

Prices of Vermont Farm Real
Estate.

76.7383
G5
4797

X9J:76.7383
G5
044797

JUNE

11:7 VERMONT 75/

BULLETIN 391

University of V
Vermont A

State Agricultural College
Natural Experiment Station

Burlington, VERMONT

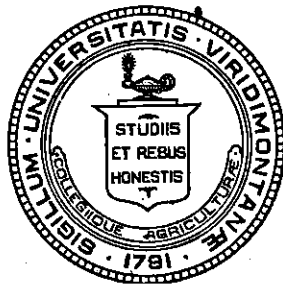
Dhananjayrao Gadgil Library



GIPE-PUNE-044797

PRICES OF VERMONT FARM REAL ESTATE

By T. M. ADAMS



During the period from 1928 to 1935 Vermont farms were appraised for taxation on the average at 75 percent of their sales value, but forest land, uncultivated land and farm land without buildings were appraised at approximately their full sales value.

Farms which sold at relatively low prices per acre were appraised at higher rates compared to their sales value than were more valuable farms, those worth less than \$10 an acre being appraised, and taxed, at twice as high a rate per dollar of sales value as were those worth over \$40 per acre.

The price of farm land varies with soil and topography and with location relative to state highways and railroad facilities. Farms in the Champlain valley—Southwest valley area sold at a higher average price than did those in any of the other major soil areas. Prices were lowest in the Taconic, Central plateau and Essex county regions. Farms classified as fairly level brought on the average one and one-half times as much per acre as those on rolling land and three times as much as those classed as rough.

Vermont farm real estate prices rose from 1900 to 1920 and have since declined. At the peak they were 50 percent above the pre-war, 1910-1914, average. In 1933 they were approximately at the pre-war level.

BULLETIN 391: PRICES OF VERMONT FARM REAL ESTATE

T. M. ADAMS¹

The following discussion of farm real estate prices has been divided into three more or less distinct parts. In the first an analysis of the ratio of appraised value for taxation purposes to the sale value of 1,240 parcels of rural property is presented. Sec. 634 P. L. specifies that all real estate shall be appraised at its "just value in money." Although the term is not further defined in the statutes, it is commonly taken to mean the sale price in money in the normal course of trade and not a sale value arrived at as a result of speculation or, on the other hand, of a forced sale. Within the limits of this assumption, the data presented indicate the inequalities in the distribution of real estate taxes levied on the different classes of rural property. Part two comprises an analysis of the effect on farm realty prices of soil, topography, distance to a state highway, and to a rail shipping point. In the third section the trend of Vermont land prices since 1900 is described and some of the factors which have affected it are discussed.

SOURCES OF DATA

Data on the transfers of rural property were copied from the deeds filed in the various town clerks' offices. The deeds, as recorded, do not commonly indicate the consideration involved. The sale prices were secured by mail questionnaire from either the buyer or the seller. Data on farm topography and location were furnished by local officials qualified to give this information. Data as to the soil, distance to a state highway and to a rail shipping point were taken from maps after information concerning the location of the farms had been secured. The appraised values for taxation purposes were ascertained from the grand list of the year nearest the date of sale.

Only sales between a willing buyer and a willing seller have been included in the analysis. Transactions resulting from foreclosure, tax sales, or any other type of transfer where force plays a part have been excluded. Likewise, all inter-family or other sales where the returned questionnaires indicated that the consideration given was not repre-

¹ The writer is indebted to the Station Agricultural Economist for guidance and criticism, and to the town clerks in the areas studied for access to their records.

The data on the transfers of rural property were copied as part of a Federal CWA project under the supervision of Eric England, National Director, United States Department of Agriculture, and Mr. F. H. Abbott, State Director, Burlington.

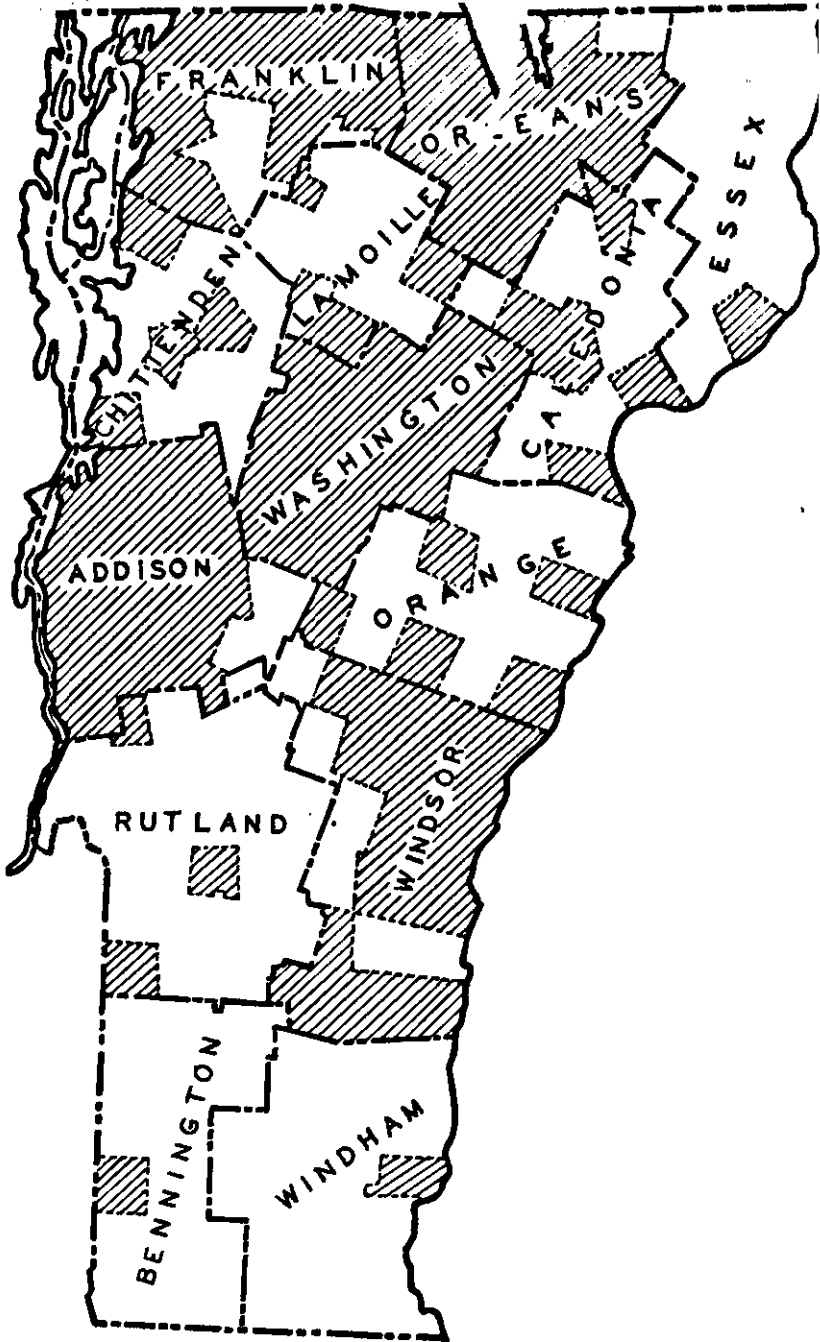


FIG. 1.—Location of the towns studied.

sentative of a voluntary trade have been excluded. No sales of "leased land" are included since the low rate of taxation thereon may have affected the prices paid.¹

DESCRIPTION OF THE AREA

Rural property located in every county in Vermont, except Grand Isle, has been included in the analysis. Data on the transfers from 1928 to 1933 were secured in 20 towns in Addison county, in 12 in Franklin county, 17 in Orleans county, 18 in Washington county, 17 in Windsor county, and in 23 other towns scattered through the other eight counties, a total of 107 (figure 1).

For the purposes of most of this bulletin, Addison county furnished 134 sales of farm real estate, Franklin 126, Orleans 125, Washington 180, Windsor 166, and other towns 110 sales.² Nearly five percent of the total farm acreage in the towns covered by this study has been included (table 1). The data do not include all the voluntary sales of

TABLE 1.—COMPARISON OF CENSUS (1930) LAND IN FARMS AND THE TOTAL ACRES INCLUDED IN THE PRESENT STUDY

Area	Land in farms		Percentage of total area
	1930 census*	Present study	
	acres	acres	
Addison	338,730	16,765	4.9
Franklin	299,982	16,937	5.6
Orleans	337,170	14,754	4.4
Washington	297,973	17,902	6.
Windsor	303,544	18,973	6.3
Other towns	484,009	12,576	2.6
All towns	2,061,408	97,907	4.7

* Each county census total is based only on the towns included in the present study.

farms made in 1928 to 1933, but only those for which either the buyer or seller reported the true sale price in reply to a questionnaire.

SIZE OF FARMS

The farms transferred in the period covered by the present study averaged 37 acres smaller than the average farm in the same area as reported by the 1930 census (table 2). In Franklin county the difference was 21 acres and in the other counties it ranged from 34 in

¹ "Leased land" is that set aside for religious and educational purposes at the time of the original town grants, in the main the so-called "glebe lands." The town collects a low yearly rental on this land which the tenants hold under perpetual lease.

² The term "farm real estate" as used here denotes farm property with buildings and other permanent improvements which go to make up a farm as a unit.

TABLE 2.—COMPARISONS OF CENSUS (1930) ACREAGE PER FARM AND AVERAGE ACREAGE PER FARM SOLD IN 1928 TO 1933

Area	Average size of farm		Difference
	1930 census*	Present study	
	acres	acres	acres
Addison	174	125	—49
Franklin	155	134	—21
Orleans	155	118	—37
Washington	141	99	—42
Windsor	148	114	—34
Other towns	153	114	—39
Average	154	117	—37

* Each county census average is based only on the towns included in the present study.

Windsor to 49 acres in Addison. The larger average size reported by the census may be due partly to the fact that a farm as defined for census purposes sometimes includes land owned by more than one individual, but it is also probable that the market for small farms was relatively more active than that for large places.

VALUE PER ACRE

The average acre price for all farms was \$24.12, those between \$10 and \$20 being most frequently reported (table 3). Approximately one-

TABLE 3.—FREQUENCY DISTRIBUTION OF FARMS ACCORDING TO THEIR VALUE PER ACRE

Value per acre	Number of farms	Percentage	Value per acre	Number of farms	Percentage
Under \$10	113	14	\$50-\$59	45	5
\$10-\$19	237	28	\$60-\$69	25	3
\$20-\$29	170	20	\$70-\$79	16	2
\$30-\$39	118	14	\$80-\$89	13	2
\$40-\$49	79	9	\$90 and over ...	25	3
Total				841	100

half the sales were within the limits of \$10 and \$29. One farm in seven brought \$50 or more and at the other end of the scale a similar number sold for less than \$10 per acre. These sale prices average 38 percent less than the estimated census valuation for the same areas (table 4). The difference is rather uniform throughout the State, varying from 34 percent in Addison to 43 in Windsor. While this may be attributed in part to failure of farmers to follow a declining market closely in their estimates of the value of their properties,¹ it is probable that the farms which changed hands in the 1928-33 period were below average in quality as well as in size.

¹ Mereness, E. H. Farm Mortgage Loan Experience in Southeast Alabama. Ala. Sta., Bul. 242, pp. 6, 7 (1935).

TABLE 4.—COMPARISON OF CENSUS (1930) VALUE PER ACRE AND THE AVERAGE VALUE PER ACRE OF THE FARMS SOLD IN 1928 TO 1933

Area	Value of land and buildings per acre			
	1930 census*	Present study	Difference	Percentage difference
Addison	\$42.52	\$27.87	\$14.65	34
Franklin	48.18	31.03	17.15	36
Orleans	37.34	24.30	13.04	35
Washington	34.13	19.95	14.18	42
Windsor	34.92	19.84	15.08	43
Other towns	36.90	21.97	14.93	40
Average	\$39.00	\$24.12	\$14.88	38

* Each county census average is based only on the towns included in the present study.

ANALYSIS OF THE APPRAISAL SYSTEM FOR TAXATION PURPOSES AS IT RELATES TO RURAL PROPERTY IN VERMONT

Taxation of real estate is a town function. Except for the small assessment which is levied for county purposes, all of the taxes imposed on real estate accrue to the town in which it is situated. The listing and appraisal of real estate and personal property in each town is performed by three listers,¹ one of whom is elected each year at the annual town meeting for a term of three years. Their compensation is determined either at town meeting or by the selectmen. They are paid on a per diem basis for time actually spent in listing, appraising, preparing reports and attending the annual meeting with the State Commissioner of Taxes.

Real estate is appraised for taxation purposes every four years and, with a few exceptions provided by law, the valuations thus made are used in compiling the yearly grand list during the succeeding four years. The quadrennial appraisal occurring within the years covered by this study was made in 1930. The law specifies that the list of real estate appraisals shall be returned annually to the town clerk's office on or before the fourth Tuesday in August.

Appeals may be made from valuations set in the quadrennial appraisal first to the listers, then to the local board of civil authority and, finally, to the State Commissioner of Taxes. Decisions on appeals taken to the latter official are handed down by a County Board of Appraisers appointed by the Commissioner with approval of the Governor.

An assessment roll of personal property and of polls is prepared annually by the town listers, which lists on or before May 15 are combined with the appraisals of real estate made in the last quadrennial appraisal into what is known as the "grand list." In the grand list book

¹ When a town so votes, one or two additional listers may be elected for a term of one year each. (P. L., Sec. 3435.)

are recorded the name and address of each taxpayer, a brief description of the real estate owned by each, the appraised value of real and personal property, and the amount of deduction, if any, from the personal property for debts owed. The grand list of the individual is one percent of the sum of the appraised value of his real property and of his net personal estate, plus \$1 for his poll in the case of a resident. The individual's tax is determined by applying a tax rate, fixed at the annual March meeting, to his grand list as thus computed.

In 1934 real estate, urban and rural, made up 84 percent of the total grand list of all the cities and towns in Vermont (table 5), personal property representing only 10 and taxable polls six percent of the total. Between 1927 and 1934 the grand list of real estate increased eight per-

TABLE 5.—THE GRAND LIST OF ALL REAL ESTATE, PERSONAL PROPERTY AND TAXABLE POLLS IN ALL CITIES AND TOWNS, 1927-1934

	Real estate		Net personal		Taxable polls	
	One Percent of valuation	Percentage of total grand list	One percent of valuation	Percentage of total grand list	Valuation	Percentage of total grand list
1927	\$2,259,627	78	\$448,438	16	\$183,180	6
1928	2,286,446	78	455,107	16	186,702	6
1929	2,340,460	79	457,075	15	184,924	6
1930	2,370,560	79	450,391	15	183,144	6
1931	2,458,468	81	400,531	13	182,294	6
1932	2,439,556	82	342,314	12	181,833	6
1933	2,438,742	84	289,356	10	181,911	6
1934	2,445,018	84	286,121	10	185,481	6

cent and that of personal estate declined 36 percent; hence the percentage of the total represented by real estate increased from 78 to 84 and that represented by personal estate declined from 16 to 10. The share of the total local tax burden borne by each of these two classes of property is practically equivalent to its share of the tax base, modification of the ratio between the two due to the effect of differences in tax rates between towns being negligible. Although farm real estate taxes per acre declined during the latter part of this period (p. 29), the share levied on real estate increased steadily in consequence of the disappearance of personal property from the grand list.

INEQUALITIES IN APPRAISALS OF RURAL PROPERTY

The Public Laws specify that real property shall be appraised at its "just value in money." It makes little difference if the listers in a given town appraise all property at a somewhat lower level than is thus specified by law since such divergencies between towns affect only the county

which is a very minor part of the total levy.¹ However, if in any town all property is not appraised at the same level, inequities result and some individual or individuals may be required to bear more than their just share of the tax burden on real estate. It is the purpose of this section of this bulletin to attempt to analyze these inequalities in so far as they relate to rural property.

TYPE OF RURAL PROPERTY

In addition to the data secured relating to 841 farms included in this study, sale prices and appraised values are available of 399 parcels of property lying outside of cities or villages, but which have no buildings. These have been classified into farm land without buildings, uncultivated land and forest land, a distinction necessarily somewhat arbitrary but sufficiently accurate to be significant.

Farm land without buildings, forest land and uncultivated land were, as a rule, overappraised relative to farm property with buildings, and the owners of such property were consequently paying more than their equitable share of the taxes on real estate (table 6). Farm land without buildings was assessed on the average at 25 percent under its sale value, but appraisals of the other types were made roughly at their full value.

TABLE 6.—RELATION BETWEEN TYPE OF PROPERTY AND RATIO OF APPRAISED VALUE TO SALE PRICE

Type of property	Number of properties	Acres per sale	Value per acre	Ratio of appraised to sale value
				%
Farm property with buildings....	841	116	\$24.12	75
Farm property without buildings..	169	49	15.97	95
Uncultivated land.....	111	46	8.87	104
Forest land.....	119	94	6.30	100
All properties.....	1,240	99	\$21.30	83

No information is available as to whether any of these forest lands were appraised under the optional classification law in accordance with which owners of forest or waste land who fulfill certain stipulated conditions may have such lands appraised for a period of years at a presumably low rate relative to sale value. However, doubtless only a small part of the forest land included in this study was so appraised. "On January 1, 1932, it was estimated there were 37,472 acres of privately owned forest land in Vermont classified on the basis of the yield tax on timber and the restricted land tax. This acreage represented only 1.1

¹ Prior to enactment of a state income tax law in 1931 a state property tax was also collected.

percent of the acreage of privately owned forest land in the State."¹ To the extent to which such lands are included the degree of overappraisal of the woodlands is understated.

SIZE OF SALE

During the years covered by this study there was a definite tendency to appraise farms with a low total sale value at a higher rate in comparison with their value than farms with a high one (table 7). The farms

TABLE 7.—RELATION BETWEEN SALE VALUE AND RATIO OF APPRAISED TO SALE VALUE, FARM PROPERTY WITH BUILDINGS

Sale value	Number of farms	Consideration per sale	Acres per sale	Value per acre	Ratio of appraised to sale value
					%
Less than \$1,000..	170	\$ 604	64	\$ 9.44	103
\$1,000-\$3,999	474	2,150	106	20.34	73
\$4,000 and over..	197	6,292	187	33.56	59
All properties....	841	\$2,808	116	\$24.12	75

selling for less than \$1,000 were appraised on the average nearly one and three-fourths times as high relative to their sale value as the farms selling for \$4,000 or more and were, therefore, taxed one and three-fourths times as heavily as the more valuable farms. These differences were due to failure on the part of the listers to discriminate sufficiently between good and poor land in making appraisals, rather than to any tendency to overappraise the farms with a relatively small number of acres. There were no significant differences in the ratio of appraised to sale value among the several groups when the farms were sorted according to the acreage per farm (table 8). On the other hand, there was a marked tendency toward underappraisal of the better farm

TABLE 8.—RELATION BETWEEN ACRES PER SALE AND RATIO OF APPRAISED TO SALE VALUE, FARM PROPERTY WITH BUILDINGS

Acres per sale	Number of farms	Average acres per sale	Ratio of appraised to sale value
			%
Less than 49	161	27	75
50- 99	229	72	74
100-149	220	118	75
150-199	104	168	75
200 and over	127	266	78
All farms	841	116	75

¹ Clayton, C. F., and Peet, L. J. Land Utilization as a Basis of Rural Economic Organization. Vt. Sta., Bul. 357, p. 130 (1933).

lands relative to the poorer ones as measured by their value per acre (table 9, figure 2). The farms which sold at a low rate per acre were decidedly overappraised. The group of 113, reported at \$9 or less per acre and averaging \$6, were put in the grand list at an average

TABLE 9.—RELATION BETWEEN VALUE PER ACRE AND RATIO OF APPRAISED VALUE TO SALE VALUE, FARM PROPERTY WITH BUILDINGS

Value per acre	Number of farms	Value per acre	Ratio of appraised to sale value
			%
\$9 and less	113	\$ 6.34	111
\$10-\$19	237	14.12	86
\$20-\$29	170	23.95	68
\$30-\$39	118	34.14	63
\$40-\$49	79	43.77	55
\$50 and over	124	69.82	57
All farms	841	\$24.12	75

of 11 percent more than the price at which they sold and at a rate approximately one and one-half times as high relative to their sale value as the average for all farms, which was 75 percent. The ratio of appraised to sale value steadily declined, but at a constantly decreasing rate, as the value per acre increased, until it reached 55 percent

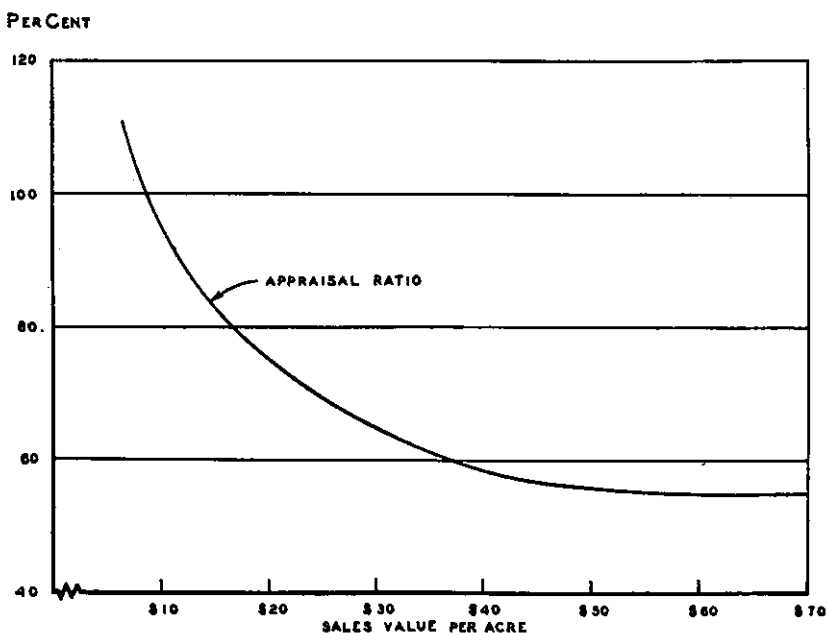


FIG. 2.—Relation between the value per acre of farm real estate and the ratio of appraised to sales value.

on the farms worth from \$40 to \$49 per acre. As values increased beyond \$50 per acre it remained approximately constant at a point only half as high as the average for the group of farms worth less than \$10 an acre.

This tendency to overappraise the farms of low value per acre and to underappraise the more valuable lands, and the evenness of the appraisals of farms of varying acreage are shown also in table 10 in

TABLE 10.—RELATION BETWEEN ACRES PER SALE, VALUE PER ACRE, AND RATIO OF APPRAISED TO SALE VALUE

Value per acre	Acres per sale			
	Under 100	100-199	200 and over	All farms
Under \$20				
Number of farms.....	121	160	67	348
Appraisal ratio.....	102%	90%	92%	94%
\$20-\$39				
Number of farms.....	121	117	50	288
Appraisal ratio.....	66%	66%	64%	66%
\$40 and over				
Number of farms.....	148	47	10	205
Appraisal ratio.....	59%	48%	60%	57%
All farms				
Number of farms.....	390	324	127	841
Appraisal ratio.....	75%	75%	78%	75%

which the properties are grouped both according to size and to value per acre. Poor farm lands, whether they were part of large, medium, or small farms, were grossly overappraised, and in all cases the ratio of appraised to sale value decreased as the average acre value increased. On the other hand, farms of varying size but of equal acre values were appraised at approximately the same level relative to sale value.

There was a close correlation between topography and the value of farm real estate in the period covered by this study (p. 19) the level lands being the more and the uneven lands the less valuable. In keeping with the general tendency for tracts of low value to be overappraised, the rough farms were appraised at a considerably higher rate relative to their sale value than were the fairly level farms (table 11). The

TABLE 11.—RELATION BETWEEN TOPOGRAPHY AND THE RATIO OF APPRAISED VALUE TO SALE VALUE, FARM PROPERTY WITH BUILDINGS

Topography	Number of farms	Acres per sale	Value per acre	Ratio of appraised to sale value
Fairly level	178	124	\$41.67	%
Rolling	337	123	26.14	62
Rough	257	129	13.18	72
All farms	772	125	\$25.41	88

ratio of appraised to sale value was on the average about two-fifths higher on the farms classified as rough than on those of the fairly level group. The average appraisal ratio of the farms with rolling land was intermediate between the other two and at approximately the average for all farms. Since taxes paid on a farm are dependent on the listers' valuation of it, the owners of the rougher farms are paying more than their fair share of real estate taxes.

There was likewise a tendency for the farms to decrease in value as the distance to a rail shipping point increased (p. 22), but apparently these differences in value were not great enough to cause overappraisal of the relatively distant farms (table 12). The ratio of appraised

TABLE 12.—RELATION BETWEEN DISTANCE TO A RAIL SHIPPING POINT AND RATIO OF APPRAISED VALUE TO SALE VALUE, FARM PROPERTY WITH BUILDINGS

Distance to a rail shipping point	Number of farms	Acres per sale	Value per acre	Ratio of appraised to sale value
				%
2 miles and less	137	127	\$33.85	72
3 to 5 miles	215	120	26.62	77
6 to 8 miles	171	130	27.50	73
9 to 11 miles	103	133	20.46	74
Over 11 miles	146	121	16.74	78
All farms	772	125	\$25.41	75

to sale value fluctuated slightly and irregularly when the farms were grouped according to the distance to a rail shipping point, giving no indication of a correlation between these two factors.

There was a somewhat closer correlation between the value of farm real estate and the distance to a state highway than between value and distance to shipping point and there was some tendency for the ratio of appraised to sale value to increase as this distance increased (table 13).

TABLE 13.—RELATION BETWEEN DISTANCE TO A STATE HIGHWAY AND THE RATIO OF APPRAISED TO SALE VALUE, FARM PROPERTY WITH BUILDINGS

Distance to a state highway	Number of farms	Acres per sale	Value per acre	Ratio of appraised to sale value
				%
Less than a mile	103	129	\$40.36	70
1 to 4 miles	332	125	26.33	74
5 to 8 miles	154	118	21.55	74
9 to 12 miles	112	134	17.59	81
Over 12 miles	71	122	20.08	76
All farms	772	125	\$25.41	75

From 1920 to 1933 the sale prices of farm real estate declined without a corresponding decline in the valuations for taxation purposes as set by the listers. In consequence the ratio of appraised to sale value has steadily risen (table 14). In the first four years of this period it

TABLE 14.—APPRAISED VALUE PER ACRE, SALES VALUE PER ACRE, AND RATIO OF APPRAISED TO SALE VALUE IN 26 TOWNS, 1920-33

Year	Number of farms	Appraised value per acre	Sales value per acre	Ratio of appraised to sale value
				%
1920	189	\$18.61	\$37.56	50
1921	159	17.24	36.81	47
1922	154	17.03	32.06	53
1923	131	18.45	35.05	53
1924	98	14.13	28.15	50
1925	122	15.46	27.20	57
1926	115	17.29	32.60	53
1927	90	16.37	29.38	56
1928	119	15.73	27.75	57
1929	107	19.05	30.93	62
1930	100	16.19	24.68	66
1931	85	16.34	24.74	66
1932	72	18.49	28.23	66
1933	58	19.04	24.34	78

was appraised at an average of 50 percent of its sale value in the 26 towns for which data are available and in the last four years, 1930-1933, the ratio had risen to 68 percent.

COST OF PREPARING THE GRAND LIST AND OF MAKING THE QUADRENNIAL APPRAISAL OF REAL ESTATE

The town grand list comprises the individual lists of the real estate, personal estate, and polls of each taxpayer. In 1932 its preparation cost on the average \$151 in 15 towns¹ (table 15). This included the listers'

TABLE 15.—AVERAGE COST OF LISTING IN 15 VERMONT TOWNS, 1928-32

Year	Cost of listing	
	Average cost	Percentage of 1928
1928	\$185.31	100
1929	187.25	101
1931	163.02	88
1932	150.92	81

per diem, necessary travel expense, clerical help, and purchased listing supplies and amounted to a little more than 0.6 percent of the taxes levied. The costs varied widely from 0.4 percent to, in one case, more

¹ Addison, Albany, Barton, Berlin, Glover, Greensboro, Leicester, Lincoln, Ludlow, Montgomery, Norwich, Ripton, St. Albans, Waitsfield, Woodbury.

than one percent of all taxes levied. The 1928 and 1929 grand list costs in these towns were practically identical, but by 1931 the cost per town had decreased materially and was less in 1932 than in 1931, being 7 percent less than in 1931 and 19 percent less than in 1929. This reduction seems to have been made possible by a lessening in the time spent by the listers rather than by lowering of the voted day wage rate. It may have been occasioned in part by the disappearance of personal property from the grand list and a consequent reduction in the volume of work.

An accurate record of the expenditures involved in the 1930 quadrennial appraisal of real estate can not be secured from the published town reports because of failure in some cases to indicate what items are chargeable to the grand list and what to the quadrennial appraisal. The combined cost of these two items in 1930 was \$327 per town. If we assume that the grand list cost \$175 (the 1929 and 1931 average), the cost of the 1930 quadrennial appraisal may be estimated at \$152 per town, or 24 cents per \$1,000 appraised valuation.

FACTORS AFFECTING FARM REAL ESTATE PRICES

Many factors of varying importance affect the price that a Vermont farm will sell for at any particular time. Among these are the soil on which it is located, the topography of the land and the location of the farm in relation to highways and shipping facilities. The relationships of these factors to the prices of farm land as they appear in the sales data for the six-year period, 1928-1933, will now be set forth. Farms of less than 25 acres have been excluded from consideration. The data cover 772 farms with a total area of 96,827 acres. While these were on the average smaller than the averages reported for the entire State and sold at prices somewhat lower than the valuations indicated by the census (p. 6), the description of the relationships present in these data may be accepted as an approximate expression of those existing between the factors studied and the value of Vermont farm land. The effect of each on land values will be discussed separately.

The farms were classified into four broad groups on the basis of the soil characteristics of the areas in which they were located. The classification followed is that presented in bulletin 373,¹ except that certain of the areas there defined in which only a few farms were located have been combined with like areas. The groups were then ranked from

¹Lea, G. L., and Midgley, A. R. Available Potash and Phosphorus Contents of Vermont Pasture Soils. Vt. Sta., Bul. 373 (1934). See, also, "Rural Vermont," Vermont Commission on Country Life, pp. 45-57 (1931).

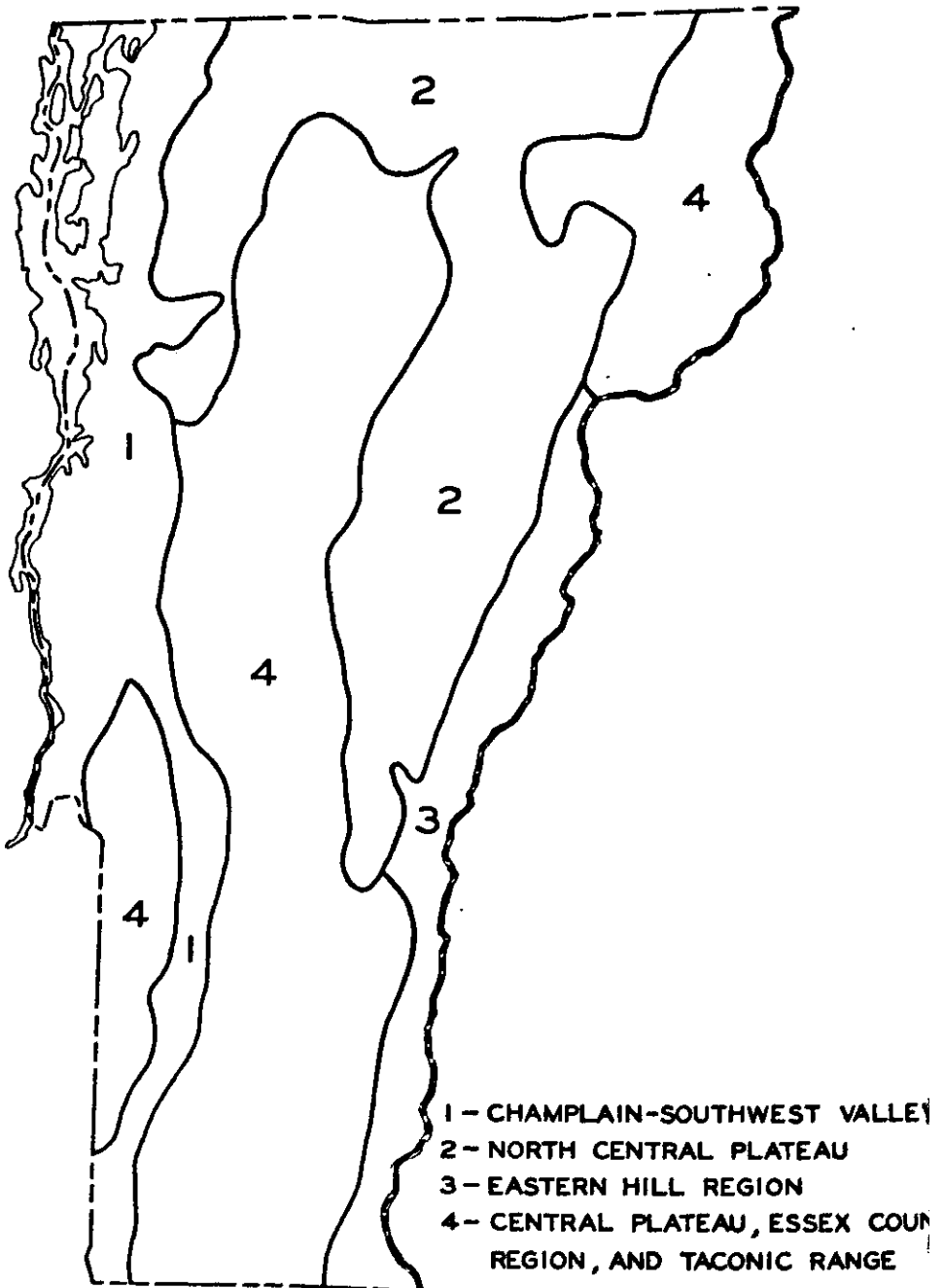


FIG. 3.—Major soil groups of Vermont.

one to four in the order of their adaptation to agricultural use. The farms were also classified on the basis of their general topography, level being ranked as one, rolling as two, and rough as three.

That the farms sold in the various years were fairly uniform as to soil and topography is indicated by the relatively slight variation in the average rank with respect to these two factors (table 16). There was,

TABLE 16.—THE TREND OF FARM REAL ESTATE PRICES

	Number of farms	Acres per sale	Topography	Soil	Value per acre	Percentage of 1930
1928	152	121	2.	2.5	\$26.87	118
1929	164	115	2.	2.4	26.62	117
1930	168	120	2.1	2.5	22.73	100
1931	137	115	2.1	2.8	22.14	97
1932	136	114	2.1	2.6	23.09	102
1933	84	112	2.2	2.4	21.65	95
Average..		116	2.1	2.5	\$24.12	

however, a considerable decline over the period in the average price secured per acre. In order to place the sales for the different years on a comparable basis, all sale prices have been adjusted to the 1930 level by dividing the sale price per acre by the index, on a 1930 base, for the year in which the sale occurred.

SOILS

The farms on the Addison, Mohawk, Vergennes and Merrimac soils of the Champlain valley and the Pittsfield group of the Southwest valley were on the whole the most valuable of those included in the study, (table 17, figure 3), ranging in value from \$10 to over \$90 per acre, with an average of \$37. Their soils are derived from calcareous mate-

TABLE 17.—RELATION BETWEEN SOILS AND FARM REAL ESTATE PRICES

Soils groups	Number of farms	Acres per sale	Distance to a state highway mile	Distance to a rail shipping point mile	Topog-raphy	Value per acre*
Addison, Merrimac, Pittsfield Mohawk and Vergennes ...	147	133	4.8	5.	1.4	\$36.78
Blandford, Wood-bridge, Calais and Worthington	294	125	4.5	7.	2.1	27.37
Colrain and Hollis..	65	107	3.7	4.8	2.1	24.46
Berkshire, Herman, Dutchess and rough stony land	266	126	6.3	8.5	2.5	17.40
All farms	772	125	5.1	7.	2.1	\$25.41

* Adjusted to 1930 base.

rials and vary in texture from the heavy clays of the Vergennes groups through the clay loams of the Addison and the loams of the Mohawk to the sandy loams of the Merrimac.

The farms in this region are predominantly level to rolling, were second among the groups with respect to average distance to a rail shipping point and were third with respect to distance to a state highway.

The farms located on the soils of the Calais, Worthington, Blandford and Woodbridge group of the North Central plateau sold for an average of \$27 per acre or roughly \$10 less than those of the Champlain and Southwest valleys. Their soils are predominantly loams and are less calcareous than the Champlain valley lands. This especially is true of the Woodbridge group which is not calcareous at any depth. These tended as a whole to be somewhat rougher than the farms in the Champlain valley area, were third in rank with respect to nearness to shipping points and second in distance to state highways.

The farms on the soils of the Colrain and Hollis groups of the Eastern hill region averaged \$24 per acre or \$3 less than those located on the soils of the North Central plateau, despite the fact that they were no rougher in topography and were nearer to rail stations and highways. These two soils are similar to each other in depth, topography, and stone content, but differ in that the Colrain contains some lime rocks while the Hollis does not.

The Berkshire soils of the Central plateau, the Herman soils of the Essex county region, and the Dutchess soils of the Taconic range are all low in productive capacity. The farms in these areas sold on the average for \$17 per acre, or less than one-half the average price paid for those located in the Champlain and Southwest valley areas. These groups are composed of shallow hill soils and are frequently found in association with rough stony land. The farms were relatively distant from rail stations and highways.

The average value per acre of farms located on the soils of the North Central plateau was less by 26 percent than that of those in the Champlain valley-Southwest valley group. Between the soils of the North Central plateau and of the Eastern Hill region the difference in value was 11 percent, but between the latter and the hill soils of the Taconic, Central plateau and Essex county regions there was another sharp drop in farm land values, amounting to 29 percent, making the average price in these areas 53 percent less than that of farms on the Champlain-Southwest valley soils.

Of course this classification of farms according to the soils on which they are located is necessarily very general in character and considerable

differences in soils occur within each group. However, if it were possible accurately to characterize the soils of each individual farm even greater differences in sale price between farms located on the better and the poorer soils would be found.

TOPOGRAPHY

The classification of the farms into the level, rolling and rough topography groups was made with the aid of some local official or resident in each of the towns. While the classification as thus made is necessarily very general in its nature and subject to variation due to unlike judgments of the classifiers, much care was taken to make the grouping consistent throughout the whole area.

A correlation between topography and other factors complicates the determination of its net effect on land values. There was a definite association between topography and location, the rougher farms tending to be the more remote from highways and from shipping points. The farms of fairly level topography were on the average 3.8 miles from a state highway, those on rolling land 4.7 miles, and those on rough land 6.6 miles. Only 29 percent of the farms of level topography were more than 4.5 miles from a state highway; on the other hand, 58 percent of those in rough land were at distances greater than this. The farms on fairly level land averaged 5 miles from a rail station, those on rolling land 7 miles and those on rough land 8.3 miles.

In order to determine the approximate relationship of contrasts in topography to the sales value per acre, apart from the effect on values of the associated differences in location, the farms in each group of level, rolling and rough surface were sorted into subgroups on the basis of distance to highway. By stating the comparison of land values as between level, rolling and rough farms as simple averages of the average prices in the several subgroups in each topography class, the effect of location relative to highways can be held roughly constant and the net effect of topography on land values can be determined. The same process was used to allow for the effect of distance to shipping points on farm realty prices. Differences in configuration are likewise associated with variations in other soil characteristics, but the available data are not adequate to enable one to separate their effects on the value of farm land.

Rough lands sold for only half as much per acre as rolling land and for only a third as much as fairly level land, even after allowance had been made for the fact that it was located farther from a state

highway (table 18). The average difference in price between fairly level and rolling land was \$12, between rolling and rough land \$13. Practically the same differences between groups are found when distance to shipping point is held constant.

TABLE 18.—RELATION BETWEEN TOPOGRAPHY AND FARM REAL ESTATE PRICES WITH CERTAIN FACTORS HELD CONSTANT

Topography	Number of farms	Acres per farm	Distance to state highway held constant		Distance to rail shipping point held constant	
			Value per acre ^a	Index	Value per acre ^a	Index
Fairly level . . .	178	124	\$38.47	100	\$38.87	100
Rolling	337	123	26.10	68	25.75	66
Rough	257	129	12.83	33	13.61	35

^a Adjusted to 1930 base.

The actual variations in land prices due to unlike topography were somewhat less on the farms over four miles from a state highway than they were on those at less than this distance (table 19) but the proportional decrease was approximately the same in the two groups.

TABLE 19.—RELATION BETWEEN TOPOGRAPHY AND FARM REAL ESTATE PRICES AT DIFFERENT DISTANCES FROM A STATE HIGHWAY

Topography	Distance to highway					
	4 miles and less			Over 4 miles		
	Number of farms	Value per acre ^a	Index	Number of farms	Value per acre ^a	Index
Fairly level	126	\$45.21	100	52	\$33.98	100
Rolling	201	31.50	70	136	22.49	66
Rough	108	13.68	30	149	12.26	36

^a Adjusted to 1930 base.

When remoteness is measured in terms of location relative to rail stations this does not seem to be true. Purchasers apparently discriminated slightly more against rough land than was five or more miles away from than they did against that which was nearer to a shipping point (table 20).

TABLE 20.—RELATION BETWEEN TOPOGRAPHY AND FARM REAL ESTATE PRICES AT DIFFERENT DISTANCES FROM A RAIL SHIPPING POINT

Topography	Distance to a rail shipping point					
	5 miles and less			Over 5 miles		
	Number of farms	Value per acre ^a	Index	Number of farms	Value per acre ^a	Index
Fairly level	102	\$42.53	100	76	\$40.51	100
Rolling	159	28.84	68	178	23.73	59
Rough	91	15.79	37	166	11.75	29

^a Adjusted to 1930 base.

HIGHWAYS

The highways of Vermont are classified as "state highways," "state aid highways" and "town roads." The first named are exclusively in charge of the state highway board and are maintained for motor vehicle traffic throughout the year. On January 1, 1932, this system included 1,013 miles of road, 65 percent of which was constructed of materials superior to gravel (27 percent concrete, 11 percent macadam, 27 percent bituminous treated gravel).¹

A number of the farms included in this study were sold prior to 1931, the date of the organization of the state highway system, but the roads now included were then as now the main arteries of travel between the larger cities and towns and were the best built and the best maintained roads.

Farm real estate buyers were apparently willing to pay a premium for location near a state highway when the lands were level and rolling but not when they were rough (table 21, fig. 4). The reduction on

TABLE 21.—RELATION BETWEEN DISTANCE TO A STATE HIGHWAY AND FARM REAL ESTATE PRICES ON DIFFERENT GRADES OF TOPOGRAPHY

Distance to a state highway	Number of farms	Acres per sale	Average distance to a rail shipping point	Value per acre*	Index
Fairly level land					
Under 1 mile	51	127	3.1	\$48.65	100
1-4 miles	75	121	4.8	41.77	86
5-8 miles	21	117	6.6	38.14	78
Over 8 miles	31	133	7.6	32.32	66
Rolling land					
Under 1 mile	42	125	5.1	36.95	100
1-4 miles	159	129	5.3	26.06	71
5-8 miles	74	112	8.3	24.31	66
Over 8 miles	62	122	10.8	21.21	57
Rough land					
Under 1 mile	10	160	3.7	12.40	100
1-4 miles	98	124	5.3	14.95	121
5-8 miles	59	127	7.6	12.19	98
Over 8 miles	90	134	12.7	11.99	97

* Adjusted to 1930 base.

both the level and rolling lands as the distance increased from less than a mile to over 8 miles was about \$16. Since the rolling lands were valued at a somewhat lower rate than were the level lands the proportional decrease was somewhat greater in their case. No consistent tendency appeared for rough farm land located close to a state high-

¹ State Highway Board, *Bien. Rpt.*, 1930-1932, p. 6 (1932).

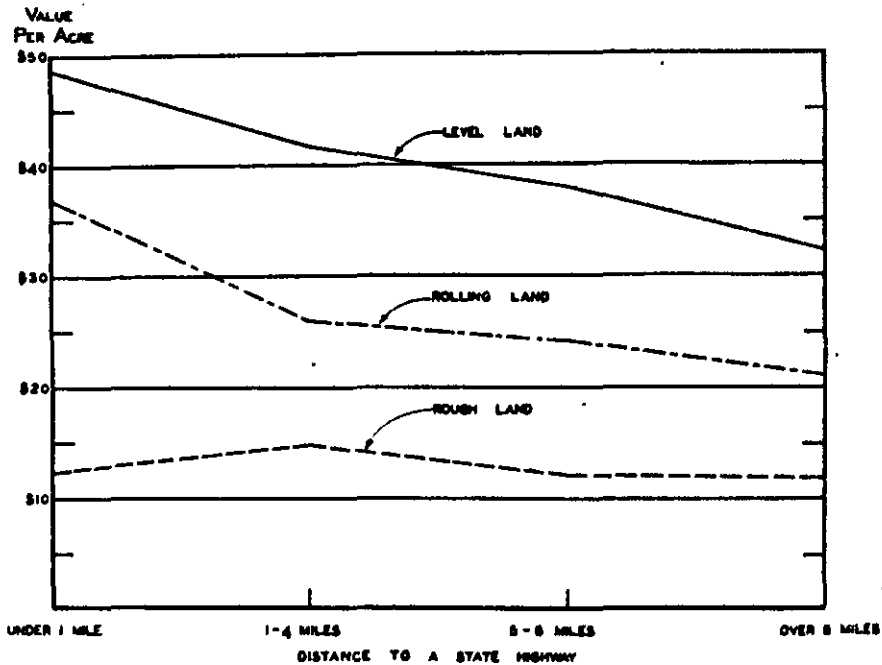


FIG. 4.—Relation between distance to a state highway and the value per acre of farm real estate.

way to sell at appreciably higher prices than did that which was more remote.

The farms near a state highway tend also to be relatively near a railway station. Due to the close association between these two factors it is probable that part of the differences in prices shown in table 21 are due to the effect on land prices of location relative to shipping facilities. Of the two factors, however, distance to highway is of considerably the greater importance (table 22). In none of the groups into which the farms are divided according to distance from highways is the average value per acre of the farms which were more than five

TABLE 22.—RELATION BETWEEN DISTANCE TO A STATE HIGHWAY, DISTANCE TO A RAIL SHIPPING POINT, AND FARM REAL ESTATE PRICES

Distance to a state highway	Distance to a rail shipping point			
	Less than 5 miles		5 miles and more	
	Number of farms	Value per acre*	Number of farms	Value per acre*
Under 1 mile	78	\$41.27	25	\$37.52
1-4 miles	229	26.03	103	27.00
Over 4 miles	45	26.24	292	18.95

* Adjusted to 1930 base.

miles from a shipping point markedly less than that of the farms at less than that distance, and in one group it was slightly greater. The greatest difference, \$7 per acre, occurred among the farms located more than four miles from a state highway. On the other hand, farm land values among the properties five miles or more from a shipping point fell off an average of \$10 per acre as the distance from a state highway rose from less than a mile to from one to four miles and dropped another \$8 per acre in the next group, made up of farms at more than that distance. Among farms nearer to rail than five miles an increase from less than a mile to from one to four miles to a state highway was accompanied by a \$15 per acre decline in average value, but beyond this point no further decrease occurred.

CHANGES IN THE PRICES OF VERMONT FARM REAL ESTATE, 1900-1933

The importance to the Vermont farmer of changes in the value of farm real estate is indicated by the fact that in 1932 real estate represented 75 percent of the total capital invested in farming operations on 204 Vermont farms.¹ Changes in values are of particular importance to the farmer whose farm is mortgaged since a decline may wipe out his entire equity.

Some basis for estimating future changes in values may be had from an analysis of the movement of land values in the past. Hence a study covering the period from 1900 to 1933 and including the relationships between the course of land prices and certain associated factors should prove of value.

TREND OF FARM REAL ESTATE PRICES

Available data show the yearly changes in the sale price of farm real estate over the period 1900 to 1933. These comprise information on the voluntary sales recorded in seven towns for the years 1900 to 1933, 19 additional towns for the years 1920 to 1933, and 81 additional towns for the years 1928 to 1933. The average sales price of farm real estate for each year have been expressed as an index on a 1910 to 1914 base, each yearly average being shown as a percentage of the average for that five-year period.² The index prior to 1920 is based on an average of 56 sales per year; for the period 1920 to 1933 it represents an average of 135 sales per year. The data do not include all the voluntary sales made in these towns during the period under

¹ Williams, S. W. Studies in Vermont Dairy Farming. Vt. Sta., Bul. 376 (1934).

² An index for each group of towns was constructed on a 1928 to 1931 base. These were then combined and converted to a 1910 to 1914 base.

review since in many cases no information concerning the true consideration was available.

Although the movement of farm real estate prices has been somewhat irregular, it may be divided into two distinct phases with 1920 as the transition point (table 23, fig. 5). From 1900 to 1920 prices

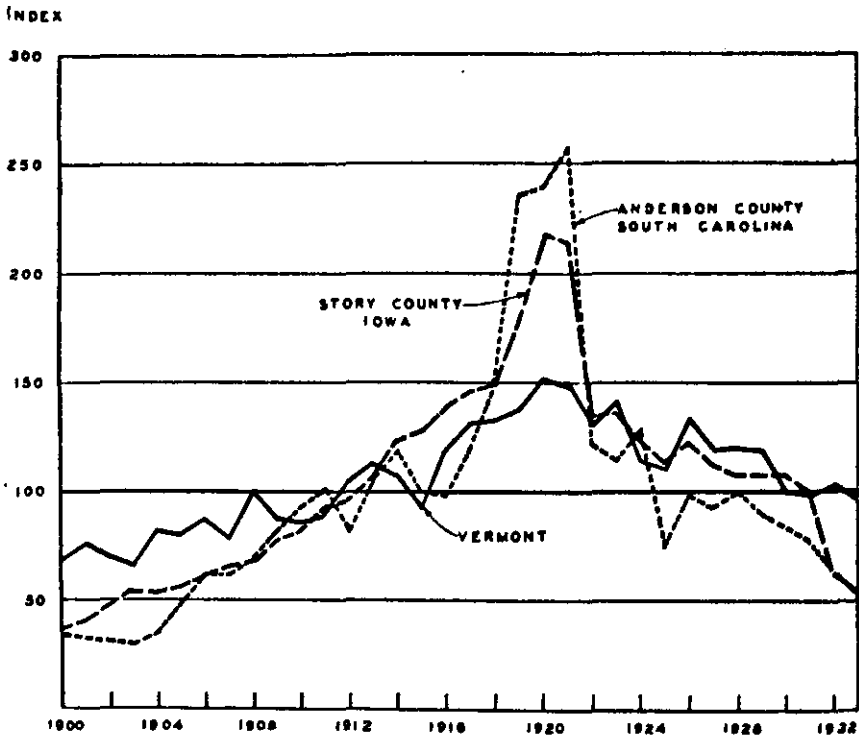


FIG. 5.—Changes in the sales price per acre of farm real estate in Vermont, in Iowa and in South Carolina, 1900-1933.

were generally rising, with the rate of increase during the last five years of the period, the war and post-war years, somewhat more rapid than in the period 1900 to 1915. From an index of 69 in 1900 prices rose until at the peak in 1920 they were one and one-half times pre-war. Since 1920, prices have moved irregularly downward. In 1933, the last year for which data are available, the average value per acre of the farms sold was four percent less than that in the 1910 to 1914 period.

MOVEMENT OF VALUES IN DIFFERENT SECTIONS OF THE UNITED STATES

Recent investigations in Iowa and South Carolina make possible a comparison of the trend of farm real estate prices in Vermont with that in these two states.

PRICES OF VERMONT FARM REAL ESTATE

The data for the price series in Iowa are for Story county, located near the center of the State and typical of its level central and northwestern sections. In 1930 the average value per acre of farm land in the county was \$154, as compared with a state average of \$124. In South Carolina the data relate to Anderson county which is in the upper Piedmont section near the northwest corner of the State. In 1930 approximately two-thirds of the crop land of the county was in cotton. The price series in both of these areas are based on tabulations made from official sources, principally from the deeds filed in the county recorders' offices.

From 1900 to 1918 prices increased at a fairly uniform rate in each of the areas represented, but the rate of gain was somewhat more rapid in Iowa and in South Carolina than in Vermont (table 23, fig. 5).

TABLE 23.—INDEX NUMBERS OF FARM REAL ESTATE PRICES IN VERMONT, STORY COUNTY, IOWA AND ANDERSON COUNTY, SOUTH CAROLINA, 1900 TO 1933
(1910 to 1914 = 100)

Year	Vermont		Story county, Iowa,* land price index	Anderson county, South Carolina,† land price index
	Number of farms	Land price index		
1900	26	69	36	34
1901	54	76	40	33
1902	55	70	47	31
1903	52	66	54	30
1904	48	82	54	35
1905	45	80	56	49
1906	50	87	61	62
1907	53	78	65	62
1908	42	100	68	69
1909	37	88	78	81
1910	60	86	82	93
1911	64	89	92	101
1912	60	105	96	82
1913	84	113	107	106
1914	69	107	122	119
1915	73	92	128	100
1916	65	118	139	98
1917	43	131	146	120
1918	54	133	150	149
1919	80	138	179	236
1920	189	152	218	240
1921	158	149	214	257
1922	154	130	134	121
1923	131	142	136	114
1924	98	114	123	128
1925	122	110	113	75
1926	115	132	122	99
1927	90	119	113	93
1928	152	120	108	100
1929	164	119	108	90
1930	168	101	108	84
1931	137	99	101	78
1932	136	103	63	65
1933	84	96	53	..

* Computed from data published in Iowa Sta., Bul. 328, "Farm Land and Debt Situation in Iowa, 1935," by W. G. Murray and W. O. Brown (1935).

† Russell, E. A. S. C. Sta., Circ. 50, p. 13 (1933).

In the two years immediately following the war land prices in Iowa increased 45 percent from \$200 to \$289 per acre. In South Carolina the percentage increase (60 percent) was even greater though the actual increase in dollars per acre was considerably less. Vermont farm prices rose only 14 percent during the two-year period.

Vermont did not share in the rapid post-war rise in prices, nor did she experience to the same degree the violent declines of 1921-1922. In South Carolina prices in 1922 were less than one-half of those prevailing in 1921. The 37 percent decrease in Iowa was not as great as that in South Carolina but much greater than the 13 percent decline in Vermont.

From 1923 to 1933 farm real estate prices decreased in all three areas. The index for Iowa and Vermont followed much the same course until 1932 when Iowa experienced a sharp decline in prices while the Vermont index shows no change. Throughout practically all this ten-year period, land prices in South Carolina were relatively lower than in Vermont.

In 1932, the last year for which data are available for all areas, farm realty prices in Vermont were slightly above the pre-war level and land prices in Anderson county, S. C., and in Story county, Iowa, were a third below those of the 1910 to 1914 base period.

In general Vermont farm real estate prices per acre have followed a more stable course than those in Iowa or South Carolina, neither the inflation in values in the years 1919 and 1920 nor the subsequent deflation being as great.

RELATION BETWEEN THE PRICE OF FARM REAL ESTATE AND THE PRICES RECEIVED BY FARMERS FOR FARM PRODUCTS

From 1914 to 1933 major alterations in farm products prices have been accompanied by less extensive changes in the same direction in the level of farm realty prices. The sharp rise in farm products prices beginning with 1915 was accompanied by a less drastic rise in the sale prices of farm real estate (table 24, fig. 6). At the peak in 1920, prices of farm products were two and one-third times and real estate prices about one and one-half times pre-war. The precipitous drop in products prices in 1921, which continued at a modified rate in 1922, was accompanied by a smaller percentage drop in the real estate price index. The movement of farm products prices following 1922 was in general upward until 1930 and then rapidly downward until it leveled off in 1933. Farm realty sales prices did not respond to the recovery in the farm products prices which took place between 1923

INDEX

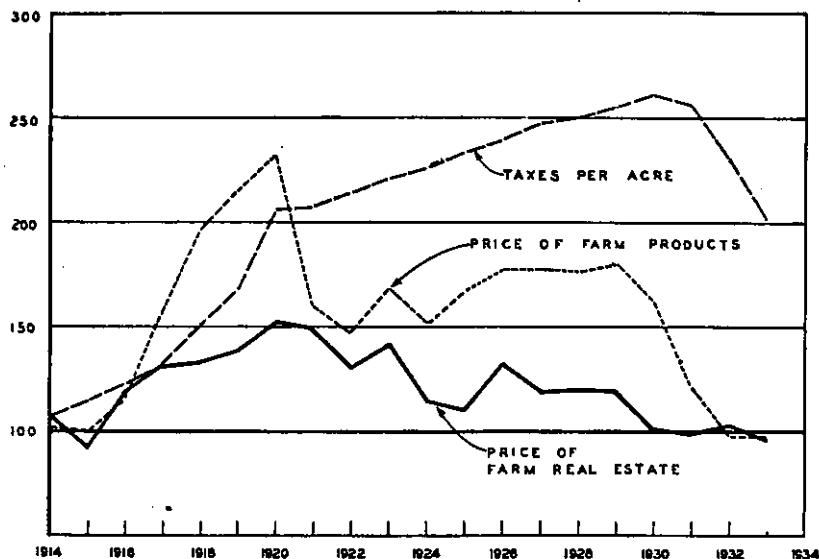


FIG. 6.—Changes in the sales price of farm real estate, in prices of farm products and in farm taxes, Vermont, 1914-1933. (For real estate and farm products prices 1910-1914 = 100; for taxes 1913 = 100.)

TABLE 24.—INDEX NUMBERS OF PRICES PAID TO VERMONT FARMERS FOR FARM PRODUCTS, TAXES PER ACRE OF FARM REAL ESTATE, AND FARM REAL ESTATE PRICES, 1914 TO 1933 (1910 to 1914 = 100)

Year	Prices of Vermont farm products*	Farm taxes†	Farm real estate prices
1914	101	107	107
1915	100	114	92
1916	115	122	118
1917	156	131	131
1918	196	150	133
1919	215	167	138
1920	232	206	152
1921	160	207	149
1922	147	214	130
1923	168	221	142
1924	151	226	114
1925	167	233	110
1926	177	239	132
1927	177	247	119
1928	176	250	120
1929	180	255	119
1930	162	261	101
1931	121	256	99
1932	97	230	103
1933	97	202	96

* Gilbert, C. W. Prices of Farm Products in Vermont. Vt. Ext. Serv., Circ. 72, p. 3 (1932). Indexes for 1932 and 1933 from Vt. Ext. Serv., Vt. Agl. Outlook for 1935, p. 4.

† 1913 = 100. The Farmers' Tax Problem, 73rd Congress, 2nd Session, House Document No. 406, p. 7 (1934).

and 1930 but continued irregularly downward. In 1932 and 1933 both the prices paid farmers for farm products and farm real estate prices were approximately at the pre-war level.

A record of the prices at which farms are changing hands on a declining real estate market does not furnish a complete and accurate description of its condition. The price index of farm real estate shows only a moderate decline in response to rapidly falling farm products prices in 1921 and again in 1931 and 1932, but the number of farms changing hands decreased considerably in both periods (table 25, fig. 7).

TABLE 25.—INDEX OF THE ACTIVITY OF THE FARM REAL ESTATE MARKET AS MEASURED BY THE VOLUNTARY SALES OF FARM PROPERTY WITH BUILDINGS AND OF OTHER TYPES OF RURAL PROPERTY* IN 26 VERMONT TOWNS, 1920 TO 1932

Year	Farm property with buildings		All other types of rural property	
	Number of sales recorded	Index	Number of sales recorded	Index
1920	389	100	135	100
1921	303	78	133	99
1922	314	81	96	71
1923	264	68	94	70
1924	247	63	88	65
1925	246	63	133	99
1926	267	69	91	67
1927	253	65	96	71
1928	268	69	84	62
1929	295	76	94	70
1930	269	69	83	61
1931	230	59	75	56
1932	212	54	50	37

* Forest land, farm land without buildings, and uncultivated land.

INDEX

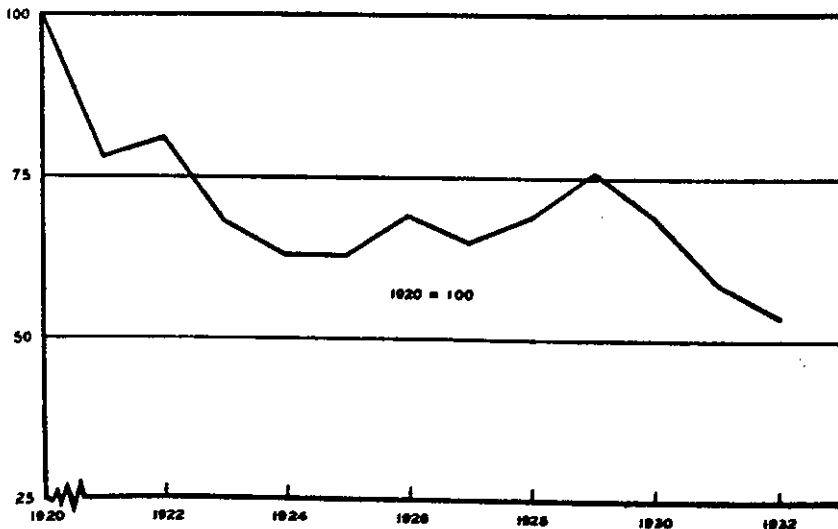


FIG. 7.—Index of the number of voluntary sales of farm real estate in 26 Vermont towns, 1920-1932

Only about three-fourths as many farms were sold in 1921 as in 1920 and a like decrease occurred in 1931 and 1932. The volume of sales of other types of rural property fell off similarly.

RELATION BETWEEN TAXES AND FARM REAL ESTATE PRICES

Farm real estate taxes more than doubled between 1913 and 1920 and then continued upward at a slower rate of increase until 1930. At the peak in 1930, real estate was taxed at the rate of 57 cents per acre, a point two and one-half times as high as the level of 1913. Since 1930 the trend has been downward. In 1933 taxes per acre were roughly double those levied in 1913 or at approximately the same level as in 1920.

Yearly changes in prices of farm products, in the prices of farm real estate, and in taxes per acre are compared in table 24 and figure 6. Since 1921 assessments have been higher relative to farm prices than they were during the pre-war base period. To pay their taxes in 1933 farmers had to sell on the average over twice as much milk and other farm products as they did in 1913. A Vermont farm management study shows that in 1932 they represented nine percent of the total expenses of farm production.¹ This increasing burden has no doubt been a factor in the decline in farm real estate prices.

TABLE 26.—RELATION BETWEEN GRADE OF LAND AND THE TREND OF FARM REAL ESTATE PRICES

Year	Number of farms	Acres per sale	Price per acre	Percent of 1928
Fairly level topography				
1928	40	114	\$44.08	100
1929	49	107	40.73	92
1930	40	101	40.74	92
1931	34	90	43.76	99
1932	32	117	33.49	76
1933	19	106	35.43	80
Rolling topography				
1928	72	129	\$24.83	100
1929	70	115	26.43	106
1930	72	121	23.41	94
1931	53	106	23.20	93
1932	62	111	23.87	96
1933	32	104	25.34	102
Rough topography				
1928	40	112	\$13.53	100
1929	45	125	13.71	101
1930	56	131	12.00	89
1931	50	141	11.86	88
1932	42	115	13.88	103
1933	33	123	11.74	87

¹ Williams, S. W. Studies in Vermont Dairy Farming. Vt. Sta., Bul. 376, p. 13 (1934).

RELATION BETWEEN GRADE OF LAND AND TREND OF FARM REAL
ESTATE PRICES

It has been pointed out that the degree of fluctuation in farm real estate prices has varied materially in different parts of the nation (p. 24) and the trend in prices has not been uniform on all grades of land in Vermont. While the changes were irregular and the trend not clearly defined, between 1928 and 1933 the greatest decrease, both in percentage and absolutely, took place in the group of farms classed as of fairly level topography (table 26).

SUMMARY

Appraisal for taxation purposes at "just value in money" as prescribed by law is far from being realized in practice. Comparison of the sale prices with the appraised values of 1,240 parcels of rural property shows that forest land, uncultivated land, and farm land on which there were no buildings were appraised at a rate which was about a third higher relative to sales value than were the farms with buildings. It further shows that with respect to the land in farm units there was a marked tendency to appraise farms which were worth a relatively low price per acre at a higher percentage of their sales value than those which sold at higher prices. This was true regardless of their size in terms of acreage. Farms worth less than \$10 per acre were appraised on the average at 11 percent more than they sold for. Increases in the sales value per acre were associated with a decline in the ratio of appraised to sales values, until at \$40 per acre or more, farms were appraised at an average of only 56 percent of the amount for which they sold. In so far as sales value is a just basis for taxation these appraisals place an improper tax on the overestimated properties.

The importance of equitable real estate appraisal is indicated by the fact that in 1934 real estate, urban and rural, made up 84 percent of the state grand list, personal property accounting for 10 and taxable polls six percent, respectively.

Preparation of the 1932 grand list cost an average of \$151 in 15 towns, varying from 0.4 percent to 1.1 percent of the taxes levied and averaging 0.6 percent. The cost of the 1930 quadrennial appraisal is estimated at \$152 per town for the same 15 towns, or 24 cents per \$1,000 valuation.

A number of factors affect the price for which a Vermont farm will sell at any given time. Analysis of the prices of 772 farms

sold in the 1928 to 1933 period indicates that the price which farm purchasers were willing to pay for farm real estate was influenced by its soil, by its topography, by the distance from the farm to a state highway and to a less extent by the distance to a rail shipping point. The farms located on the soils of the Champlain valley and the Southwest valley were on the average more valuable than those located on any of the other major soil areas of the State. At an average price of \$37 per acre they brought \$10 more than those of the North Central plateau, \$13 more than those of the Eastern hill region, and \$20 an acre more than the farms in the Taconic, Central plateau and Essex county regions. Variations in topography, which are closely associated with soil differences, also influence prices. Farms on rolling land brought about two-thirds and farms on rough land about one-third as much per acre as fairly level farms. As the distance from a state highway increased the average prices of fairly level and of rolling farms declined, farms located more than eight miles from state roads being worth approximately two-thirds as much per acre as those which were within a mile. Prices of rough land were much less influenced by location.

Vermont farms have varied in value per acre over the period 1900 to 1933. While the movement of farm real estate prices has been somewhat irregular the trend was in general upward from 1900 to 1920. Since 1920 it has been reversed and land prices have declined. In 1933 the average farm sold for slightly less than it would have brought in the period immediately before the war. This rise and decline in farm real estate prices was on a much smaller scale in Vermont than in some other sections of the United States.

The price farm purchasers were willing to pay for farm land in the period 1914 to 1933 was materially influenced by the prices farmers received for their sales. In general farm product prices and farm land prices followed similar courses, but the rise prior to 1920 and the subsequent decline were both less extreme in the case of real estate prices than they were in that of farm product prices.

Taxes directly affect the net income resulting from the ownership of farm real estate. These increased 160 percent from 1913 to 1930, when a decrease began which continued through 1933. To pay their real estate taxes, farmers had to sell on the average over twice as much produce in 1933 as they sold for the same purpose in 1913. While the decline in farm real estate prices since 1920 has in a large measure been occasioned by the decline in the prices farmers receive for their products, the increase in taxes has been a contributing factor.