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PROGRAM FOR TAX STUDY CLUBS

IV. TAX ASSESSING

A. Outline

(It is best for one person to have charge of this section)

1. Quadrennial Assessment of Real Estate: (100) +
Revaluation in 1919 by the State. Horizontal reductions in 1921 in most counties.
Ratio of reduction in your county. Ratio of reduction in other counties.
No re-assessment in 1923.
 2. Annual Listing of Personalty: Forms provided by the State. (39)
Taxpayer lists his property on these forms (abstracts). (54, 57)
Tax-lister in each township receives the abstracts and prepares the township taxlist.
Time of listing. (43)
Oath of taxpayer. (61, 62)
Penalty for not listing. (60, 63, 72)
 3. Machinery of Tax Assessing, and Tax Listing:
a. County tax supervisor:
How chosen. (42)
Qualifications. (42)
Powers and duties. (42, 43, 105)
Compensation.
Efficiency of his work.
b. Township list-takers and assessors: (assessor one year, list-taker three years)
How chosen. (42, 100)
Qualifications.
Powers and duties. (43, 44, 52, 101, 102)
Compensation. (51)
Efficiency of their work.
c. County Board of Equalization and Review: (50, 108)
How well does it function.
Any taxpayer may ask for an adjustment. (109)
 4. Basis of Assessment:
Theoretically:
All real and personal property except legal exemptions at true value in money. (47, 48)
Actually:
What the list-taker sees, or the conscience of the taxpayer dictates.
At variable ratios of its true value.
 5. State Board of Assessment:
Assessment of public utilities. (18-37)
Assessment of Building and Loan Associations. (14)
Check local assessments of corporations and banks. (11, 12)
Reporting of corporation excess. (15)
 6. Preparing the Taxlist:
Compiled from township lists. (64)
Corrected by auditor, tax supervisor, or register of deeds. (106, 107)
The Grand Abstract reported to the State. (76)
Order to sheriff or tax collector. (49)
- *Numbers in parentheses refer to sections in the 1925 Machinery Act.

B. Explanation

Last week we considered taxable wealth, or the property to be assessed for taxation. This week we are concerned with the method of assessment. In North Carolina there is a general revaluation of real estate only every fourth year, but individual changes may be made any year. Personal property is not really assessed at all. Each year the taxpayer meets the list-taker for his township, lists his taxable property on a form prepared by the state, and takes oath that he has listed it all and at its true money value.

Public service corporations are assessed by the State Board of Assessment, and all other corporations have their assessments reviewed by this body.

While no doubt most people are conscientious in performing this duty there are others whose memory seems to be so faulty that they forget all about some of their property. Why is it that a person who will not steal from an individual will steal from the government, even perjuring himself to do so? In dealings with government the human conscience seems to be less sensitive than when dealing with individuals. One seeks to justify tax evasion on the ground that "everybody's doing it." He argues that if others are understat-

ing their taxables he must do so, too, in self-protection. The result of this competition in perjury is that it destroys all semblance of tax equity, penalizes honesty, and breaks down the morale of the state.

There are at least two steps which can be taken to overcome this demoralizing practice. (1) Accept only one standard of valuation, and that 100 percent. That means there must be more assessing and less list-taking. (2) There must be more efficient methods used to get property on the tax books. Tax-listers should be assisted with maps and cross reference files. Transfers of property should be immediately entered on the tax books. Probably the tax supervisor should be made a full-time officer as he has already been made in a few counties. On the whole, counties are losing more money because of delinquencies in raising revenue than in wasteful spending. It will be worth while to study the methods of tax assessing and tax listing in your county with unusual care.

C. Questions

Were valuations reduced in your county in 1921?

Are valuations either too high or too low at the present time?

Are valuations equitable throughout the county?

How do they compare with adjoining counties?

Should real estate be assessed oftener than every fourth year?

Is personal property assessed at its true value?

To what extent are bank deposits and solvent credits listed?

Is anyone ever penalized for not listing his taxables?

How much personal exemption is allowed? Is it enough? Is it too much?

Does your county have an energetic tax supervisor?

What types of men are selected as tax-listers?

Who are they in your county?

Are they vigilant in locating taxables? How are corporations assessed?

What is meant by corporation excess? How is the taxlist prepared?

Study the taxlist. Is it neat and intelligible? Is it strictly alphabetical?

D. Sources of Information

North Carolina Machinery Act, 1925.

The township books of abstracts, the township taxlists, the county taxlist.

Interviews with the county tax supervisor and the tax-listers.—Paul Wager.

MONEY FOR MOTOR CARS

Over ten million dollars was the toll paid into state coffers for highway construction and maintenance by the automobile industry during the past tax year, according to an article prepared by Commissioner of Revenue R. A. Doughton, for the July issue of the Carolina Motorist. The exact figure, \$10,117,589.51, is divided into several production items: \$4,710,234.87 comes from the license plates sold; \$5,277,113.41 is derived from the gas tax; \$35,000.00 is paid by the automobile manufacturers, while the title fee, receipts for which go to the theft fund, amounts to \$130,239.23.

"The size of the automobile industry in North Carolina can be more appreciated when I tell you that for the fiscal year ending June 30, 1925, a total of 350,000 automobile license plates were sold, bringing in to the State a revenue of \$4,710,234.87," declares Governor Doughton. "Then there is a gas tax of 4 cents per gallon since March 26th—3 cents prior thereto. This tax netted the State a revenue of \$5,277,113.41 for the same fiscal year. The automobile manufacturers' tax amounts to \$35,000.00, theft fund \$130,239.23. This gives us a total income of \$10,117,589.51 from the automotive industry, all of which is put back into the building and maintenance of the State Highway System, and retiring the State Highway Bonds and the payment of interest thereon.

"For this same period there was expended by the State of North Carolina Highway Commission a sum of \$25,000,000.00 in the construction of 1185 miles of highway, and the maintenance of 6,000 miles of highway.

"North Carolina is growing rapidly, and I predict that by June 30, 1927,

KNOW NORTH CAROLINA

Transporting Children

North Carolina school children numbering 69,391 are transported 40,765 miles each day by 2,006 school buses in 95 of the 100 counties of the State, according to estimates by the State Department of Education.

The figures are based on actual reports from the 68 counties participating in the equalization fund and estimates on the remaining counties using school buses for the transportation of children. Actual reports show that in the school year 1922-23, a total of 31,544 children were carried daily by 858 buses; and in 1923-24, a total of 48,251 children were carried, 26,354 miles daily by 1,318 buses.

In 1923-24, the most recent period for which figures on bus transportation in other states are available, only Indiana hauled more children than North Carolina, and the per pupil per year cost of \$13.57 in North Carolina was the lowest in the Union. The year cost per truck in North Carolina is only \$496.

The average daily mileage of the school trucks is 20 miles. The usefulness of the trucks is shown by the fact that there are in the State 842 rural schools with four or more teachers.

School buses were first used in the State in 1915 by Edgecombe and Pamlico counties, both of which claim the honor of being first. The five counties which provide no buses are Alleghany, Cabarrus, Macon, Perquimans, and Cherokee.—News and Observer.

there will be more than a half million motor vehicles registered in this State. Business is good in North Carolina if we are to judge from the new car sales. It will be interesting to know that the new cars sold from July, 1924, to June, 1925, inclusive, total 76,317. Used car sales are estimated at about 75 percent of the new car sales.

"With this tremendous growth, it can be expected that North Carolina will be able to continue its progressive road building program, pay the interest and promptly retire its bonds, giving to the people a greater and more permanent system of highways."—The Carolina Motor Club, Inc.

PROGRESS IN CAROLINA

Had the Southern exposition been held in New York in 1900 instead of 1925, the visitor who might have been attracted to North Carolina would have been of necessity a pioneer spirit capable of seeing in a few significant facts the index of a progress whose miracle has been its cumulative character.

He would have noted that in the twenty years 1880-1900, the true value of the state's property had risen from \$461,000,000 to \$682,000,000, but he could not have pictured its increase sixfold to \$4,500,000,000 in 1924.

He would have noted that manufactures had risen in twenty years from a value of \$20,000,000 to \$85,000,000, but could not have foreseen that the census of 1920 would rate them at \$665,000,000.

He would have seen a healthy increase in farm products from \$52,000,000 in 1880 to \$89,000,000 in 1900, but could never have imagined that in 1923 this value would increase to \$513,000,000, while farm crops would rise in value from \$69,000,000 in 1900 to \$436,000,000 in 1923.

Who could have thought that in less than 25 years bank resources would have risen from \$15,362,182 to a total of \$471,854,564? Foreseen that a state expending \$624,381 on roads would in 1923 be spending \$36,148,000, and in 1925 have improved highways a total investment of over a hundred million dollars? That a state which was with great effort expending something less than a million dollars on public schools would in less than a generation be spending for the education of its youth 23 times as much?

These are figures which point a capital constantly augmented as created by an energy increasing with success and expended not only in industry and education, but on impulse for the graces and luxuries of life seemly to a people of an ancient amalgam of racial strains that in its white population comes near to producing in fact the "American" of theory.

In its textile empire of five hundred mills to which there is contributed 640,000 developed water power; in its waterways; its fabulously fertile coastal plain; its seaside, piedmont, mountain playgrounds and resorts; in its wealth of minerals and of forests, and in the new urge for the uniform development of its resources, North Carolina presents for the Southern exposition those facts of self-achievement which best prove opportunity.—Natural Resources.

RURAL ELECTRIC POWER

III. FARM WATER WHEEL INSTALLATIONS

In the last issue we discussed the general principles of power development by falling water and described the steel overshot water wheel. This kind of installation was recommended for quantities of water from 1 to 30 cubic feet per second; for falls up to 25 feet, and to develop up to 50 horsepower.

There is no fixed point either of stream flow, fall, or power where the utility of the overshot water wheel stops and that of the water turbine begins. For very small quantities of water and moderate falls, the overshot wheel is undoubtedly best, but as the flow of water available increases, a field is entered where either the overshot wheel or water turbine may be satisfactory, and finally with quantities of water greater than 25 to 30 cubic feet per second, the water turbine is usually best.

The Water Turbine

The water turbine is simply a metal casing inside which is a series of blades attached to a shaft. The water enters through the side of the casing, causes the blades to turn the shaft, and is discharged through the bottom of the casing. The water turbine is from 85 to 90 percent efficient under the best operating conditions, but as the fall for which a given wheel is designed decreases, or as the power load falls off, the efficiency is reduced. The overshot wheel is more efficient under conditions of varying fall and load. On the other hand the overshot wheel cannot operate if the water level from the stream or pond which serves it falls below the top of the wheel. The turbine can operate

with fair efficiency if the water level serving it falls 75 percent below its normal height. Moreover, the turbine can sometimes be more advantageously located due to its smaller size.

The Impulse Wheel

Where conditions are such that very high fall is available with only moderate quantities of water, neither the overshot wheel nor turbine is best. Under such conditions an impulse wheel should be used. This is a small wheel, from 12 inches to several feet in diameter, with small buckets on the periphery. The water is introduced as a powerful jet from a nozzle against these buckets, causing the wheel to turn.

The best type of installation for a given location will depend on not only the three factors of fall, water available, and power needed, but also on conditions at the site which may affect the cost of construction. Names of makers of steel overshot wheels were given in the last article. Prominent makers of small water turbines suitable for rural use are James Leffel and Company, 1503 Fourth National Bank Building, Atlanta, Georgia; Rodney Hunt Machine Company, Orange, Massachusetts; S. Morgan Smith Company, York, Pennsylvania. The principal maker of the impulse type of wheel for high heads is the Pelton Water Wheel Company, 90 West St., New York.

The following table gives some rough limits within which the three types of water power machines are usually most economical and efficient.—Thorndike Saville.

	Variation in Fall Feet	Variation in Water Cu. ft. per second	Variation in Horsepower	Conditions for which best adapted.
Steel Overshot Wheel	4 to 25	1 to 30	5 to 50	Low fall, small quantity of water, small power
Small Water Turbines	5 to 50	5 to 1500	5 to 5000	Moderate fall, any quantity of water, any quantity of power
Impulse Wheel	50 to 1000	1-3 to 1000	2 to 3000	High fall, small to moderate quantity of water, any quantity of power

MANUFACTURE IN THE UNITED STATES, 1923

In the following table, based on the Census of Manufactures, Federal Department of Commerce, the states are ranked according to the value of factory products for the year 1923. Factories with annual output of less than \$5,000 are not included. The accompanying column shows the percent increase in the value of factory products over the year 1921.

North Carolina ranked 15th in the total value of factory products for 1923, the amount being \$951,911,000. Texas, the only Southern state ahead of North Carolina, gets her rank from her size, and the refining of crude oil. The oil supply is not permanent, and doubtless Texas will soon give way to North Carolina. Witness the percent increase in value of factory products over the year 1921. One-sixth of all the factory products of the South are manufactured in North Carolina. The leading industries in North Carolina are textile, \$363 million, tobacco, \$295 million, and furniture, \$40 million.

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Rank	States	Value of Products in Thousands	Percent Increase Over 1921	Rank	States	Value of Products in Thousands	Percent Increase Over 1921
1	New York	\$8,960,693	28.5	25	Alabama	\$541,719	78.9
2	Pennsylvania	7,438,609	47.0	26	West Virginia	489,508	57.7
3	Ohio	5,046,504	52.9	27	Kentucky	427,090	41.1
4	Illinois	5,041,520	36.1	28	Nebraska	415,016	24.4
5	Michigan	3,870,434	75.4	29	Maine	402,650	18.6
6	Massachusetts	3,583,205	25.8	30	Oregon	363,912	62.7
7	New Jersey	3,321,302	29.9	31	South Carolina	360,446	52.5
8	California	2,216,639	26.0	32	New Hampshire	333,125	35.2
9	Indiana	2,031,822	47.5	33	Oklahoma	315,197	11.1
10	Wisconsin	1,721,501	41.7	34	Colorado	255,183	15.3
11	Missouri	1,547,167	33.1	35	Utah	191,586	72.5
12	Connecticut	1,288,293	54.1	36	Florida	188,258	29.1
13	Texas	979,668	16.3	37	Mississippi	178,582	56.5
14	Minnesota	968,477	13.9	38	Montana	175,007	116.7
15	North Carolina	951,911	43.1	39	Arkansas	173,085	45.4
16	Maryland	903,406	41.7	40	Vermont	149,952	31.6
17	Iowa	690,043	32.3	41	Delaware	128,951	48.6
18	Rhode Island	675,425	30.6	42	Arizona	123,377	215.5
19	Washington	660,538	47.4	43	Wyoming	110,632	37.9
20	Louisiana	624,683	30.4	44	Idaho	87,429	53.2
21	Kansas	605,037	7.8	45	South Dakota	47,321	13.9
22	Georgia	604,450	58.5	46	North Dakota	42,145	15.9
23	Tennessee	555,253	48.4	47	Nevada	22,243	66.4
24	Virginia	548,159	20.7	48	New Mexico	20,422	47.0