matter, the liberal inclusion of textual commentary, and the numerous citations extend its usefulness far beyond the classroom. In fact, two other reviewers have disagreed about the book's value as a law school text but concede its value to practitioners.³

One must say that this book *may* be rather than *will* be valuable in North Carolina because of its format and the nature of the pending federal legislation. Unlike the situation in regard to labor relations in the private sector—in which the important law is almost exclusively federal—great variety exists in the fifty states with respect to systems for regulating public employee labor relations. Consequently, the authors of this text proceed on an issue-by-issue basis, presenting statutory citations and case law from both courts and administrative boards that suggest how various jurisdictions attempt to respond to an issue, and including additional commentaries that offer other solutions. Separate chapters discuss the right to join and form unions, the establishment of the collective-bargaining relationship, the obligation and duty to bargain (including a substantial set of materials on the important and controversial question of the scope of bargaining), union security in public employment, union collective action (the right to strike and picket), settlement of collective-bargaining impasses (mediation, fact-finding, arbitration), and enforcement of the collective-bargaining agreement. Each of these issues needs careful consideration as state legislation is drafted and interpreted, and if North Carolina is forced by federal law to adopt its own public employee collective-bargaining legislation,⁴ this text and statutory appendix⁵ may prove a valuable re-

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from the coverage of the National Labor Relations Act. As far as this author has been able to determine, only the latter bill has been reintroduced in this session of Congress (as H.R. 77).

2. Russell A. Smith is emeritus professor of law at the University of Michigan; Harry T. Edwards is professor of law at the University of Michigan; and R. Theodore Clark is a partner in the law firm of Seyfarth, Shaw, Fairweather & Geraldson in Chicago.

3. For a more extensive critique of the value of *Labor Relations in the Public Sector* as a classroom text, see the reviews of this book by R. Moberly, at 60 CORNELL L. REV. 323 (1975), and A. Anderson, at 73 MICH. L. REV. 215 (1975).

4. As introduced in the last session of Congress, H.R. 8677 (*supra*, note 1) included a section providing that a state could be exempted from the act's provisions if it adopted a system for regulating the relationship between public employers and employees that was "substantially equivalent" to the system provided for in the federal act. It is possible that if federal legislation is passed regulating public-sector collective bargaining, states will be allowed to develop their own systems as alternatives, within federal guidelines.

5. In addition to several relevant federal acts, the statutory appendix contains the complete text of various public sector labor relations acts from ten states.

A MUNICIPALITY SURVEYS ITS CITIZENS

Larry Mazer and Kenneth Andrews

WHAT IS A CITIZEN SURVEY? Simply put, it is the science and art of asking questions of citizens and receiving their answers. Since a major part of oral communication is based on the question and answer type of interchange, one might conclude that surveying is easy to do. Right, surveying is easy to do—but it is hard to do right. This article will explain how Washington, North Carolina—population 8,990—developed and implemented a citizen survey. Washington's experience can help similar small communities accomplish a task that has normally been considered beyond their financial, and possibly staff, capabilities.

How is a citizen survey made, and what use can it be to local government? The citizen survey is similar in technique to that used in the U.S. Census of Population (asking questions and receiving answers) except for two critical differences. First, the Census tries to interview a representative from each and every household in the country. A survey, on the other hand, takes into account the extreme costs involved in total interviewing and selects a sample of the population that will hold constant the characteristics of the total population concerned. This sampling process has been refined to the point that the Harris and Gallup polls have to interview only a few thousand people to find out what a nation of 200 million people is thinking. Second, while a census deals mainly with descriptive questions (What is your age? How many rooms in your dwelling?), a citizen survey emphasizes attitudes or perception of services (Are streets clean? Is street lighting adequate?). A citizen survey is an instrument of measurement—like a thermometer or gas gauge—but this instrument can tell city officials what their clients, the citizens of that city, are thinking.

To understand the kinds of uses a citizen survey can have, Washington's rationale for undertaking such a project should be examined. The city staff of Washington had four problems:

(1) In response to federal Community Development legislation (CD) the city had begun a citizen participation process designed to influence the expenditure of both federal and local resources. Even though this process was very effective, there was some fear that the opinions of many people would be overlooked because they do not attend or speak out at special hearings, ward meetings, or council sessions.

(2) City staff realized that while they were responsible for assessing community needs (part of the CD process), some needs might be overlooked because the staff did not personally perceive them as needs, even though for some citizens these needs definitely exist.

(3) Once CD funds were received (Washington is "hold harmless" and was "entitled" to \$227,000), the city would be responsible for performing a one-year evaluation of how the money was spent. One way to do this would be to show how the perceptions of citizens had changed between the time before CD activities began and the end of the program.

(4) The city government, under the leadership of a new city manager, was trying to improve over-all municipal management and saw the citizen survey as a quantifiable justification for improving productivity and effectiveness of services.

All four of these problems led the city's administrative staff to seek a means of obtaining information on the way the "average citizen" felt about his/her city and its services to help make the Community Development process work in Washington—in short, a sample survey.

Once this decision to make a survey had been reached, city staff joined with staff from the State Division of Community Assistance to analyze various survey alternatives and choose the one that most closely met the city's needs. The alternatives that were examined were personal interviews, mail surveys, and telephone interviews. Table I illustrates some of the positive and negative characteristics of each alternative considered. After reviewing these alternatives the staff decided that a personal interview survey, although much more difficult to administer, offered the most valid data and allowed a wider range of questions to be asked.

The decision to use a personal interview format elicited a number of biases against this type of survey. The arguments against a long door-to-door survey ran to such comments as "people don't want to be bothered and will refuse to be interviewed," "people are distrustful and will call the police," and "people won't take the time for long interviews." In actual fact:

—Only 15 people, or 5 per cent of the sample, refused to be interviewed.

—64 per cent of people interviewed had never been interviewed before.

Table 1

Positive Aspects	Negative Aspects
<i>Mail Survey</i>	
Inexpensive, minimal manpower to perform (mainly clerical)	A low rate of return, non-respondents may differ significantly from respondents in terms of age, race, sex, and income, biasing the results and limiting utilization of the information.
<i>Telephone Survey</i>	
Less expensive than personal interview; efficient use of interviewers since no travel time between residents is involved.	Excludes those who do not have phones or who have unlisted numbers; time-consuming questions would have to be avoided because the attention span of a respondent on the telephone is limited; interviewer training is necessary.
<i>Personal Interview</i>	
A more complex survey is possible (face-to-face interviewing increases the attention span of the respondent); use of dwelling units as the sample unit gives <i>all</i> citizens an opportunity to be surveyed.	Expensive, time-consuming; extensive interviewer training is necessary; professional interviewers cost between \$3 and \$4 an hour. Volunteers can be used, but reliability goes down.

—No calls were made to the police (this can be credited in part to good advertising and the use of local citizens as interviewers).

—Once started, none of the interviews were terminated (people seemed to appreciate the chance to talk about their city). The interview forms had eleven legal-size pages and took about half an hour to administer.

In making all decisions relating to the Washington survey, a standard rule was to bring as many professional resources into the decision-making process as financially feasible. This began with identifying two books that were invaluable: *An Introduction to Sample Surveys for Government Management* by Carol Weiss and Harry Hatry (an Urban Institute publication), and *Measuring the Basic Effectiveness of Municipal Services* (an International City Management Association publication). For example, the final questionnaire came almost entirely from the second publication.

In addition to books (those cited are only two among many), a local university or technical school can provide statistical and data processing support, and establishing a relationship with such a resource is virtually essential. Without this support (and hopefully it will be given gratis), a large survey will be almost impossible to implement effectively. In Washington, free technical assistance was given by East Carolina University's Regional Development Institute and Department of Political Science. Most universities have expertise in this area, and the Institute for Research in Social Science at the University of North Carolina at Chapel Hill is a recognized expert in the field of surveying.

The process employed in Washington had six basic components: Survey Planning and Design; Developing the Sample; Developing the Questionnaire; Interview-

ing; Editing, Coding, Key punching, and Tabulation of Data; and Results.

Survey Planning and Design included evaluating survey alternatives, as discussed earlier; setting up a survey timetable; planning for publicity; and identifying additional resources. In setting up the Washington timetable, the major problem was to complete the interviews by Thanksgiving: Christmas shopping after that day would seriously hamper evening interviewing.

Wednesday evenings produced an unusually large number of not-at-homes (presumably because of church activities). As a result of this "unforeseen" circumstance, the time allotted for interviewing had to be expanded. In any survey effort, some kind of delay will almost certainly occur during the interviewing process; therefore an estimate of the number of interviewers, the number of interviews per day, etc., should be conservative.

Developing the Sample is a most critical step of the survey process and should be done with the help of someone familiar with survey methodology, since a faulty sample makes comparisons between the group interviewed and the total population impossible. In survey work, the two essential concerns are external validity and internal validity. External validity refers to the ability of the survey to make statements about the total population based on interviews with a small percentage of that population. Internal validity, which will be discussed in the next section, refers to the ability of the questionnaire to reflect adequately what the respondent is thinking.

In Washington, external validity was assured partly by the completeness of the list used to draw the sample. In all sample surveys a list of potential respondents must be developed; and this list often is the major flaw in a survey design. Use of telephone listings, utility billings, or tax rolls all create an inherent bias in the sample, since they exclude a particular type of person from having the opportunity to be interviewed. As part of the city's Community Development program, the city planning staff had prepared a housing inventory that located every dwelling in the city and rated its structural soundness (standard, deteriorating, dilapidated). Since every dwelling in the city was on that inventory, the assumption was that a sample drawn from that list would give everyone the possibility of being chosen.

In addition to assuring a valid sample, the sample design was concerned with two other factors: equity of service; and assurance that the socioeconomic characteristics of each neighborhood would not be disturbed. From the beginning it was realized that comparisons between parts of the city would be as important as total city data so that the equity in which services were provided could be determined. Census enumeration districts were used to divide the city into subsections to facilitate this type of comparison. An enumeration district (E.D.) map was used because the E.D.s were roughly contiguous with actual neighborhood boundaries and allowed easy comparisons with 1970 census data.

The second factor—assuring that neighborhood characteristics would not be disturbed—was accomplished by stratifying the sample according to structural soundness of the dwellings. If an E.D. had 50 per cent of its dwellings standard, 25 per cent deteriorating, and 25 per cent dilapidated, the sample drawn from that E.D. kept that rate constant. Thus, if eight homes were chosen, four were standard, two were deteriorating, and two were dilapidated.

The part of the sampling process that most confuses the layman is the sample size. This aspect of the sampling process usually includes discussions of statistical reliability and sampling precision. Since it has been established that a sample as small as 100 people can be statistically valid enough for purposes of the survey, the decision on size of the sample was based on three other factors: (1) the number of interviews that could be accomplished given the constraints discussed under Survey Planning and Design, above; (2) the need for a large enough sample so that decision-makers would accept the data without having to be given a statistical explanation of sampling; and (3) the need for a large enough sample so that cross-neighborhood comparisons could be made with some confidence. Given these three concerns, the decision was made to sample 10 per cent of all dwelling units in the city, or 287 planned interviews.

Once these decisions had been made, the final sample was determined by numbering each dwelling unit in an E.D. and selecting, by means of a random table of numbers, 10 per cent of the units within the three structural categories.

Developing the Questionnaire probably represents more of the "art" of survey work than the "science," as exemplified in the last section. To insure internal validity, the questionnaire must ask questions that are simple to understand and easy to respond to. The decision on how a question is worded is based largely on the perception of what the community will understand. For example, if a park is officially called Veterans Memorial Park but is commonly called East Side Park, the latter name (or both) should be used in any questions about that park. (In Washington, maps were provided that labeled public facilities). While no cookbook is available to assure a perfect questionnaire for a community, there is a shortcut that can save time and improve the final product. Rather than start from scratch, the Washington survey was adapted from a survey used in St. Petersburg, Florida, by the International City Management Association. [Two other sources of surveys are *Obtaining Citizen Feedback* (the Urban Institute) and *Household Survey Manual* (1969. Executive Office of the President, Bureau of the Budget).] The ICMA survey was helpful because it provided a basic survey format that was very reliable. Also, many of the questions from the ICMA survey were used verbatim in the Washington survey because they met local needs. Approximately one week was spent reviewing the ICMA survey, restructuring, deleting, and adding

questions to the basic format. The result was an eleven-page survey that touched upon almost every governmental function of the city.

The questionnaire development process in Washington had some shortcomings. Ideally it should have begun with an articulation of goals and objectives from the city department heads. These goals and objectives would then have been translated into measurable criteria for which data could be obtained by a citizen survey. Unfortunately, in Washington, departmental heads never became deeply involved in the survey effort, and the questions resulted from an administrative effort rather than from a department (line) effort. Noninvolvement of department heads should be avoided because the data that result from a survey in which they are not involved are not as useful to the head and may be subject to valid criticisms such as "If I wasn't needed in the beginning to develop questions concerning my department, why expect me to get involved in using the information?" In Washington, low involvement of department heads in developing the questionnaire came about because they did not fully understand the survey process and its purpose. Educating department heads in this regard may be time consuming and require outside help, but it should be done and done well before the questionnaire development process.

In reverse order, the Washington survey data will be used to develop goals and objectives by department heads, since it has established a quantifiable base for future efforts. Although this approach represents backward logic, pragmatically it seems more feasible and should be considered as one way of getting people to think in terms of measurable objectives. Although most of the survey questions were designed to assess the perception of supplied services, some were designed to identify desires for services that were not supplied. In this way survey data can also help develop goals and objectives.

Once the questionnaire is completed, some sort of pre-test should take place as a final review of the form. In Washington this was accomplished by extensive review by numerous professionals and review by the actual interviewers. This is the absolutely minimum type of pre-test that can be allowed. Using a previously administered questionnaire as a guide can decrease the need for extensive pre-testing, but those questions that are new should be examined thoroughly.

Interviewing represents a departure from both the structural problems already discussed and the final data tabulation and analysis to come. Although superficially few complexities exist in the interviewing process, interviewing is a time-consuming and demanding activity that calls for skills in organization, interpersonal relations, training, and review. It should also not be taken lightly, since faulty interviewing can destroy a survey's value.

In Washington most interviewing was done by the planning staff and a core group of older citizens; some interviewing was done by civic club members and high school students (accompanied by an adult). Getting

volunteers sufficiently dedicated to administer this survey successfully is difficult. In Washington as the survey lost its novelty, volunteers became scarce. The administrative staff generally felt that a token payment of \$1 or \$2 for each interview completed would probably increase interest without adding an excessive cost to the total survey. Because the number of interviewers fell off near the end of the survey period, approximately 5 per cent of the questionnaires had to be administered by telephone. This was not viewed as a serious flaw in the methodology since all the remaining interviewees were successfully contacted—that is, no one was excluded because he had no telephone. This development illustrates the possibility of mixing interviewing techniques by using telephone interviews in some areas and personal interviews where phoning is not appropriate.

Whether this “profit motive” is made part of the methodology or not, one critical rule in the interviewing process is that the specific house that has been chosen from the sample must be sampled. Interviewers who do not understand the significance of the sampling process may see little difference between interviewing the designated house and the one next door if no one is at home in the first house. They must be made to see that not-at-homes somehow differ from at-homes and thereby represent an important segment of the population. For example, Wednesday evenings not-at-homes may be more church-oriented than those who stay home on Wednesday evening. This one difference could possibly change their attitudes toward many issues. In Washington, two callbacks (at different times) were made in an attempt to reach the not-at-home respondent.

When the door is answered, the interviewer must direct the questionnaire to someone. If the interviewer asks to speak to the head of the household, the final sample will likely be male dominated. Asking for one particular individual (like the head of household) will also increase the number of not-at-homes. These problems were avoided by asking for one of four respondent categories on a revolving basis. The four categories were oldest male, youngest male (over eighteen), oldest female, and youngest female (over eighteen). When an interviewer came to a designated household he/she asked first for the oldest male who resided in the house and was immediately available for interviewing. If no one in this category was available, the interviewer then asked to speak to the oldest female in the house who was available. Whichever person was interviewed, the interviewer would begin his/her next interview by asking for a person in the next category. As a result of this revolving selection process, a more representative age and sex distribution was established.

Editing, Coding, Key punching, and Tabulation of Data is a technical task that will be handled by the resource identified for this purpose. The computer programmer who will organize this effort should take part in developing the questionnaire so that the form of the data

fits the particular program with which he is familiar.

A great deal of editing can be avoided if close-ended or multiple-choice questions are asked. Open-ended questions, which call for written answers, must be reviewed and categorized before they can be tabulated. This type of editing is very time consuming and subject to interpretation errors.

If the questionnaire is close-ended, a self-coding process can also save time. Normally, the data from a questionnaire are transferred to a coding form for keypunching. A self-coding questionnaire can be keypunched directly from the questionnaire, avoiding this coding form completely, which saves both time and possible errors. Although a self-coding questionnaire is a time-saver, all surveys should be examined to make sure that markings are easily readable and erasures are not construed as answers.

Tabulating the data will probably be performed by means of a “canned” computer program, such as the Statistical Package for the Social Sciences (SPSS), that has been designed for this type of purpose. Those who will use the data from the survey will have to supply the programmer with a list of the information they will need. For instance, not only totals on every question but also cross-tabulations between age, use of particular services, and neighborhood will be needed. This list of needed data should be prepared during the questionnaire development process so that questions that are not really useful, however interesting, can be discarded.

RESULTS

Once the Washington data were tabulated, the first part to be analyzed concerned the series of respondent profile questions, which would establish how closely the sample compared with the total population. Table 2 illustrates one segment of this analysis, which indicates a satisfactory correlation between the 1970 census and the sample in terms of race and sex characteristics.

Once the reliability of the survey had been established, the administrative staff began the long process of analyzing the information. The type of information dealt with in Washington's survey can be broken down into the following categories:

- Descriptive information similar to that gathered in the U.S. Census: personal characteristics of age, income, family size, formal years of education, sex, and race; geographic location and housing standard, including provision of housing stock with hot water and indoor plumbing; ownership of motor vehicles; number of years lived in Washington;
- Usage estimates of various facilities, particularly library resources and parks and recreation facilities;
- Reasons for use/non-use of above facilities;
- Adequate delivery of existing municipal services as the citizens define and perceive them: trash and garbage collection, sufficient water pressure, clean water;

WASHINGTON CITIZEN SURVEY

Hello, my name is _____ I am helping the City of Washington interview a select sample of residents in your area to help the government better plan its programs. We want to ask you about the services that are provided by the city and other governments.

The information you give us will be strictly confidential and no names will be recorded or addresses revealed.

Here's the first question I'd like to ask:

-
- | | | |
|---|--|-------------|
| 1. How long have you lived in Washington? | 1 () Less than 3 months (terminate)
2 () 3 to 12 months
3 () 1 to five years
4 () more than 5 years
5 () Don't know | cc <u>9</u> |
|---|--|-------------|
-

- | | | |
|--|--|--------------|
| 2. Are you ever bothered by traffic noises in this neighborhood? | 1 () No, never bothered
2 () Yes, almost daily
3 () Yes, at least once a week
4 () Yes, less than once a week
5 () Don't know | cc <u>10</u> |
|--|--|--------------|
-

- | | | |
|---|--|--------------|
| 3. Are you bothered by polluted air or other annoying odors in this neighborhood? | 1 () No, never bothered
2 () Yes, almost daily
3 () Yes, at least once a week
4 () Yes, less than once a week
5 () Don't know | cc <u>11</u> |
|---|--|--------------|
-

- | | | |
|--|--|--------------|
| 4. Would you say the amount of street lighting at night in this neighborhood is about right, too low (need more lighting), or too bright (more lighting than necessary)? | 1 () About right
2 () Too low
3 () Too bright
4 () Don't know | cc <u>12</u> |
|--|--|--------------|
-

Next, I have a few questions concerning library service in Washington.

-
- | | | |
|--|---|--------------|
| 5. Do you or any other member of this household have a library card for one of the public libraries in Washington? | 1 () No, don't
2 () Yes, have card
3 () Don't know | cc <u>13</u> |
|--|---|--------------|
-

- | | | |
|--|--|--------------|
| 6. How often during the past twelve months have you or a member of your household (including children) used one of the public libraries in Washington, including its main libraries, its branches? | 1 () At least once a week
2 () At least once every 3 months
3 () Fewer than 4 times last year
4 () Not at all
5 () Don't know or don't remember | cc <u>14</u> |
|--|--|--------------|
-

I am going to read a list of reasons SOME people have given for NOT using libraries more often. Please tell me which if any, generally, are TRUE for you or members of this household? Let's start with "Library does not have books I want.": Is this statement TRUE or generally NOT TRUE for you or members of this household? How about "Too busy to go to library"? True or Not True? How about . . .

Sample page from the Washington questionnaire.

Table 2

Race/Sex	1970 Census	Sample	Percentage Difference
Black Male	17.0%	12%	5.0%
Black Female	21.0	25	4.0
White Male	26.8	26	.8
White Female	34.7	37	2.3

—Quality-of-life issues that are not in and of themselves a service that city efforts alone produce but are by-products of the adequate service delivery, citizen action, and the cooperation of business and industry. Included here would be city cleanliness—achieved through a combination of thorough garbage and trash pick-up, private efforts to keep vacant lots cleared off, and pollution abatement programs of business and industry;

—Complaint service and responsiveness of personnel, as well as courtesy and fairness of public officials;

—Citizen participation and its impact on the direction of city affairs;

—Priorities (“areas of greatest concern”).

Four descriptive elements—geographic location, income, age, race and sex (taken together)—were cross-tabulated against each of the remaining 95 variables isolated in the coding process.

Washington's data could be used for either of two purposes: for general description (an overview of municipal services), and as a specific tool of policy implementation. In other words, an analysis can be undertaken to determine whether certain clientele are being excluded in regard to service delivery, so that a strategy could be devised to correct the situation if need be. Fall 1974 will be a benchmark; later surveys will highlight the extent and degree of change in following years.

Where did Washington stand in the over-all assessment, and of what specific use will the data be? Washington tends to be a retirement community; a plurality (29%) of its citizens are over 65, and 51 per cent are 55 or over. The “average” citizen tends to have limited education; 34 per cent went no further than the eighth grade; 48 per cent did not finish school. Forty-three per cent of the families make less than \$5,000 a year (32% of the whole make less than \$3,000). Twenty per cent of the respondents did not own a car and also fall into the “over 55” and “under \$3,000” categories.

Age, low income, lack of transportation, and low education tend to inhibit participation in civic affairs, whether in public meetings or in use of public facilities. Seventy-four per cent of the respondents said neither they nor any member of their family had attended any meeting or hearing of the city council or other city government groups in the last twelve months. Fifty-four per cent of the households had not used the libraries at all in the last year; 51 per cent never used parks and recreational facilities despite the wide variety of programs that are tailored for mass participation.

A municipality has virtually no control over the socioeconomic factors that operate within its population, and can increase participation and use of facilities only by trying to remove the barriers it believes inhibit or limit public access. While changing socioeconomic factors is the process of years (or generations), a city could overcome the transportation barrier, for example, by a publicly owned and operated bus system. One specific question was asked on the survey as a trial balloon for the level of demand for such a system: “If you could call a minibus to your front door, would you use it to make trips around town, such as to shop or visit friends?”

In recent city-wide public meetings, several definite demands have been made for a transportation system. The subject is certain to come up again and will no doubt reach the city council. Response data, then, would give policy-makers information on market demand for a minibus vis-à-vis the expected high costs of start-up, maintenance, personnel, and fuel. This information will also demonstrate whether the articulators of the service demand are really the ones who would use it.

Survey results indicated that 47 per cent of the respondents would never use a minibus, 13 per cent would use it daily, another 18 per cent would use it at least once a week. A transportation system must generate revenue, so one factor in deciding whether to implement would be whether the clientele would be able to pay. The survey indicates that 56 per cent of the riders would be over 55; 47 per cent would come from families making less than \$3,000 a year, and another 21 per cent would fall in the \$3,000-\$4,999 category. This profile indicates that subsidization may be the only way of making such a system

SURVEY TIPS

This is not your chance for the Pulitzer Prize. In developing your questionnaire, aim for the lowest common denominator. Your survey instrument will not be judged on the eloquence of its prose but on whether it clearly asks questions that people with minimal education will understand.

Man's best friend. When selecting interviewers for your survey, be sure to ask them if they are afraid of dogs. An interviewer who is terrified by dogs or cats is going to wreak havoc on your random sample (by avoiding houses) and cause unnecessary delays.

It is better to light one candle than curse the darkness. If interviewers are to conduct surveys at night, make sure they have flashlights to help them find the assigned households.

Know local customs. Your chance of getting the sample you have selected with a minimum of callbacks is much improved if you do not send interviewers out on nights when many people will be at prayer meetings, basketball games, etc. The period between Thanksgiving and Christmas is a poor time to do surveys. Many people will be out shopping.

viable. Although these data do not represent a complete market analysis on a minibus system, they balance rhetoric with a more objective assessment of interest and potential success.

Another use of the data was to determine priorities among Washingtonians. The first priority was public safety. Considerations in the area of public safety were broken down into unreported crime (breaking and entry and vandalism), "fear level" of citizens to venture out into their neighborhood at night, and the popular assessment of police officers' fairness and courtesy. Eighteen respondents (7%) of the total either had had their homes broken into or had had enough evidence to suggest breaking and entry, sometimes as many as four or more times. These incidents were split almost evenly in whether they were reported: the non-reporter tended to be a black who made under \$3,000 and also felt he had "no say" in the way city hall runs things. The stated reason for not reporting was primarily "didn't think it would do any good." Out of 28 vandalizations of personal property, 19 went unreported, half for the belief that no result would come from reporting, the other half because the matter was "unimportant." Vandals did not seek out any racial group, economic level, or geographic location. These data are especially significant since they illustrate that reported crime data alone are not an adequate indicator of crime in the city.

Adequate lighting was a concern of all volunteer surveyors as they tried to navigate Washington streets on a fall evening. They had company. The citizens who chose

street lighting as their area of greatest concern constituted the third largest group in the sample. Fifty per cent of the residents of E.D. 19, a predominantly black section that cuts into the CD impact area, said that street lighting in their neighborhood was "too low." No other district reported such a perceived inadequacy of a physical city service. Those who chose street lighting as the area of greatest concern tended to be over 55, black, and with incomes less than \$3,000 a year. This demonstrates the situation in which a particular socioeconomic group in a concentrated location agree that improved service of a certain kind is desired.

An analysis of 99 variables could extend indefinitely. The uses of survey data are valuable primarily as a feedback device to local officials to tell them when they are or are not doing things right. The data can function as an evaluation tool of their performance efforts.

SUMMARY

Washington set out to give citizens a larger voice in governmental affairs. A citizen survey proved one important way of doing so. Surveying was not beyond the city's staff capabilities since a "team building" approach was used, and many outside resources were eager to help. Surveying was also not beyond its financial limits; since outside services were provided free, the only cost that the city incurred was for staff time. Finally, this case study illustrates that the survey approach is both useful and feasible even for small communities.

BOOK REVIEWS *(continued from page 28)*

source. However, if legislation is passed by Congress that merely removes the exemption of public employees from the National Labor Relations Act (the law that now governs private-sector labor relations), then the value of the treatment in this casebook of other states' experience with their own public-sector labor relations laws will be greatly diminished.⁶

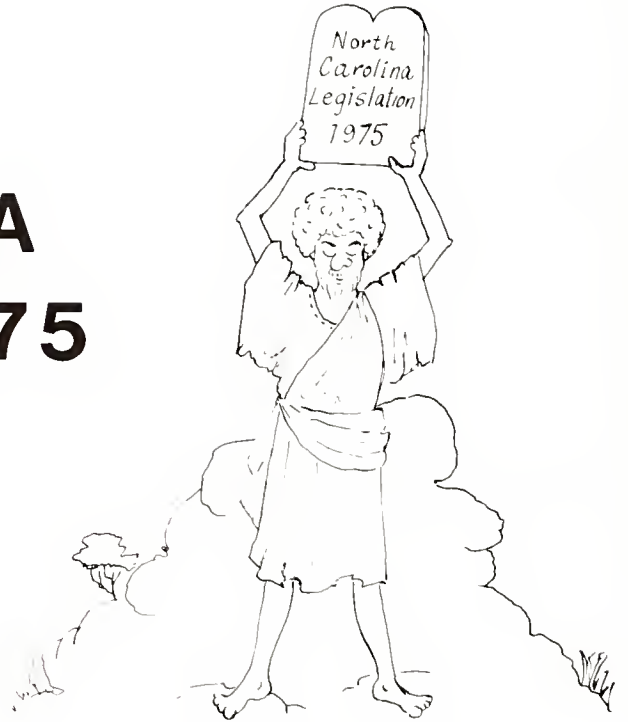
In any event, the book's final chapter, which deals with the political and civil rights of public employees, should be of current interest to all who are concerned about the impact of the law on personnel matters. The authors present materials discussing the extent to which the First Amendment protects public employees' right to free speech and association (including partisan political

activities), procedural due process as a protection against dismissal, and fair employment practices (predominantly race and sex discrimination). However, since the primary emphasis of the book is on collective bargaining, this final chapter only scratches the surface of a complex and turbulent area.

In summary, few would dispute the authors' prefatory statement that "public sector 'unionization' and collective bargaining represent the most important development in 'labor relations' since the post-Wagner Act period of the 1930's and 1940's." This text is the only casebook to deal comprehensively with this development, and it does so in a fashion that renders the book valuable for practitioners as well as students. Nevertheless, whether it will soon appear in the curricula of North Carolina law schools or on the shelves of North Carolina attorneys or public officials depends less on the independent value of the book than on the fate of federal legislation dealing with collective bargaining by public employees. —M.B.B.

6. Even if public employees are brought under the National Labor Relations Act, the experience of individual states in interpreting state legislation using language similar to the federal act may still be relevant. For example, cases discussing whether class size in schools is one of the "terms and conditions of employment" about which bargaining must take place will still be important because there are no existing cases on point decided under the N.L.R.A.

NORTH CAROLINA LEGISLATION 1975



A Summary of Legislation in the 1975 General Assembly of Interest to North Carolina Public Officials

This year the Institute of Government will prepare a special wrap-up of 1975 legislation of concern to public officials in North Carolina. **North Carolina Legislation 1975** will review bills that passed and some of those that did not in the recent session of the General Assembly. It will contain articles written by Institute faculty members in such areas as city and county government education, courts, environment, planning, finance, criminal law, juvenile corrections, motor vehicle law, personnel, and so on. The publication will cost \$5.00, plus 3 per cent sales tax for North Carolina residents. **Send no money.** We will bill you later.

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A STUDY OF SELF-REPORTED DELINQUENCY IN CHARLOTTE/MECKLENBURG

Stevens H. Clarke and Gary G. Koch

SOME PRELIMINARY RESULTS

WHAT CAN WE LEARN about juvenile delinquency from what teenagers say about themselves? A study¹ is now being done based on responses to anonymous self-administered questionnaires by 9,716 junior and senior high school students in Mecklenburg County (including Charlotte and its suburbs) while in school on March 14, 1974. These 9,716 can be regarded as a fairly good representation² of the population attending grades 7 through 12 that day (about 26,250 students). The respondents, mostly between 12 and 18 years of age, included boys and girls in approximately equal numbers. The delinquency study was an extension of a study of drug abuse, knowledge about drugs, and related factors carried out by the Charlotte Drug Education Center and the Junior League of Charlotte with the cooperation of the Charlotte-Mecklenburg public schools and most private schools in the county. (Reports on the drug study are available from the Charlotte Drug Education Center or the Institute of Government.)

A total of 24,224 students completed the drug study questionnaire. Of these, 9,716 students in randomly selected classrooms completed a longer questionnaire that included seven delinquency questions in addition to the 77 drug-abuse questions. This article deals only with the delinquency questions:

1. Have you ever been picked up by the police or called in to talk to the police because of a complaint about something you did?
2. Have you ever taken things which did not belong to you which were worth *more than five dollars but less than fifty dollars*?
3. Have you ever taken things which did not belong to you which were worth *fifty dollars or more*?
4. Have you ever taken a car for a ride without the owner's permission?
5. Have you ever broken into any building, or gone in

without the owner's permission, for the purpose of taking something which did not belong to you?

6. Have you ever forced anyone to give you something which belonged to them (money or anything else) by hurting them or threatening to hurt them?

7. Have you ever beaten up on anyone or hurt anyone on purpose? (Do not count fights with a brother or sister or fights when you were attacked or challenged and had to defend yourself.)

The possible answers to all questions were "never," "once," "twice," "three times," and "more than three times." In this report, we will assume that each student's response about the number of offenses he or she has committed is truthful. In point of fact, some students forget their past conduct, others deny acts they have committed, and still others say that they have done things that they really have not done. However, other research has fairly well established that self-reports like these are sufficiently free from systematic bias to support the kinds of inferences we have drawn from them.³

Certain youth of junior and senior high school age were not included in the study: those who had dropped out of school at age 16 or later (a sizable group), those who had never enrolled in school (presumably a minuscule group), those who were enrolled but absent on the day the questionnaire was administered, and those who were present but chose not to respond.

Of an estimated 12,300 students who would have received the delinquency portion of the questionnaire if they had been present or had not refused to answer, about 79 per cent (9,716) accepted the questionnaire and responded to it partially or completely. Excluding absentees and dropouts from the study leaves a gap that cannot be closed until a more extensive study is undertaken. However, we believe that if all such youngsters had been included, the general conclusions of the study would probably have been the same, because they concern relative rather than absolute magnitudes of incidence of delinquency among various groups.

THE RESPONDING STUDENTS were placed in groups according to how many times they said they had com-

1. This study was begun at the request of the Governor's Committee on Law and Order, which provided funds for data analysis.

2. The sample consisted of randomly selected *classrooms* throughout the county. A few districts were excluded from the sampling because special drug abuse education programs were being carried out there. These districts were not unrepresentatively high or low in drug abuse.

3. For a discussion of this issue, see Travis Hirschi, *Causes of Delinquency* (Berkeley: University of California Press, 1969).

Table 1
Frequency of Offending (unit: person)

Offense	Never	Once	Twice	Three Times	Four or More Times	No Resp.	Total Persons
Larceny \$5-\$50 (weight = 1)	6,988 (72%)	889 (9%)	355 (4%)	178 (2%)	879 (9%)	427 (4%)	9,716 (100%)
Larceny \$50 or More (weight = 2)	8,471 (87%)	354 (4%)	155 (2%)	88 (1%)	242 (3%)	406 (4%)	9,716 (100%)
Joy Riding (weight = 2)	8,232 (85%)	483 (5%)	203 (2%)	106 (1%)	302 (3%)	390 (4%)	9,716 (100%)
Breaking or Entering (weight = 3)	8,109 (84%)	512 (5%)	244 (3%)	113 (1%)	341 (4%)	397 (4%)	9,716 (100%)
Robbery (weight = 5)	8,302 (85%)	458 (5%)	177 (2%)	77 (1%)	313 (3%)	389 (4%)	9,716 (100%)
Assault (weight = 3)	7,530 (78%)	623 (6%)	341 (4%)	147 (2%)	670 (7%)	405 (4%)	9,716 (100%)
Delinquency Level	Delinquency Index			% Respondents			
No delinquency	zero			59.7%			
Low	1-4			14.7			
Medium	5-12			13.0			
High	13-64			12.6			

mitted each of the six offenses (which have been designated here as larceny from \$5 to \$50, larceny of \$50 or more, joy-riding, breaking and entering, robbery, and assault). Table 1 shows the number and percentage of students in each group for each offense. Each offense has not been committed by most of the youngsters, and most youngsters who have committed an offense have done so only once or twice. "Chronic" offenders who admit three, four, or more offenses amount to only a small proportion of the total group. Even though the chronic offender group is small, it accounts for the great majority of the total of offenses committed by the entire group, as Table 2 shows. That table, which gives counts of *offenses* (delinquent acts) rather than *persons*, shows that, whatever the type of offense, most offenses (from 63 per cent to 71 per cent) are committed by youths who admit to three, four, or more offenses.

We may infer from the data in Tables 1 and 2 that (1) most junior and senior high school students in Mecklenburg County are never or infrequently delinquent, and (2) a small minority of the students is responsible for the great bulk of the offenses committed. This suggests a possible strategy for reducing crime attributable to the 12 through 18 age group: if those likely to be chronic offenders after their first or second offenses can be identified, and if effective methods of modifying their behavior exist, a substantial reduction in total juvenile crime might be brought about by concentrating these methods on a relatively few youngsters.⁴ However, a note of caution must be added. These data, as well as data in a recent study of 10,000 boys in Philadelphia,⁵ indicate that most

4. We do not mean to imply that this is the only way to approach the problem of juvenile delinquency and crime, nor do we mean to suggest that there are, in fact, sure-fire ways of identifying potential "chronic" offenders and inducing them to refrain from illegal conduct.

5. See Marvin Wolfgang, Thorsten Sellin, and Robert M. Figlio, *Delinquency in a Birth Cohort* (Chicago: University of Chicago Press, 1973).

Table 2
Number of Offenses by Individual Offenders'
Frequency of Offending

Offense	Type of Offender (Frequency of Offending)				
	Once	Twice	Three Times	Four or More Times*	Total Offenses
Larceny \$5-\$50	889 (16%)	710 (13%)	534 (9%)	3,516 (62%)	5,649 (100%)
Larceny \$50 and More	354 (19%)	310 (16%)	264 (14%)	968 (51%)	1,896 (100%)
Joy Riding	483 (20%)	406 (17%)	318 (13%)	1,208 (50%)	2,415 (100%)
Breaking or Entering and Larceny	512 (19%)	488 (18%)	339 (13%)	1,364 (50%)	2,703 (100%)
Robbery	458 (20%)	354 (18%)	231 (10%)	1,252 (55%)	2,295 (100%)
Assault	623 (14%)	682 (15%)	441 (10%)	2,680 (61%)	4,426 (100%)

*Exactly four offenses per offender are assumed, which of course *understates* the contribution of this offender group.

offenders *desist* after one or two offenses. We must be discriminating in our methods of modifying behavior, because if we simply apply these (presumably expensive) methods to every first offender, we will include a great many youths who would not in any case make a habit of delinquency.

The rest of the data presented here—Tables 3 through 9—deals with factors associated with delinquent behavior among the Mecklenburg County students. All of these data are tabulated in terms of "levels" of delinquency—"none," "low," "medium," and "high" determined as follows. First, a delinquency index was computed for each respondent based on the frequency and seriousness of delinquent acts; a numeric "weight" was assigned to each type of offense based on its seriousness (these weights are shown in Table 1), and the index was defined as the weight of each offense times the frequency committed, summed over all offenses. The index has a value from zero to 64. Delinquency levels were defined in terms of the index value as follows: an index value of zero corresponds to a "no delinquency" level; an index value of 1 to 4 corresponds to "low delinquency"; a value of 5 to 12 corresponds to "medium"; and a value of 13 to 64 corresponds to "high." (The over-all proportions of respondents in these four levels are shown at the bottom of Table 1.) Of the 9,716 students, 387 are excluded from Tables 3 through 9—those who, although they completed other parts of the questionnaire, did not complete at least four of the six delinquent-offense questions. This leaves a total of 9,329 respondents assigned to delinquency levels. Some of the tables do not quite add to 9,329 because questions about sex, race, and other factors were sometimes left unanswered.

The data in Table 3 indicate that boys are far more delinquent (in terms of offenses such as larceny, breaking and entering, and assault) than girls—a predictable finding in view of much other data, both national and

local, that indicate the same thing. Because of this large difference, boys and girls are treated separately in most of the tables.

Table 3 also deals with race. The reason for including race among other factors in the analysis is that it has played, and continues to play, an important role in many social phenomena. The analysis generally suggests that racial differences are unimportant when we control for other factors, as will be shown later.

The lower portion of Table 3, like many other recent American studies based on self-reports rather than on official data, indicates little difference among racial groups with regard to delinquency. Comparing boys and girls separately shows a statistically significant, but very small, difference in the proportions in the high delinquency category (25 per cent for black and Indian boys versus 19 per cent for white boys, and 8 per cent for black and Indian versus 5 per cent for white girls). A tentative conclusion from these data and from similar data in other studies done outside this state is that the incidence of delinquency is a problem of roughly equal dimensions for these racial groups.

Table 4 deals with age. From other data, we would expect the total number of delinquent acts to increase with age; delinquent activity is generally believed to peak around age 15 or 16. The data in our study show no peak with regard to the proportion of respondents at the high delinquency level. A possible explanation is that high school dropouts (whose substantial numbers are obvious from the dwindling totals for older age groups) tend to be

Table 3
Delinquency Level by Sex and Race

Sex	No Delinquency	Low	Med.	High	Total
Boys	2,141 (48%)	675 (15%)	763 (17%)	907 (20%)	4,486 (100%)
Girls	3,404 (71%)	691 (14%)	453 (9%)	262 (5%)	4,810 (100%)

Note: Of 9,329 respondents with index scores, 33 did not indicate their sex.

Race and Sex	No Delinquency	Low	Med.	High	Total
Black and Indian Boys	46%	12%	18%	25%	(1,109)
Girls	68%	12%	12%	8%	(1,284)
White and Other Boys	48%	16%	17%	19%	(3,367)
Girls	72%	15%	8%	5%	(3,518)

Note: For boys only, black/white comparison of high delinquency yielded odds ratio = 1.45 and corrected Pearson chi square = 19.95; this indicates a small race effect that is not an accident of sampling (i.e., is "statistically significant").

Table 4
Percentage in the High Delinquency Level by Age and Sex

Sex	Age	Percentage in "High" Delinquency Category	Total in Age Group
Boys	13 or under	16%	(1,321)
	14-15	23	(1,664)
	16-17	20	(1,187)
	18 or over	22	(308)
Girls	13 or under	6	(1,386)
	14-15	6	(1,753)
	16-17	5	(1,401)
	18 or over	5	(265)

more delinquent than those who remain in school. However, since some research done elsewhere suggests that delinquency decreases rather than increases after dropout, these results are somewhat puzzling.

Table 5 shows the relation of parents' income to delinquency level, without controlling for other factors. A popular theory of delinquency in the 1960s—one now under heavy attack by researchers—was that delinquency is a product of economic deprivation and resulting frus-

Table 5
Delinquency Level by Sex and Income

Sex	Income	Delinquency Level (Percentages)				Total in Income Group
		None	Low	Med.	High	
Boys	Below average	37%	11%	20%	32%	(158)
	Average	49	14	17	19	(1,779)
	Above average	50	16	16	18	(1,898)
	Far above average	39	18	17	26	(484)
Girls	Below average	72%	14%	8%	7%	(123)
	Average	72	14	10	5	(2,162)
	Above average	71	15	9	5	(1,925)
	Far above average	65	14	11	10	(397)

tration due to insufficient opportunity to succeed in legitimate pursuits. Self-report studies similar to the present one have suggested that income in reality plays little or no role in the incidence of delinquency. Here again, the Mecklenburg County data are somewhat puzzling. The proportion of students in the high delinquency category is a good deal higher for boys with below average family incomes than for boys with middle-range incomes; this finding is consistent with some but not all of the other studies. The proportion highly delinquent in the highest income bracket ("far above average") is also a good deal higher than the corresponding proportion in the "average" and "above average" brackets. The resulting U-shaped curve (high delinquency for extremely low and extremely high incomes and lower delinquency for middle-range incomes) is inconsistent with the results of other studies.

The relationship between level of delinquency and fre-

Table 6
Boys Only: Frequency of Police Pick-up
by Delinquency Level and Race

Delinquency Level	Race	Frequency of Police Pick-Up (percentages)					Total
		Never	Once	Twice	Three Times	Four or More Times	
None	Black & Indian	91	8	1	0	1	(500)
	White & Other	85	10	3	1	1	(1,624)
Low	Black & Indian	81	14	2	2	0	(127)
	White & Other	65	21	8	3	3	(539)
Medium	Black & Indian	67	20	7	4	2	(193)
	White & Other	55	23	12	4	6	(559)
High	Black & Indian	50	20	11	10	10*	(272)
	White & Other	36	19	15	8	23*	(620)

*Comparing blacks and whites in high delinquency level regarding proportion with four or more pick-ups: odds ratio = 2.67
chi square = 19.48 (df = 1)

quency of being picked up by the police is shown in Table 6. As might be expected, the higher the delinquency level, the more frequent police pick-up is. One surprise appears, however. It is almost an article of faith among some criminologists that, although the true amount of delinquency is probably about the same for nonwhites and whites, the nonwhite person who commits an offense has a greater chance of being apprehended than the white person who commits the same offense. The Meck-

lenburg County data do not support the belief; to the contrary, they suggest that *whites* are more likely to be picked up. (For example, in the high delinquency category, 23 per cent of the whites were picked up four or more times, compared with 10 per cent of the blacks and Indians.) Of course, these data do not illuminate the issue of differential treatment by the law enforcement system because they do not reflect what occurs after the police take the youth into custody. For example, whites may have a better chance of being released without a police record or formal charges than nonwhites or a better chance of avoiding juvenile court and training school.

Tables 7, 8, and 9 deal with the relationship between delinquency and home and school relationships of the responding youngsters. Here, the results are consistent with studies done in other states and nationally. It should be remembered that while the home or school situation may cause delinquency, the reverse may also be true. For example, a youth's communication with his parents may be poor *because* he is always getting into trouble, or his marks in school may be poor *because* of his delinquent conduct, rather than the reverse. Probably a good way of looking at the home and school data is to regard the home and school situation as *associated* with delinquency and to assume that the causal relationship goes both ways; e.g., a bad home life may cause delinquency, but

Table 7
Proportion in High Delinquency Category by Home Situation and Sex
(Subpopulation totals in parentheses)

	Percentage in High Delinquency Category	
	Boys	Girls
1. Living with both mother and father?		
yes	18% (3,575)	5% (3,736)
no	29% (900)	9% (1,064)
2. Parents' discipline perceived as deserved and fair?		
Deserved and fair	16% (3,315)	4% (3,632)
Undeserved or unfair	32% (693)	13% (765)
Never disciplined	34% (338)	11% (313)
3. Feel comfortable talking to parents about things that really matter?		
yes	15% (2,361)	4% (2,662)
no	26% (2,040)	7% (2,069)
4. Is discipline perceived as deserved and fair, and does child talk to parents about things that really matter? [(2) and (3) combined]		
Deserved and fair; talks	13% (1,933)	---
Deserved and fair; does not talk	21% (1,333)	---
Undeserved, unfair, or no discipline; talks	28% (364)	---
Undeserved, unfair, or no discipline; does not talk	35% (650)	---

delinquency may also cause a bad home life. This still leaves us free to take the position (with which these data are consistent) that if the home or school situation can be improved in certain ways, delinquency may be reduced.

The planners of this study had no part in choosing the kinds of questions students were asked about their home and school. As explained earlier, the delinquency questions were simply attached to a long questionnaire dealing with drug abuse and related factors whose content had been determined long before the opportunity to do the delinquency study arose. Fortunately, a number of questions concerning home and school were asked that were fairly compatible with a widely accepted theory of delinquency—control theory. Simply stated, this theory is that delinquent behavior is the result of a child's not having developed sufficient moral standards or standards of conduct, which in turn results from insufficiently strong "attachments" (ties of communication, mutual respect, and love) between the child and adults—especially parents, other adult relatives, and teachers.⁶

The home and school questions concerned whether the student was living with both parents or in some other arrangement, whether he or she was ever disciplined and if so whether the discipline was perceived as deserved and fair, his over-all grade average (about half the students said their average was A or B), and whether he generally felt good about school.⁷

Table 7 shows the relationship of factors in the home to the proportion of respondents in the high delinquency category. Whether the home was "intact"—i.e., the student lived with both parents—proved to be a relevant factor among the students who were highly delinquent. Other studies have suggested that the controlling factor is not whether the home is broken but rather the quality of the relationship the child has with the person he lives with. However, possibly because this sample is larger than that of many similar studies, we find that the association of home structure (intact versus broken) with delinquency persists even when we control for the quality of relationship.

Discipline and communication in the home are also important, as the remaining data in Table 7 indicate. The youth who is disciplined and feels that his discipline (presumably understood as punishment) is deserved and fair is much less likely to be highly delinquent than the youth who is not disciplined at all or is disciplined but feels that his discipline is undeserved or unfair. The youngster who feels comfortable talking to his parents "about things that really matter" is considerably less

likely to be highly delinquent than one who does not talk comfortably with his parents. These two factors—discipline and communication in the home—have a cumulative (additive) effect, as item 4 in Table 7 shows. The least amount of "high delinquency" is found among those who communicate and also receive at least some discipline and perceive it as fair; the greatest amount is found among those who do not communicate and do not receive discipline, or, if they do receive it, think that it is unfair. We may ask whether communication or fair discipline is more important. The two middle rows of item 4 show that the percentage highly delinquent among boys for "deserved and fair; does not talk" is 21 per cent, compared with 28 per cent for "undeserved, unfair, or no discipline; talks." This suggests that discipline is more important than communication alone. Note, however, that the data do not suggest that punishment *alone* is more important in affecting delinquency than communication with parents; the important factor is whether *discipline is perceived as fair*—i.e., whether discipline is administered in such a way that the child can accept the implicit standards of conduct that are involved.⁸

Table 8 depicts the association between high delinquency and school variables. Grade averages are not only

Table 8
Proportion in High Delinquency Category
by Sex, Grade Average, and Feeling About School

Sex	Grade Ave.	Percentage in High Delinquency	Total	Feel Good About School Most of Time?	Percentage in High Delinquency	Total
Boys	A	17%	(402)	Yes No	15% 29	(2,825) (1,562)
	B	14	(1,673)			
	C	22	(1,826)			
	D	32	(453)			
	F	43	(113)			
Girls	A	4	(503)	Yes No	4% 9	(3,097) (1,620)
	B	4	(2,342)			
	C	7	(1,702)			
	D	15	(200)			
	F	26	(43)			

Combined Variables. Proportion in High Delinquency Category, Boys Only

Feel good; A or B	13%	(1,479)
Feel good; C, D, or F	18%	(1,346)
Not feel good; A or B	21%	(557)
Not feel good; C, D, or F	33%	(1,005)

an indication of what the school thinks of the student's ability and of what the student thinks of himself, but also probably an indirect measure of his communication with the teacher and the degree of mutual respect between student and teacher.⁹ The fact that a student generally feels good about school is probably also a reflection of his

6. This theory will probably appear to be just common sense to most readers; however, it is not the only accepted theory of delinquency and much controversy exists over causes of delinquency among criminologists and others who study criminal behavior.

7. From the point of view of control theory, these questions could have been better phrased but are certainly adequate for present purposes. No information other than what the students themselves indicated could be obtained from the questionnaire—for example, no assessment of the student by the teacher or school (e.g., his official academic record)—could be included.

8. Here again, most readers will probably accept this as just common sense. Sometimes research simply confirms what we know already!

9. This is probably true despite the fact that good teachers try to maintain as good a relationship with low-achieving students as with high achievers.

attachment to teachers, coaches, guidance counselors, and other adults he encounters in school, who (like adult members of his family) may promote his development of acceptable standards of conduct. Certainly if a student feels bad about school most of the time, he is less likely to learn whatever it is teachers have to offer, including whatever they provide in the way of moral teaching. The figures in Table 8 indicate that, for both sexes, the lower the grade average, the greater the chance of being highly delinquent. Not feeling good about school is associated with a greater likelihood of being delinquent among boys, but for some reason, not among girls. Looking at grade average and school feelings combined with regard to boys only, we see that just as the two home factors have a cumulative or additive effect, so do these two school factors.

What do these data suggest with regard to delinquency control policy? First, how a student feels about school may well be a *cause* of delinquency (although probably also to some extent *caused by* delinquency). The data in Table 8 are consistent with the idea that if school could become a more positive or less defeating experience for some youngsters, even for those who now have low grade averages, much delinquency might be eliminated. (Despite their grades, most boys with averages of C or below do feel generally good about school; they are much less likely to be highly delinquent than those with the same grades who do not feel good about school. If the feeling of the latter group about school were to improve, even with-

out an improvement in grades, perhaps their involvement in delinquency would decrease.) The data in Table 7 also suggest some ways of intervention that may help prevent delinquency. If, with outside professional assistance, communication and mutual respect between parents and delinquent youth could be increased, the chance of repeat offending might well be reduced. If the home situation is so poor that intervention efforts do not seem likely to affect it, perhaps attachments to other adults—professional youth workers or supervised volunteers—can be encouraged that will to some extent compensate for the inadequacy of attachments to parents.

In Table 9, which was developed as part of a statistical model of delinquency "risk," the boldface numbers with decimal points represent mean (average) delinquency levels for various groups of boys.¹⁰ The "no delinquency" level has a value of zero, the "low" level has a value of 1, "medium" corresponds to 2, and "high" corresponds to 3, so that to say that a certain group has a mean delinquency level of .57 signifies that the average member of the group has a delinquency level half way between "none" and "low"; and a mean delinquency level of 1.87 would signify that the group's average level would be between "low" and "medium" but closer to "medium." Readers who find this confusing may find it easier just to consider the large numbers with decimal points as

10. A similar model is being developed for girls.

Table 9
Mean Delinquency Levels As Function of Home Situation,
School Situation, and Race ("Risk Clusters" are circled).

Total N = 4,199 Boys (subpopulation n's in parentheses)								
School \ Parents	White and Other (Total 3,174 Boys)				Black and Indian (Total 1,025 Boys)			
	Communicates; Discipline Perceived As Fair		Does Not Communicate or Discipline Not Perceived As Fair or Not Disciplined		Communicates; Discipline Perceived as Fair		Does Not Communicate or Discipline Not Perceived As Fair or Not Disciplined	
	Home Intact	Home Broken	Home Intact	Home Broken	Home Intact	Home Broken	Home Intact	Home Broken
Feels Good About School High Grade Average	① .57 (644)	.87 (54)	.91 (460)	1.14 (65)	① .72 (68)	.88 (42)	1.22 (54)	1.21 (33)
Feels Good About School Low Grade Average	.78 (359)	② .83 (52)	1.20 (404)	1.61 (76)	.87 ② (115)	.94 (71)	1.45 (122)	1.20 (93)
Does Not Feel Good About School High Grade Average	.91 (141)	1.21 ③ (29)	1.06 (210)	1.79 (47)	1.05 (19)	1.38 ③ (13)	1.18 (43)	1.31 (35)
Does Not Feel Good About School Low Grade Average	1.28 (146)	1.30 (23)	1.68 ④ (387)	1.87 (77)	1.11 (69)	1.41 (53)	1.43 (125)	④ 1.68 (70)

	Risk Cluster	White	Black
Predicted	1	.57	.72
Means	2	.88	.94
for Risk	3	1.18	1.31
Values	4	1.71	1.68

measures of delinquency—the higher they are, the more delinquent (on the average) are the students in the groups to which they refer.

The rows and columns of Table 9 are labeled according to various combinations of the home and school factors we have already examined in Tables 7 and 8. The figures are presented separately for white boys and for black and Indian boys—although, as we shall see, the differences between whites and nonwhites disappear when these other factors are controlled for, as they are here. Looking first at the data for white boys, on the left side of the table, let us take as an example the numbers in the upper left corner—.57 with (644) beneath it. These figures mean that there are 644 white boys in the study who communicate with their parents, who receive parental discipline and perceive it as fair, whose homes are intact (i.e., they live with both parents), and who feel good about school and have high grade averages. The mean delinquency level for these 644 boys is .57. The other sets of numbers are interpreted in the same way. The table entries are arranged so that as we read from left to right, we go from a good home situation to a bad one, and as we read from top to bottom, we go from a good school situation to a bad one.

The home and school factors in combination clearly have a cumulative effect. As we move from the top left entry to the right or down or diagonally, we see that the delinquency levels increase. In any row we look at, levels increase from left to right, and in any column, they increase from top to bottom. Furthermore, the results are almost the same for blacks and whites, which suggests a tentative conclusion that race ceases to be a factor once home and school conditions are taken into account.

These results also suggest that a certain level of “risk” (or “delinquency proneness”) is associated with various combinations of home and school conditions. This led us to combine various groups of boys (grouped initially ac-

cording to home and school conditions) into “risk clusters,” as shown in Table 9. (Each risk cluster is identified by an area of the table marked off with solid lines; the number of each cluster is circled.) The mean delinquency levels for all boys in each risk cluster are shown at the bottom of Table 9. With this concept of risk cluster, a very efficient description or “smoothing” of the Table 9 data was generated using statistical techniques developed at the Biostatistics Department of the University of North Carolina at Chapel Hill. The “smoothing” analysis suggests but does not prove that most variation in delinquency may result from home and school conditions. What remains to be done is to investigate how important home and school factors are, relative to other factors that may cause delinquency. It is clear, for example, that even if we control for family and school factors, parents’ social status still has an effect on delinquency. Research now in progress will attempt to measure the relative importance of home conditions, school conditions, social status, sex, age, race, income, and other factors to delinquency.

AT THIS STAGE OF THE RESEARCH, we can conclude that these data yield substantial support for what most readers have probably already concluded from their own experience and common sense: a delinquency prevention program aimed at the individual offender should concentrate on the youngster’s relationship with his parents, teachers, and other adults from whom he can learn standards of conduct. The data suggest that if improvements can be made in relationships with parents (or adults who may play a parental role), delinquent behavior may be reduced, and also if relationships with teachers and feelings about school can be improved. The data also suggest that if improvements can be made in both the home situation and the school situation, the resulting reduction in delinquency will be considerably larger than if we deal with only one of the two situations.

PROPERTY TAXATION *(continued from page 26)*

moved from one location to another. The permit would have to be obtained by the mobile home owner from the county tax collector. The information required in the permit application would include the owner’s name and address, the address or location of the premises from which and to which the mobile home is to be moved, and the name and address of the carrier who is to transport the mobile home. Before the county tax collector could issue the moving permit, he would be required to have proof that all county and city taxes owed by the owner have been paid. Both taxes that are already due and those that are to become due during the current calendar year would be required to be paid. Note that the mobile home owner would have to pay *all* of the city and county property taxes that he owes and not merely the taxes on the mobile home itself.

Manufacturers and retail dealers of mobile homes

would be required to obtain moving permits when they transported a mobile home for resale or to the home site of the original purchaser. They would not, however, be required to pay the property taxes due in order to obtain the permit.

When a mobile home is being moved, the moving permit would have to be displayed near the license tag on the rear of the mobile home. Penalties for moving a mobile home without a permit or for failing to display the permit would be a fine of \$50, or imprisonment for not more than thirty days, or both. Commercial transporters of mobile homes would not be required to obtain moving permits, but they would be required to see that the permit is properly displayed while a mobile home is in transit. Presumably, then, both whoever transported the mobile home without a permit and the owner could be prosecuted for violating the statute.

ALLOCATION AND CONSERVATION: THE TRIANGLE RESPONDS TO THE ENERGY CRISIS

Alfred R. Light, Robert Navazio, and Rose Spaulding

The energy crisis is here to stay. Until 1973 few people thought about "energy" as a problem area. Energy politics was fragmented; different styles of public policy existed for the regulation, promotion, and distribution of each major source of energy: coal, oil, natural gas, electricity, and nuclear fission. Government involvement varied, in part based on the special physical characteristics of each fuel (specific attributes and location), different market forces (demand), and general political debate and policy enactment at the national level.¹

The factor that crystallized the concept of "energy" as one policy arena in the minds of most Americans and forced policy-makers to start thinking about national energy policy was a series of energy emergencies in the sixties and early seventies, culminating in "Energy Pearl Harbor Day, October 17, 1973." Just as oil spills dramatized the environmental crisis, the great Northeast blackout of 1965, natural gasoline shortages and "curtailments" that began to show up in 1968, the heating oil difficulties that hit Americans in the winter of 1971-72, and so on dramatized the energy crisis. But when "a handful of oil-rich Arab nations shut off a few valves . . . Americans (soon) knew the joyride was over. On January 1, 1974, the oil-producing nations dropped the other shoe, so to speak, by more than doubling the price of crude oil."²

STATE ROLE IN A NATIONAL ENERGY SYSTEM

As it assessed, in mid-1974, the way the nation coped with the prior winter's petroleum shortages, the Federal Trade Commission (FTC) concluded that the states had bailed out an incoherent, confusing, and fragmented federal allocation program.³ State governments pointed out problems and advocated their states' interests. North Carolina's state government was a significant factor in this

operation. The Tar Heel state had had two energy study panels operating for several months when the Arab boycott began: Governor Holshouser and the legislature, with some encouragement from interested energy experts at North Carolina State University, had initiated the study efforts about the same time a number of other states began similar ones.⁴

During the fall of 1973, North Carolina officials had to deal with a number of energy problems created by federal programs, guidelines, and decisions. The Federal Power Commission proposed to curtail natural gas supplies to North Carolina industries that fall; Governor Holshouser traveled to Washington to testify against the FPC proposals. Eventually, Tar Heel lawyers proved in court that FPC had not followed the proper procedures for curtailment. The state government thus postponed a natural gas crisis in North Carolina in 1973, although the state continues to confront the problem of natural gas shortages today.

Also, as the federal mandatory petroleum allocations program developed, North Carolina energy officials, under the general direction of retired Admiral Fowler Martin, had to fight to keep a "fair share" of scarce energy supplies coming into the state. For example, federal allocations schemes initially overlooked the fact that Atlantic-Richfield (ARCO) and British Petroleum (BP) had recently pulled their distributors out of the state, and some gasoline distributed from Charlotte outlets was retailed across the border in South Carolina filling stations; the Federal Energy Office originally counted this gasoline as a part of North Carolina's allotment. State and regionally based FEO officials lobbied aggressively during the 1973-74 crisis to get this unfair basis for distribution changed and eventually did.

The state energy office, which evolved from the legislative energy crisis study commission, was responsible for the emergency allocation of 3 per cent of the gasoline and some other fuels coming into North Carolina. The small staff of the North Carolina state energy office handled over 400 requests for emergency fuels from the 3 per cent "set-aside" during February 1974 alone.

1. See David Howard Davis, *Energy Politics* (New York: St. Martin's Press, 1974).

2. S. David Freeman, *Energy: The New Era* (New York: Vintage Books, 1974), pp. 1-2.

3. Committee on Interior and Insular Affairs of the United States Senate, *Mandatory Allocations Program—Oversight* (Washington, D.C.: Government Printing Office, 1974).

4. See Southern Interstate Nuclear Board, *The States and The Energy Crisis* (Atlanta, Ga.: Southern Interstate Nuclear Board, 1973).

Table 1
The Distribution of Taxable Gallons of Gasoline by Region

	1972	1973	1974 if no ¹ crisis	1974 Feb. 74 ² program	1974 uniform ³ program	1973 gals. ⁴
United States	96,566	102,205	109,289	80,010	80,323	78.6%
New England	5,070	5,333	5,626	4,111	4,213	77.1
Mideast	15,843	16,785	17,851	12,743	13,166	75.9
Great Lakes	18,235	19,194	20,397	15,518	15,153	80.8
Plains	8,541	8,975	9,500	7,510	7,098	83.7
Southeast	22,795	24,290	26,333	18,455	18,943	76.0
North Carolina	2,617	2,855	3,074	2,046	2,175	72.2
Southeast	9,949	10,513	11,326	8,539	8,268	81.2
Rocky Mountain	2,872	3,120	3,396	2,453	2,387	78.6
Far West	13,351	13,994	14,860	10,681	11,095	76.3

1. 1974 estimated projects of taxable gallons are based on the average state growth rate of gross gallons reported for the past two years; consequently they abstract from the energy crisis.

2. 1974 actual allocations are the FEO gasoline allocations for February 1974 on an annual basis (excludes Nevada).

3. 1974 uniform allocations assume that the 23.1 per cent national shortfall from the 1972 base is equally distributed among the states.

4. Energy crisis allocations as a percentage of taxable gallons of motor fuel oil as reported for 1973.

Source: Federal Highway Administration and Federal Energy Office data and Advisory Council on Intergovernmental Relations and compilations, March 1974.

Note: This table displays the gasoline shortage as one group of experts viewed it during March 1974. The ACIR documents "current" shortfalls and projects various actual and proposed federal distributions. North Carolina seems to have come off worse than almost any other state or region under the allocation schemes ACIR analyzed.

LOCAL ACTIONS TO MEET THE CRISIS

The FTC report, which praised the states, did not mention the important role that local governments played in helping the states respond to the exigencies of the energy crisis. During the summer of 1974, a research project at the University of North Carolina at Chapel Hill found that the Tar Heel emergency allocation system relied in large measure upon the advice and information provided by local governments. This article, which is based upon the UNC-CH research, describes the local response to the energy crisis in the Triangle Area formed by Raleigh, Durham, and Chapel Hill, concentrating upon the role of municipal governments in those cities. It also summarizes the results of a survey of citizens, gasoline station operators, and local government officials concerning their views on the energy crisis.

The Triangle J Planning District, in which the cities of Raleigh, Durham, and Chapel Hill are located, is not typical of the state. There is some evidence that energy shortages affected this region more than most other parts of North Carolina. The Triangle is a fast-growing area of the Piedmont Crescent and is more affluent and more urban than the state as a whole. Nevertheless, the experience of these cities suggests the kinds of problems and responses most local governments confronted during the energy crisis. The following generalizations are directly relevant only to the Triangle, however.

Only 15 per cent of local government officials involved in the energy problem anticipated an energy crisis before the summer of 1973. Although a few environmentally oriented officials saw the coming crunch, the majority became aware of an energy crisis during the fall of 1973. Early that fall, state military leaders informed city civil defense coordinators about an immediate grave situation: fuel distributors could not meet the demand for heating oil. Colonel John Schoming, Civil Preparedness officer in Durham, estimates that during the energy crisis he received 300 calls from people who could not get heating oil. Raleigh's Russell Capps reports fewer calls, but most of his energy requests also concerned heating oil. Emergency Preparedness officers first determined whether a hardship case was "legitimate," then requested an oil dealer to supply the needed oil and filled out the necessary forms to get the dealer's allotment increased by the state.

The cities also instituted energy conservation measures beginning in the fall. In November Chapel Hill City Manager Chet Kendzior issued a memo to all city employees encouraging a number of conservation measures. The board of aldermen created an Energy Conservation Task Force "to coordinate a systematic, overall plan for fuel reduction." But Chapel Hill officials who dealt with the energy problem during the period say that this task force was of little help. The Chapel Hill Carrboro Merchants Association took the non-governmental lead in helping to conserve energy by discontinuing the use of Christmas lights, cutting other unnecessary lighting, etc.

CITY ACTIONS

By December, however, a new pressing set of problems presented itself to the Triangle—the gasoline shortage. Local officials feel, as many other people apparently do, that oil companies' attempts to drive up prices created the shortage along with the public's panicky buying up of most available supplies in mid-January. Despite their cynicism, local governments in the Triangle responded to the challenge of energy shortages with three kinds of actions: (1) Cities looked for ways to reduce fuel consumption by the city itself; (2) they tried to help make gasoline distribution orderly and equitable, and (3) they searched for immediate ways to reduce citizen gasoline consumption.

The first area, "internal belt-tightening," is more important than it might first appear. According to Orange County's Civil Defense Coordinator Henry Meares, Chapel Hill's government almost ran out of gasoline twice during the winter. Fearing that they might have to cut back on municipal services, Triangle cities took a number of fuel conservation measures: setting back thermostats; requesting city workers to drive slowly, discouraging unnecessary trips in city vehicles, maintaining vehicles better, carefully monitoring gasoline usage, setting limits on supplies for city departments, replacing city cars with compacts and subcompacts, and establishing "stationary patrols" and more foot patrols for police.

City governments, although they had little legal authorization to respond, received a rash of requests from citizens to do something about gasoline shortages. Raleigh, Durham, and Chapel Hill all developed city-wide fuel distribution systems based, necessarily, on voluntary cooperation. Chapel Hill Mayor Howard Lee met with station owners in the city in January and February. Station owners (19 of 27 stations represented) agreed to sell gasoline at only certain hours during the days (8-10 a.m., 4-6 p.m.) and only limited amounts during those hours so that supplies could be stretched to last the entire month. But these meetings were unable to iron out the problem of "preferential treatment" of regular customers.

In Durham Mayor Hawkins faced a different situation. ARCO and BP had pulled out of the state, and FEO allocations to North Carolina had not been adjusted to take this into account; Durham therefore had even fewer gallons of gasoline than it was "supposed to have." Lee Christian, a Durham oil distributor, presented a committee of local oil distributors with an allocation plan partly because federal and state officials had not responded (or, in the case of the state, probably could not respond) to Durham's severe problem. Under the Durham plan, a gasoline customer could fill his tank on only one day a week, which was determined by the last digit of his license plate. This arrangement differed from the Governor's later odd-even plan in which a motorist could fill his tank on any of three days during a week. Originally, Mayor Hawkins was skeptical of his city's plan, but oil retailers approved it and it went into effect February 18. In Dur-

ham confusion existed for a while, but gasoline lines did end shortly after the plan was implemented even though the plan was only loosely adhered to. It may be that the Durham plan was effective primarily because it called state and federal attention to the city's acute problem and thereby increased the local distributors' March allotments.

In Raleigh little substantive action occurred until March. The city council eventually suggested to the Wake County chapter of the North Carolina Service Stations Association that there be uniform pumping hours and a minimum purchase requirement. Both the state president and the local president of the Service Stations Associations opposed these measures. The Raleigh Merchants Association promoted a \$3 minimum purchase regulation throughout the winter, and the county Service Stations Association eventually implemented the suggestion for uniform pumping hours, but by that time (mid-March) the lines had shortened and shortages were disappearing. In a city with 200 service stations, and with the service stations operators' leadership opposed, Raleigh found it difficult to get the coordination and cooperation necessary to make a voluntary program work. When Governor Holshouser made the odd-even program his own, he faced the same problem. While city police did alleviate the gasoline lines problem somewhat by trying to prevent serious traffic problems and clearing intersections, the lines themselves proved rather persistent in Raleigh.

In addition to their efforts to allocate gasoline at the pumps, cities tried a number of indirect measures to help reduce gasoline lines. Chapel Hill briefly considered an emergency bus system; few buses and little fuel to run them were available. In Durham the city and the Downtown Revitalization Foundation organized a computerized carpool system, begun in early February. Few city employees took advantage of the system (on February 28, only 50). "People were asked to join a carpool just as the President was saying the crisis was over," explained one organizer of the system. Raleigh had more success with its city employees' carpooling effort. Of 16,000 forms sent out, 4,000 were returned. However, when Mayor Lightner and Transportation Planner John Hilpert tried to expand the system into a citywide program, results were disappointing (only 1,000 of 20,000 forms returned).

Although local governments were often frustrated in their energy conservation efforts, they did incorporate energy consideration into their thinking about the cities' future. Mass transit is being pushed in Chapel Hill and Raleigh. Chapel Hill began its bus system in August 1974. Raleigh committed itself to \$3.2 million for improvements in its mass transit system and is trying to get additional funding. Concern about adequate bus transportation recently prompted Raleigh to decide to take over the bus system itself. Both Chapel Hill and Raleigh are working on a system of greenways that might make bicycles a more useful method of transportation. Durham's architects have incorporated a number of

Table 2
Gasoline Operators Responding Favorably and Unfavorably
to Government "Energy Crisis" Actions

	Whole Sample		Chapel Hill		Durham	
	Good	Bad	Good	Bad	Good	Bad
National	51.1%	23.4%	60.9%	26.1%	41.7%	20.8%
State	29.5	40.9	15.0	60.0	41.7	25.0
City	40.5	31.1	25.0	20.0	52.0	40.0
	(N = 50)		(N = 24)		(N = 26)	

Source: Survey of Triangle area operators; interviews conducted by Robert Navazio and Elizabeth Saslow.

energy-saving features into blueprints for its new city hall. The new building will have a tiered structure with a skylight to decrease electrical lighting requirements and a sunscreen to cool the building from direct rays, decreasing the need for energy-gobbling air conditioning in the summer.

ATTITUDES AND PERCEPTIONS AT THE PUMP

As reported above, city plans to distribute gasoline equitably depended to a large extent on the good will and voluntary cooperation of fuel distributors and gasoline station operators. A survey of 50 gasoline station operators, conducted during the summer of 1974, reveals that most operators looked favorably upon city plans to prevent lines and to ease the problems resulting from shortages. They were more critical of the state's odd-even and other plans to cope with the crisis.

Operators felt that the federal government could do and had done the most to alleviate energy shortages with FEO's mandatory allocations program. Nevertheless, leading officials of gasoline operator associations and fuel distributors felt that FEO regulations were so unwieldy that they could never really be followed or enforced. Those who had to interpret federal guidelines pointed out that the oil companies were the only ones who could enforce or implement the federal programs. District managers for major oil companies reported that the information that would be needed to make government-controlled fuel distribution operate was not available to the oil industry, much less Washington. For example, a complete distribution system would require knowledge of supply levels at every service station, local distributor, and regional outlet.

Interestingly, both fuel distributors and local station operators pointed, more frequently than to any other reason, to oil company contrivance as the major cause of the gasoline shortage. The solution to the energy crisis rested, according to these professionals, with the federal government and the major oil companies. A significant percentage (29.5%) felt that the federal government's partial and flawed intervention in the 1973-74 winter crisis was so bad that it would be better if the federal

government "stayed out" if another gasoline shortage should occur.

Although gasoline operators were most dissatisfied with the state's tardy voluntary odd-even plan, they felt that the state could be effective in the future if it acts sooner, when shortages appear, and makes its plan mandatory. Operators mostly approved the local distribution plans, especially when they had qualms or criticized the federal allocation program. A survey of service stations made by the American Automobile Association indicates that Durham's plan worked to stop lines in the beginning of March. Data appear to show that lines stopped one or two weeks earlier in Durham than they did in any other major city (e.g., Wilmington, Rocky Mount, Charlotte, Raleigh, or Greensboro). Durham's plan was implemented at exactly the opportune time (March 6), when the new month's supply became available. Locally organized communications networks among station operators are city-wide (and usually no wider). Perhaps the city, which can guide the existing distributor and operator communications network, is a proper unit for organizing emergency fuel distribution plans.

ATTITUDES AND PERCEPTIONS BEHIND THE WHEEL

Ordinary citizens in the Triangle Area agreed with operators and distributors that oil company manipulation was a major cause of the energy crisis and that answers lie

Table 3
Important Causes of the Energy Crises: Citizen Views

	July 1973	Nov. 1973	Mar. 1974
Oil company manipulation	54.4%	71.8%	71.4%
Wastage	57.0	53.3	53.6
Bad planning	49.7	51.8	51.1
Beyond man's control	4.5	50.8	50.0
Overpopulation	38.9	34.4	33.8
Resource scarcity	38.6	32.8	33.4
Mideast war	19.8	30.7	29.7
Lack of supplies	22.9	19.5	18.8
Lack of technology	15.8	10.8	9.9

Source: Energy Problem Social Survey, courtesy of Prof. T. P. Schwartz, Department of Sociology, University of Delaware; Respondents from Raleigh, Durham, and Chapel Hill (N = 200).

Percentages are those who said that the suggested cause was "important."

Table 4

Solutions to the Energy Crisis: Who Can Help?

	July 1973	Nov. 1973	Mar. 1974
Congress	54.6%*	57.1%*	55.4%*
Oil companies	57.0	55.1	54.4
Each American	53.0	51.5	52.3
President	55.4	51.5	50.8
Political leaders	57.8	46.9	47.2
Government officials	61.4	34.2	34.2
Engineers/science	35.6	30.6	30.6
Citizen groups	42.6	30.1	30.0
Businessmen	48.2	20.4	20.7
University	29.3	19.4	19.2
Ralph Nader	29.5	11.2	10.8
Courts	36.8	7.7	7.7

*Percentage of respondents saying "quite a bit."

Source: Energy Problem Social Survey, data analyzed by James Lott and Robert Pierce, Department of Political Science, University of North Carolina at Chapel Hill.

with the oil industry and the federal government, especially the Congress and the President. The 1973-74 shortages worked to strengthen and spread these opinions. Whether an energy crisis exists (real or manufactured) varies in citizen beliefs, as one would expect, with the presence and hardship of the gasoline shortage.

The media's role in enhancing the energy crisis is also significant. The increase in realization of an energy crisis coincides with an increase in media coverage of the crisis. Chapel Hill gasoline station operators almost invariably reported that gasoline lines began there on January 28, the Monday following a weekend of news reports of gasoline lines. Avery Upchurch, executive director of the North Carolina Service Station Associations, remembers that the first report of gasoline lines in the state came on January 22, when Buncombe County's sheriff reported Asheville's pumps running dry. The psychology of the energy crisis (keep your tank "full" at all times, go to a station when you see one open, etc.) helped to make a bad situation worse than "necessary."⁵

North Carolina newspapers had an opportunity to help the situation. Recent studies show that legislators and other state leaders read the state press regularly and rely on their reporting and advice on a variety of issues. However, during the energy crisis, newspaper editorials in the state focused on national issues and disputes and offered little in the way of helpful suggestions or in setting the agenda for state energy policy-making.⁶

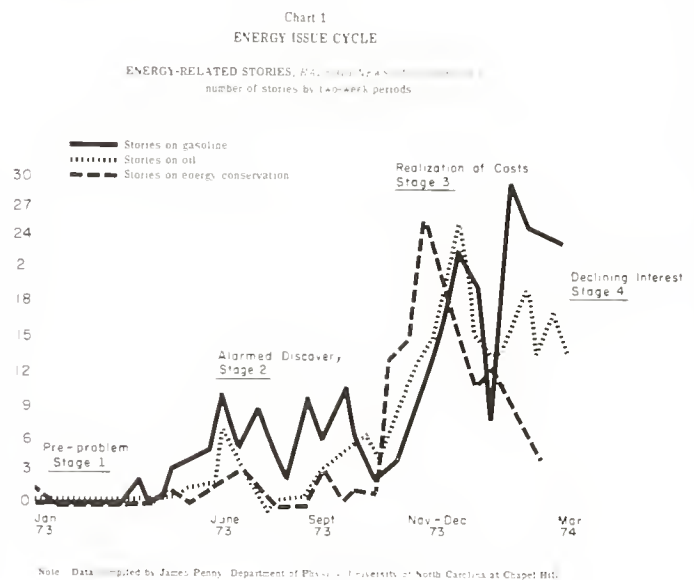
5. Research in the area of the energy crisis psychology is being conducted by Professors Howard G. Miller and F. J. Smith, Department of Psychology, North Carolina State University at Raleigh.

6. William Gormley, "The Press and the Energy Problem: Afghanistanism in North Carolina" paper presented at the North Carolina Political Science Association Annual Meeting, April 4-5, 1975, University of North Carolina at Charlotte.

FUTURE POLICIES

In looking toward the future, both state officials and citizens maintain some ambivalence in their policy attitudes. For example, a majority of legislators (before the fall 1974 elections) agreed with the statement "Increasing energy supplies should not be at the expense of environmental quality." A large majority also agreed with the statement that "environmental regulation should not be so stringent as to inhibit the increase of energy supplies." State administrators seem less ambivalent; they tend to fall on the side of increasing energy supplies with some sacrifice to the environment.

Opinions among citizens and state officials favor a state role in energy conservation. Hefty majorities support some sort of action for increased insulation requirements. Smaller majorities support legislation requiring manufacturers to specify energy usage. Most people also favor a state emergency gasoline rationing plan, although legislators (perhaps looking to the Governor in the "other" party) are less enthusiastic in their endorsement of emergency energy powers for the Governor. Generally, on most state and local issues, legislators and Triangle citizens agree. On national issues, the legislators are somewhat more conservative, e.g., more favorably disposed toward the oil-depletion allowance and less favorably disposed toward a TVA-like federal oil and gas corporation.⁷



The energy crisis was in some ways valuable because it focused attention and spurred action to study and deal with an important problem that will cause trouble for most Americans in the future. At the national level, it

7. Interviews of state legislators conducted by Martha T. Bowles and Mary Kay Stack, Department of Political Science, University of North Carolina at Chapel Hill, during June and July of 1974.

produced a national study of where the nation should go in energy consumption and production, the so-called Project Independence Blueprint. At the state level, it helped to get an energy conservation program going and to help policy-makers understand North Carolina's dependence on "foreign" energy sources (e.g., Texas and Louisiana oil and natural gas). At the local level, it provided an opportunity for the public and private sectors to test their capacity to cooperate effectively on an important community problem. To the extent that contingency plans and procedures for dealing with another gasoline or other energy source shortage were developed, the 1973-74 energy crisis was useful.

The national energy problem cannot have a local solu-

tion but national policy-makers should not ignore local government's potential in implementing national plans for energy conservation and emergency fuel distribution. In a fragmented and incoherent "energy crisis" environment, local governments—acting independent of one another, with little guidance from the other levels of government, and with few resources and little power—helped ease the pain of shortages among their citizens. Before it creates more "creative federalism" bureaucracy in a federal FEA, ERDA, or whatever, Washington might well take a second look at city hall and the county courthouse, although action at all levels of government and intergovernmental collaboration are obviously necessary in coping with this important problem.

Table 5
Policy Proposals

Environmental regulation should not be so stringent as to inhibit the increase of energy supplies.

	Strongly Disagree	Slightly Disagree	Undecided	Slightly Agree	Strongly Agree
Legislators	14.2%	25.0%	3.5%	25.0%	32.1%
Administrators	11.1	11.1	11.1	22.2	44.4

Increasing energy supplies should not be at the expense of environmental quality.

Legislators	3.5	17.8	3.5	35.7	39.2
Administrators	0.0	44.4	33.3	22.2	0.0
Citizens	4.1	11.3	20.5	26.7	37.4

The state legislature should direct the North Carolina Building Code Council to include increased insulation requirements in the state building code.

Legislators	10.7	14.2	14.2	10.7	46.4
Administrators	11.1	0.0	33.3	22.2	33.3
Citizens	3.1	8.2	15.4	30.8	42.6

The state legislature should pass a measure requiring the manufacturers of household appliances to specify how much energy these appliances use up, as a guide to consumers.

Legislators	25.0	10.7	3.5	25.0	35.7
Administrators	11.1	0.0	33.3	22.2	33.3
Citizens	6.2	9.2	5.1	34.9	44.6

The state legislature should pass a bill enabling the Governor to set up an emergency gasoline-rationing program.

Legislators	35.7	7.1	3.5	25.0	35.7
Administrators	11.1	11.1	11.1	11.1	55.6
Citizens	15.4	19.0	8.2	28.2	29.2

Source: Interviews of legislators by Martha T. Bowles and Mary Kay Stack; administrators by Stephen Allred; citizens survey supervised by James Lott; all interviews conducted June-August 1974.

John Coghill. Husband, Father, Civitan Man of the Year, Sunday School Teacher, Church Worker, City League Basketball Coach, High School Baseball Umpire and R.J. Reynolds Leaf Buyer- in-Charge, Multiple Markets.



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