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the minnesota rural real estate market in 1972

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including special studies of:
the twin city metropolitan area
the red river valley
east central minnesota

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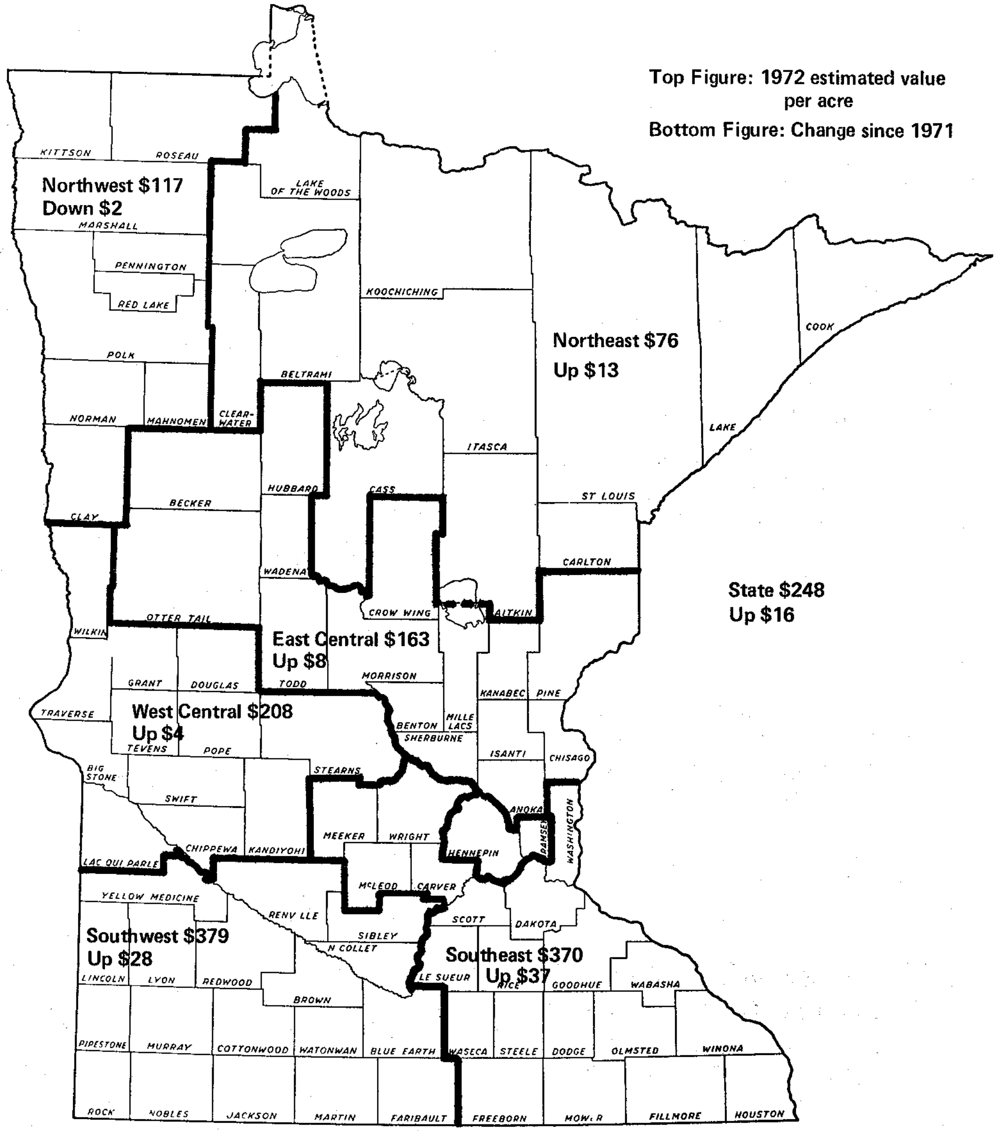
FIG. 1. ESTIMATED AVERAGE FARMLAND VALUE FROM REPORTER'S ESTIMATES*



*Hennepin and Ramsey Counties Excluded

SUMMARY

The Minnesota Farm Land Market Report

Reporters' estimates indicate that rural land values in 1972 in Minnesota averaged $248 per acre, or 7 percent above the 1971 level. Reported sales prices averaged $302 per acre, an increase of 12 percent during the same period. This latter figure represents a mixture of trends varying from a 67 percent increase in sales prices in the Northeast district to a 21 percent decline in the East Central district.

The number of farm land transfers decreased in Minnesota in 1972 according to U.S. Department of Agriculture estimates, but this trend is not supported by number of farm sales reported by respondents to this survey, which showed an increase in 1972.

Contracts for deed were used to finance 50 percent of all reported sales, 29 percent were financed by mortgages and 21 percent were cash sales.

Improved land (that with buildings) accounted for 73 percent of all reported sales, the proportion being lowest in the Northwest and West Central districts, and highest in the East Central district (80 percent of sales).

Almost 9 out of 10 rural land sales were for agricultural purposes, varying from 98 percent in the Southwest to 78 percent in the East Central District. Sales to agricultural investors (those who were not adding land purchased to land already owned) were 15 percent of all sales statewide, sales for non-farm purposes increasing their share of the market in the Southeast and East Central districts. 22 percent of all sales in the East Central district were for non-farm uses.

The Twin Cities Metropolitan Area

Rural land values in the Twin Cities Metropolitan Area continue to increase, and it is evident that urban influence on the rate of increase are not confined to the five-county area studies in previous editions of this report, but is now affecting Wright and Chisago counties.

Non-farm investors were active in the Metropolitan Area but paid lower prices in 1972 than in 1971 ($1,017 as against $1,230 in the five counties). This suggests that 1971 was an abnormal year in the land market. Non-farm buyers accounted for 39 percent of sales in the five counties, 40 percent in the seven counties. This expansion of activity over 1971 was at the expense of operating farmers and expansion buyers.

Prices paid for land of average and poor quality substantially exceeded prices paid for good quality land in the five counties (by 19 and 7 percent respectively) indicating that there is no longer a true "farm land" market when Metropolitan Area counties are averaged. Even in the seven counties prices paid for land of average quality exceeded those paid for good quality land by 12 percent ($667/$593). Since "good", "average", and "poor" refer to quality of land for agricultural use, it is evident that there is an increasing use of rural land for urbanizing purposes.

Red River Valley

Prices received in reported sales of farmland decreased 9 percent in 1972 over 1971. Market activity in the Valley was approximately the same as in 1971 although it declined in the non-Valley area.

Expansion buyers still dominate the market in the Valley but by a significantly reduced margin as compared with 1971 (69 as against 90 percent). The slack has been taken up by operating farmers and agricultural investors. Expansion buyers still pay more for land ($163 per acre) but this also decreased. Although improved land accounted for 73 percent of sales statewide, the proportion in the Valley was only 47 percent in 1972, although improved land sold for more than unimproved, reversing the order of 1970 and 1971.

The East Central District

The eastern counties of the East Central district are increasingly influenced by the Twin Cities and this is reflected in land prices being higher in the east than in the west ($305/$124 per acre when 1971 and 1972 are aggregated and averaged). Rates of increase in prices paid are also higher in the eastern counties.

Non-farm users and operating farmers each accounted for about 35 percent of sales in the eastern counties in 1971-72, but non-farm users paid $509 per acre compared with $213 per acre paid by operating farmers. The latter group and expansion buyers dominate the market in the western counties.

PROCEDURE

Data for the Minnesota Rural Real Estate Market Report in 1972 were collected through the use of mail questionnaires sent to 1,322 individuals during the month of July, 1972. Potential respondents included real estate brokers, agricultural loan specialists, bankers, and other people knowledgeable of farm land values in Minnesota.

The questionnaire is divided into two parts. In the first part respondents are asked to estimate an average value for farm land, with separate estimates for land of high, medium, and low quality in their area. These estimates are used to calculate percentage changes in land values during the past year. This is done by (1) weighting the average estimated value per acre of all respondents in a county by the number of acres of farm land in their county; (2) adding these values county by county for each region; and (3) dividing this total for all counties in a region by the total acreage of farm land in that region. In making comparisons with 1971, only estimates of respondents who had answered in both 1971 and 1972 were used. On the basis of this rather rigorous restriction, a total of 532 estimates was useable.

The second part of the questionnaire requested data on actual farm sales during the period from January 1 to July 1, 1972. Reports were obtained on a total of 1,641 sales. Data were supplied on type of buyers and sellers, method of financing, and quality of land and buildings. Reporters are requested not to include sales between close relatives when filling out this part of the questionnaire.

Four types of buyers are distinguished in this report.

1. Operating farmers:those buying complete farm units for operation as individual farms.
2. Expansion buyers: those who already own some farm land either as farmers or landlords.
3. Agricultural investors: those who buy farm land to be rented out or managed for farming purposes.
4. Non-farm investors: those who buy farm land that will not be used for farming purposes.

The four groups are mutually exclusive.

The distinction between improved and unimproved land is determined by the presence of buildings. Land with buildings is classified as improved land. Land with no buildings is unimproved.

Land value changes determined by the estimate method have definite advantages over value changes based on reported sales. The quality of land and buildings has a marked effect upon land value and these factors can vary significantly from year to year and from sale to sale. The estimate method holds these factors constant, but memory bias is a problem. For this reason, only reports from respondents who report for two consecutive years are used in constructing the estimates of value.

A. Land Market Trends

Reporters' Estimates

For the state as a whole the average value of farmland in 1972 was $248 per acre (Table 1). This represents an increase of $16, or 7 percent over 1971. Large increases of 11 percent and 8 percent respectively in the Southwest and Southeast districts were offset by more modest increases in the West Central and East Central districts (2 percent and 5 percent respectively) and a decline of 2 percent in the Northwest. The 20 percent increase in the Northeast should not be taken at face value, based as it is on a smaller sample of estimates than in any other district. In addition the land market in this district has typically fluctuated widely from year to year.

As in 1971, the largest increase in farmland value was in the Southeast region of the state, a reflection of its situation relative to the Twin City Metropolitan area (Table 2). The Southwest still maintains its position as the most valuable farmland area in the state, however, with a 1972 average estimated value per acre of farmland of $379. This lead is rapidly being eroded by values in the Southeast which have shown a 93 percent increase in rural land values in the decade since 1962 (see Figure 2). This compares with only 52 percent in the Southwest, which is also well behind the increase in the East Central district of 64 percent. Like the Southeast, the East Central District is feeling the impact of urban influences on land values. The acceleration of this process during the 1960's is evident.

Over the state as a whole the past decade has seen a 56 percent increase in land values, evenly divided between 1962-67 and 1967-72.

Actual Sales

State-wide the 7 percent increase in estimated land values is substantially less than the 12 percent increase in average prices received in actual sales (Table 3). This differential is not as spectacular as the 9 percent for 1971 over 1970, but as in 1971 a large discrepancy is observable in the East Central district. This time, however, actual sales prices preported for 1972 are far below the reporters' estimates of farmland values, the trend in the reported sales showing a massive decline of 21 percent over 1971. It transpires that the 1971 figure for reported sales was abnormal, and this is the subject of further analysis in Part IV of this report. Here it can be noted that the activity in the land market in the eastern counties of the East Central district is not as vigorous as during 1971, although land prices within the ambit of the Twin Cities are still high relative to the lower valued western counties.

Table 1: Estimated Average Value Per Acre of Farm Land by District, Minnesota, 1962-1972.*

Years	South-east	South-west	West Central	East Central	North west	North east	Minn.
			—dollars per acre—				
1962	192	250	138	99	104	69	159
1963	194	246	142	103	114	68	161
1964	206	252	145	111	115	59	166
1965	219	261	146	112	113	51	171
1966	242	277	153	122	112	58	183
1967	262	303	163	128	108	62	194
1968	286	333	181	134	122	57	211
1969	308	350	196	146	120	54	223
1970	317	347	198	161	120	62	227
1971	333	351	204	155	119	63	232
1972	370	379	208	163	117	76	248

*Based on reporters' estimates of average value per acre of farm land in their area.

Table 2: Percentage Changes in Estimated Value Per Acre, Minnesota, 1962-1972

District	Estimated 1972 Value Per Acre	Percent Change From 1962	1967	1971
	—dollars—		—percent—	
Southeast	370	93	41	11
Southwest	379	52	25	8
West Central	208	51	28	2
East Central	163	64	27	5
Northwest	117	12	8	–2
Northeast	76	10	23	20
Minnesota	248	56	28	7

FIGURE 2 - ESTIMATED AVERAGE VALUE PER ACRE OF MINNESOTA FARM LAND BY DISTRICTS 1945 - 1972

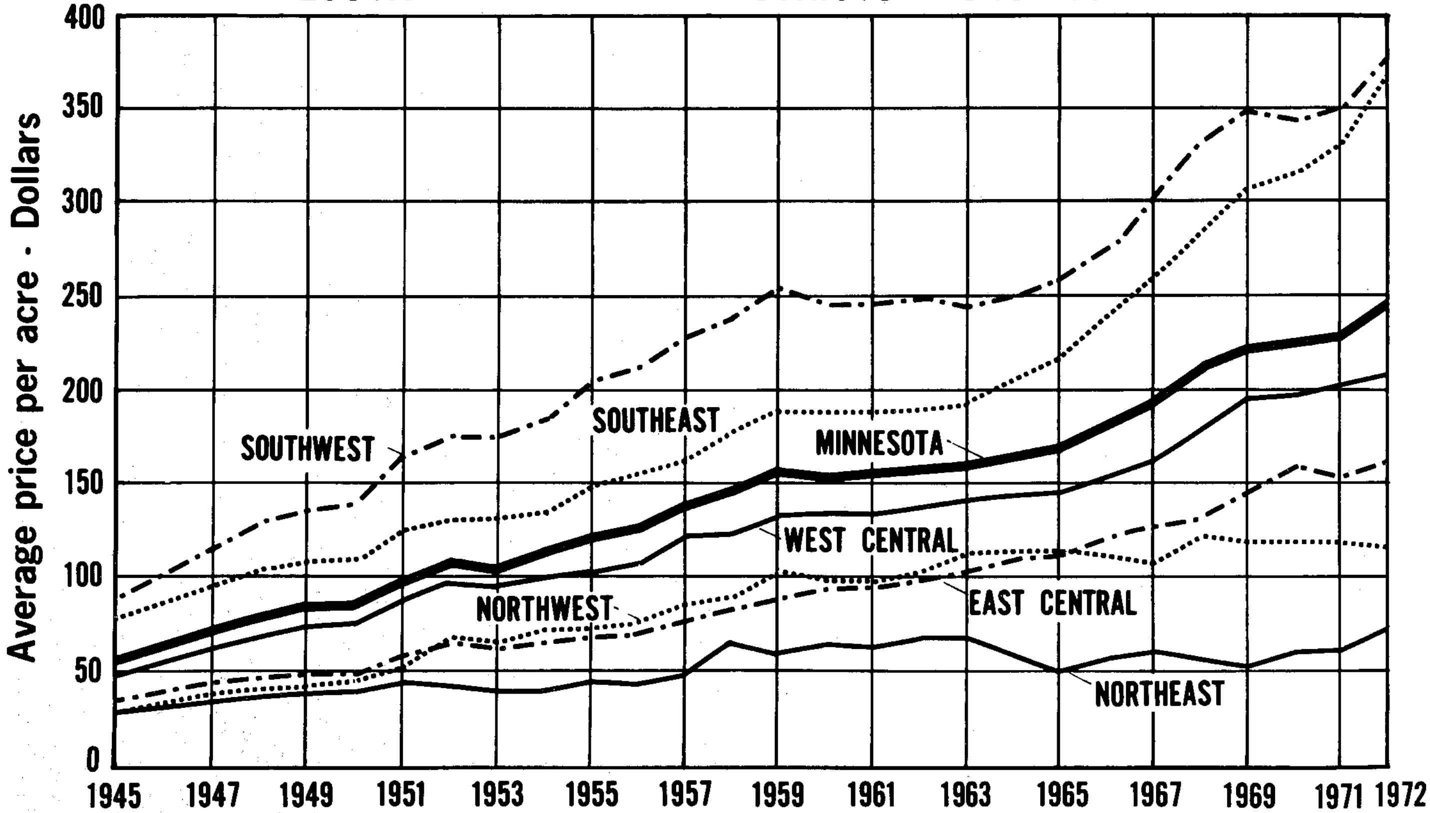


Table 3: Average Price Per Acre of Farmland, Estimated and Actual Sales, by District, Minnesota 1971-72.

District	1971 Estimated Value	1971 Sales Price	1972 Estimated Value	1972 Sales Price	Percent Changes Over 1971 Estimated	Percent Changes Over 1971 Actual
	—dollars per acre—				—percent—	
Southeast	333	372	370	420	11	13
Southwest	351	342	379	367	8	7
West Central	204	205	208	223	2	9
East Central	155	193	163	152	5	−21
Northwest	119	99	117	105	−2	6
Northeast	63	46	76	77	20	67
Minnesota	232	269	248	302	7	12

Sales prices in the Southeast district increased 13 percent over 1971, close to the estimated value increase of 11 percent. Similarly there is a close correlation between estimated and sales prices in the Southwest. Sales prices in the West Central district were 7 percent higher than estimated values, 8 percent higher in the Northwest, and an exceptional 47 percent higher in the Northeast district. The peculiarities of the land market in this last district have already been noted. In fact, proportionately little farmland remains in the district and many of the sales of rural land are connected with recreational property acquisition. Given the premium on recreational property at present, the discrepancy of sales price over estimated value may not be as exaggerated as indicated. Further information is needed to verify this trend.

Actual sales prices for rural land have significantly increased during the past decade in the Southeast district, by a factor of 114 percent, more than in any other district (Table 4).

Sales prices in the East Central District doubled over the same period of time, more evidence of the influence of the Twin Cities on surrounding rural land values. The Southwest market seem to be picking up slightly after relatively small increases since 1967, and an equally strong upward trend seems prevalent in the West Central district. Sales prices in the Northwest have not yet recovered to the peak value of $121 per acre reached in 1969, although there is a slight increase over 1971. A substantial decline in the sales prices of farms in the Red River Valley was offset by an increase in values in non-valley areas (see Part III).

Table 4: Average Reported Sales Price Per Acre of Farm Land, by District, Minnesota, 1962-1972.*

Years	South-east	South-west	District West Central	East Central	North west	North east	Minn.
			—dollars per acre—				
1962	196	229	140	76	74	30	161
1963	214	222	136	86	109	48	168
1964	213	234	150	86	104	52	178
1965	213	233	133	96	106	40	178
1966	253	260	164	113	103	31	203
1967	272	306	179	93	117	51	215
1968	316	329	186	104	90	47	232
1969	341	334	194	130	121	51	238
1970	346	340	206	141	113	45	243
1971	372	342	205	193	99	46	269
1972	420	367	223	152	105	77	302

*Based on reported farm sales, January 1 to July 1 of each year.

Activity in the land market

Based on U.S.D.A. figures the volume of voluntary sales nationwide showed a slight decline in 1972 over 1971 although this figure has fluctuated within relatively narrow constraints (29.7 to 38.1 transfers per thousand farms) since 1965 (Table 5). Except for 1971 there has been general downward trend in voluntary sales since 1968. Voluntary sales still account for about three-quarters of all title transfers, however.

Numbers of actual sales reported by respondents to this survey showed a substantial increase over 1971, from 1,388 to 1,641 (Table 6). All of the increase was accounted for by increased numbers of sales being reported from the Southeast, Southwest and West Central districts, particularly the first two.

The average size of tract sold was relatively unchanged in the Southeast and Southwest districts, but there were changes of varying size in all other districts, ranging from an increase of 24 acres in the East Central district to a decrease of 22 acres in the Northeast. As mentioned above and as elaborated on in Part IV below, the change in the East Central district is mainly contingent upon abnormalities in the figures for 1971.

Reason for Sale

Retirement or death accounted for 57 percent of all decisions to sell in the state as a whole in 1971 (Table 7). These two reasons are particularly strong in the Southwest, (accounting for 66 percent of all sales), and West Central districts (58 percent). Only 8 percent of the decisions to sell were to permit a move to another farm. Also statewide, 19 percent of the sellers left farming for some other way of life. The highest frequency was 42 percent in the Northeast, doubtless a response to the increasing difficulties of commercial farming in this area. This reason also accounted for high proportions of farm sales in the East Central District (30 percent) and the Southeast (22 percent), a reflection of rising land taxes and the attraction of non-farm jobs in this more urbanized area of the state. The "other" category, accounting for 16 percent of sales in the state, includes such reasons as health, foreclosure, and sales by speculators to raise money.

Table 5: Estimated Number of Farm Title Transfers Per Thousand Farms, by Methods of Transfer, Year Ending March 1, Minnesota, 1957-72.

Years	Voluntary Sales	Forced Sales (Foreclosures, Tax)	Inheritance, Gifts and all Other Transfers	Total all Classes
1957	34.0	2.8	15.6	52.4
1958	35.6	3.5	14.7	53.8
1959	39.7	2.6	11.4	53.7
1960	34.5	2.7	9.9	47.1
1961	29.0	2.6	7.7	39.3
1962	29.3	1.9	10.4	41.6
1963	24.1	1.9	10.1	36.1
1964	30.6	3.2	12.4	46.2
1965	29.7	2.8	10.6	43.1
1966	35.5	2.1	14.9	52.5
1967	37.5	1.4	14.2	53.1
1968	38.1	2.4	9.8	50.3
1969	33.5	2.0	11.8	47.3
1970	31.8	2.2	9.6	43.6
1971	36.1	2.2	10.4	48.7
1972	34.7	1.6	9.6	45.9

Source: "Farm Real Estate Market Developments," CD-77, Economic Research Service, USDA, July 1972.

Table 6: Number of Sales, Acreage of Land Sold and Average Acres Per Sale, by District, Minnesota, January-June, 1971-1972.

District	No. of Sales 1971	No. of Sales 1972	Acres Sold 1971	Acres Sold 1972	Acres/Sale 1971	Acres/Sale 1972
Southeast	439	554	63,833	83,355	145	150
Southwest	405	498	68,232	84,902	168	170
West Central	184	265	34,132	53,026	186	200
East Central	192	188	25,277	29,373	132	156
Northwest	111	98	28,187	26,715	254	273
Northeast	57	38	11,606	6,909	204	182
Minnesota	1,388	1,641	231,267	284,280	167	173

Table 7: Reason for Selling Land, by District, Minnesota, 1972.

Reason for Sale	Southeast	Southwest	West Central	East Central	Northwest	Northeast	Minn.
Death	12	32	18	11	18	16	19
Retirement	40	34	38	42	35	29	38
Left Farming	22	13	16	30	16	42	19
Moved, Still Farming	11	6	9	8	4	3	8
Other	15	15	19	10	26	11	16

Improved and Unimproved Land

Improved land (land with buildings) accounted for 73 percent of all sales in 1972 (Table 8). The proportions were fairly uniform in the Southeast and Southwest districts at 76 and 73 percent respectively. The East Central district had the highest percentage of improved land sales, reinforcing the suspected trend observed in 1971 that buyers were seeking rural residences rather than farmland. The prices paid per acre for improved land in the East Central district are still high relative to those paid for unimproved land. Unimproved land sold for $128 per acre, or 82 percent of improved land values, in this district, the second lowest unimproved to improved ratio in the state (Table 9). This indicates a sustained demand for rural residences which were formerly farmsteads.

Improved land sold for more per acre than unimproved land in 1972, in all districts except the Northeast. The most pronounced change occurred in the Southeast. From 1971 to 1972, the price of unimproved land remained virtually unchanged ($420/$419) while the price of land with buildings rose from $364 per acre in 1971 to $420 per acre in 1972. This may reflect an increased demand for rural housing in this urbanizing area, and a relatively constant demand for unimproved tracts for farm enlargement.

Statewide 1962-72 the sales prices of unimproved land averaged 80 percent of the prices of improved land, ranging from a low of 67 percent in 1968 to a high of 90 percent in 1965 (Table 10). Since 1969 the range of fluctuation, 78 to 84 percent, has been somewhat narrower.

Type of Buyer

Sales to operating farmers dominated the market in 1972, accounting for almost three-quarters of all sales (Table 11). The three western districts of the state, Southwest, West Central and Northwest, had a distinctly higher proportion of this type of sale than the eastern districts, the highest figure being 89 percent in the Southwest. There was a marked increase in sales to operating farmers in the Northwest district over 1971, from 78 to 85 percent. Sales to agricultural investors declined slightly, and sales for non-farm purposes were about the same in 1972 as in 1971, with few spectacular movements in individual regions.

In Table 12 types of agricultural buyers are grouped into three classes; operating farmers (who were not adding the land purchased to land they already owned), farm expansion buyers (who were adding the land purchased to land already owned and who may be either operating farmers or agricultural investor buyers), and agricultural investor buyers, who were not adding the land purchased to land already owned. The proportion of land sold to operating farmers has remained remarkably constant since 1965 although there have been significant variations within districts. Purchases for farm expansion and by investor buyers have also been relatively constant since 1969.

Table 8: Proportion of Improved and Unimproved Land Sold, by District, Minnesota, 1972.

District	Improved Land	Unimproved Land
	percent	percent
Southeast	76	24
Southwest	73	27
West Central	70	30
East Central	80	20
Northwest	55	45
Northeast	74	26
Minnesota	73	27

Table 9: Average Sales Price Per Acre of Improved and Unimproved Farm Land, by District, Minnesota, 1972.

District	Improved Land	Unimproved Land	Unimproved as a Percent of Improved
	—dollars per acre—		percent
Southeast	420	419	100
Southwest	373	344	92
West Central	234	189	81
East Central	156	128	82
Northwest	111	98	88
Northeast	76	79	104
Minnesota	317	247	78*

*Table 9 provides a good example of the way in which a statewide average can be misleading. The statewide ratio of the sale prices per acre of unimproved land to improved land is 78 percent, which is below the ratio for any of the six districts, considered separately. This results from the fact that 45 percent of the land sold in the Northwest district was unimproved land (Table 8). This was by far the highest percentage in any district, and the average price was lower than in any district except the Northeast. When aggregated into a state total, this pulls down the statewide average, since the proportion of unimproved land is relatively small in the districts with higher-priced land.

Table 10: Price Differential Between Improved and Unimproved Land Sold, Minnesota, 1962-1972.

Year	Improved Land	Unimproved Land	Difference	Unimproved as a Percent of Improved
		—dollars per acre—		percent
1962	166	128	38	77
1963	172	144	28	84
1964	181	160	21	88
1965	183	165	18	90
1966	211	158	53	75
1967	222	177	45	80
1968	248	166	82	67
1969	245	206	39	84
1970	254	200	54	79
1971	279	228	51	82
1972	317	247	70	78

Table 11: Percent of Tracts Purchased for Farming and Non-Farm Purposes, by District, Minnesota, 1971 and 1972.

District	Operating Farmer		Investor (agricultural)		Non-Farm Purposes	
	1971	1972	1971	1972	1971	1972
Southeast	63	62	24	21	13	17
Southwest	87	89	11	9	2	2
West Central	82	78	10	14	8	8
East Central	62	63	18	15	20	22
Northwest	78	85	16	11	6	4
Northeast	55	61	20	21	25	18
Minnesota	73	74	17	15	10	11

Table 12: Percent of Tracts Purchased by Type of Buyer, by District, Minnesota, 1969-1972.

District	Operating Farmer Buyer (Sole Tract)				Farm Expansion Buyer (Operator or Investor)				Investor Buyer (Sole Tract)			
	1969	1970	1971	1972	1969	1970	1971	1972	1969	1970	1971	1972
Southeast	33	33	34	34	37	44	38	41	30	23	28	25
Southwest	21	19	22	20	67	72	67	71	12	9	11	9
West Central	27	25	29	24	59	66	60	61	14	9	11	15
East Central	50	57	51	55	32	23	26	26	17	19	23	19
Northwest	21	20	24	27	69	69	59	62	10	11	17	11
Northeast	35	33	55	58	35	17	19	16	30	50	26	26
Minnesota	30	30	31	30	52	55	50	53	18	15	19	17

Farm expansion sales were more frequent in the predominantly agricultural western half of the state. A high proportion of sales in the East Central district still goes to operating farmers who are not increasing farm size. This is a district of relatively small farms in need of expansion to remain viable economic units. It is also a district in which current land market prices are high relative to the agricultural earning potential of the land. The conclusion seems inescapable that proximity to the Twin Cities is inflating land prices to an extent that discourages farm expansion. Sales to investor buyers declined in four of the six districts, a trend counter to the one observed in almost all districts from 1970 to 1971.

The price paid for farm land varies considerably by type of buyer. In 1972 expansion buyers paid $26 per acre more than operating farmers, but $24 per acre less than investor buyers (Table 13). There was a marked increase in prices paid by agricultural investor buyers in 1972 over 1971, amounting to $72 per acre. This was due especially to large increases in prices paid by investors in the Southeast (over $100 more), in the Southwest, and in the West Central districts. In the Southeast, West Central and Northeast districts operating farmers paid more than expansion buyers in 1972. As in previous years, high prices have typically been paid by investors in urban-influenced areas such as the Southeast ($439 in 1972, $330 in 1971 against, for example $401 per acre in the predominantly agricultural Southwest in 1972, $314 in 1971).

Land and building quality

While the average reported sales price per acre for the state as a whole increased by 12 percent over 1971, land of average quality increased by 16 percent, good quality land by 6 percent and poor quality land declined in price by 3 percent (Table 14). This last figure is undoubtedly a reaction to the huge increase of 30 percent in price paid for poor quality land in 1971 over 1970. It was suggested that this figure reflected an unusual level of activity by non-farm investor buyers in 1971. The inference from the 1972 figure is that this activity has leveled off.

In fact, the sales price of poor quality land to non-farm buyers in 1972 was barely more than sales price for poor quality land to all types of buyers, ($206 as against $193 respectively), and was less than the price paid for land of similar quality by agricultural investors ($230)(Table 15). It is noteworthy that non-farm investors paid $486 per acre for land of average quality in 1972, a marked increase over the corresponding figure of $271 in 1971. Good quality land maintains its high value in all classes of sales but the $779 per acre by non-farm users is substantially down on the 1971 figure of $936 per acre. Agricultural investors paid more for land of all qualities than either expansion buyers or operating farmers.

Land rated average or good accounted for 87 and 89 percent respectively of purchases by operating farmers and expansion buyers. This is consistent with a desire by agricultural buyers to upgrade or maintain the quality of their farm units.

The signficance of building quality varies widely for different types of buyers (Table 16). While 79 percent of sales to operating farmers included building of good or average quality, 59 percent of sales to expansion buyers involved land with poor buildings, or none at all. Non-farm investors paid the highest prices for land with buildings of good or average quality, supporting a premise that many non-farm investors are seeking rural residences rather than farm land. Non-farm investors paid the highest average prices for farm lands with no buildings, although the differential from prices paid by other types of buyers is much less in 1972 than in 1971, due to a decrease in price paid by non-farm users from $600 in 1971 to $367 in 1972. This adds weight to the premise that the speculation in land observable in 1971 tailed off during 1972.

Method of Financing

Contract for deed remains the most popular method of financing, accounting for 50 percent of all sales in 1972 (Table 17). It was the dominant method in all districts except the Northwest, where mortgage sales are predominant. Cash sales, at 21 percent of all sales, accounted for a higher proportion of sales than at any time during the past 10 years. This is partially due to a surprising increase in the percentage of cash sales in the Southwest District and to increased cash sales in all other districts. This increase seems to be at the expense of contract for deed sales, although sales in the Southwest and in the Southeast districts are still predominantly financed by contract for deed. The highest frequency of cash sales occurs in the Northeast, where land values are lowest in the state.

Table 13: Average Sales Price Per Acre by Type of Buyer, by District, Minnesota, 1970, 1971, 1972.

District	Operating Farmer			Expansion Buyer			Investor Buyer (Agriculture)		
	1970	1971	1972	1970	1971	1972	1970	1971	1972
				—dollars per acre—					
Southeast	327	363	386	311	333	369	406	330	439
Southwest	299	312	334	348	360	376	359	314	401
West Central	202	201	222	209	206	217	172	210	242
East Central	141	146	142	113	123	157	159	191	159
Northwest	85	87	97	175	122	118	57	51	72
Northeast	68	49	88	43	47	52	31	36	57
Minnesota	215	241	273	267	281	299	220	251	323

Table 14: Price Per Acre for Land of Various Quality, Minnesota, 1971 and 1972.

Land Quality	1971	1972	Percent Change From 1971
	dollars per acre		percent
Good	341	363	6
Average	245	284	16
Poor	199	192	−3
All	269	302	12

Table 15: Price Per Acre and Percent of Purchases by Type of Buyer for Land of Various Quality, Minnesota, 1972.

Type of Buyer	Land Quality: Good		Average		Poor	
	dollars	percent	dollars	percent	dollars	percent
Operating Farmer	338	43	233	42	176	15
Expansion Buyer	351	41	285	48	183	11
Agricultural Investor	403	28	307	52	230	20
Non-Farm Investor	779	25	486	44	206	31
All	363	38	284	47	193	15

Table 16: Price Per Acre and Percent of Purchases by Type of Buyer for Land with Various Qualities of Buildings, Minnesota, 1972.

Type of Buyer	Building Quality							
	Good		Average		Poor		None	
	$	%	$	%	$	%	$	%
Operating Farmer	326	37	252	42	227	15	144	6
Expansion Buyer	411	16	319	25	278	23	248	36
Agricultural Investor	396	17	335	31	316	27	244	25
Non-Farm Investor	549	21	570	21	407	22	367	36
All	372	22	299	30	284	21	248	27

In the Southeast, Southwest, and West Central districts, the highest prices per acre were paid in those sales financed by contract for deed (Table 18). Statewide, the second highest prices were paid in cash sales, reversing the order prevailing in 1971, when mortgage sales prices came second to contract for deed. Much of the reason for this shift in the statewide ranking is due to substantial increases in prices paid in cash-financed sales in the Southeast, Southwest and West Central districts.

In 1972, the highest average price paid per acre for all qualities of land was paid in those sales financed by contract for deed (Table 19). The second highest prices were for cash sales. There was a sharp drop in sales prices paid for poor quality land financed by mortages from 1971 to 1972 ($259/$158). The lower down payment associated with contract for deed financing is typically associated with sales of good quality and high-priced land. The general trend indicates a continuing decline in mortgage financing during 1972.

Distance of buyer from tract

The Minnesota rural land market remains distinctly local with 62 percent of all buyers in 1972 living within 10 miles of the purchased tract (Table 20). In the predominantly agricultural western part of the state the proportions are higher—80 percent in the Southwest, and 65 percent each in the West Central and Northwest regions. Median distance of buyer from tract in these three districts was 3, 5, and 6 miles respectively. These districts are also those with the highest proportion of farm expansion buyers (Table 12 above). Two districts, the East Central and Northeast, do not conform to this localized norm. In the East Central district, 60 percent of the buyers lived over 10 miles away from the purchased tract and 32 percent over 50 miles away. In the Northeast, the corresponding figures are 66 and 46 percent respectively. The median distance of buyer from tract in the East Central district was 15 miles, and for the Northeast 40 miles.

Table 17: Proportion of Farm Sales by Method of Financing, by District, Minnesota, 1966, 1971, and 1972.

Method of Financing	South-east	South-west	West Central	East Central	North-west	North-east	Minn.
			—percent—				
Cash							
1966	17	14	14	22	23	37	17
1971	14	17	9	22	16	26	16
1972	18	23	18	27	22	30	21
Mortgage							
1966	35	44	44	39	51	19	41
1971	32	24	41	34	33	26	31
1972	24	28	37	31	42	24	29
Contract for Deed							
1966	48	43	42	39	25	44	42
1971	54	59	50	44	51	48	53
1972	58	49	45	42	36	46	50

Table 18: Average Sales Price Per Acre of Farm Land by Method of Financing, by District, Minnesota, 1966, 1971, and 1972.

Method of Financing	South-east	South-west	West Central	East Central	North-west	North-east	Minn.
			—dollars per acre—				
Cash							
1966	242	230	155	77	96	18	160
1971	333	276	156	131	78	41	212
1972	386	368	219	149	79	68	286
Mortgage							
1966	250	254	170	134	105	63	207
1971	367	310	199	214	107	65	264
1972	375	326	200	148	119	60	256
Contract for Deed							
1966	257	270	164	107	104	49	220
1971	371	369	216	204	94	43	284
1972	444	390	243	154	104	75	333

Table 19: Price Paid Per Acre and Percent of Sales, by Method of Financing and Quality of Land, Minnesota, 1971 and 1972.

Land Quality Class	Method of Financing: Cash		Mortgage		Contract for Deed		All Sales	
	1971	1972	1971	1972	1971	1972	1971	1972
Good								
$ per acre	328	376	290	306	362	387	340	363
% of sales	28	33	37	39	40	39	37	38
Average								
$ per acre	210	259	245	247	251	314	243	283
% of sales	43	46	47	47	44	47	45	45
Poor								
$ per acre	139	189	259	158	184	215	194	192
% of sales	29	21	16	14	16	14	18	15
All Grades								
$ per acre	212	286	264	256	284	333	269	302
% of sales	100	100	100	100	100	100	100	100

Table 20: Classification of Farm Land Sales by Distance of Buyer's Residence From Tract, by District, Minnesota, 1972.

District	Distance of Buyer's Residence from Tract Purchased, in Miles: Less Than 2	2-4	5-9	10-49	50-299	300 and Over	Median Distance
	—percent of sales—						miles
Southeast	18	18	18	30	9	7	7
Southwest	25	38	17	13	5	2	3
West Central	18	30	17	18	12	5	5
East Central	18	9	13	28	21	11	15
Northwest	12	29	24	24	6	5	6
Northeast	17	6	11	20	26	20	40
Minnesota	20	25	17	22	10	6	5

PART II: THE RURAL LAND MARKET IN THE TWIN CITIES METROPOLITAN REGION

The seven counties comprising the officially designated Twin Cities Metropolitan Area are Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington. In terms of land values, it has become increasingly evident that Chisago and Wright counties are part of the general sphere of influence of Minneapolis and St. Paul. Thus this study of the metropolitan area is on two levels. Hennepin and Ramsey counties are excluded from the analysis because of their high degree of physical urbanization, and the consequent distortion that would result from inclusion of extremely high-priced land sales. The remaining five counties are analysed as in previous years, and analysis of an enlarged area including Chisago and Wright counties attempts to show that the present seven-county metropolitan area is no longer realistic as a planning area, at least on the basis of rural land values.

Of the seven counties studied (five counties from the present Metropolitan Area, plus Chisago and Wright) all are still predominantly agricultural except Anoka, but since 1965 all have exhibited population growth rates well above those for the state as a whole (Table 21). The growth rates for the intercensal decade 1960-70 for each county are substantially higher than for Minnesota.

Trends in land use for the five counties show almost two-thirds of the land in farms in 1969, and over 70 percent if Anoka is excluded (Table 22). These proportions are similar for Chisago and Wright counties. It is proximity to the Twin Cities rather than agricultural demand which gives distinctive characteristics to the rural land market for all counties.

The demand for land is dominated by non-farm buyers seeking property for residential, recreational, commercial, industrial or frankly speculative purposes. In terms of agricultural productivity, values are inflated relative to other areas in the state.

Reporter's estimates of value in the seven counties can diverge widely from actual sales prices (Table 23). the average estimated values for 1969-70 and 1971-72 show substantial increases in all counties where adequate data are available. Details of reported sales in each year show wider and less uniformly directional changes in value. In Carver County, reported sales values per acre increased from \$514 to \$866 in 1972, with a steady increase over the 4 years. Sales prices in Anoka County fluctuated from \$472 in 1969 to \$602 in 1970 and to a high of \$1,030 in 1971, before coming down to a more "normal" value of \$837 in 1972. Much of the uncertainty in Anoka may be attributable to the "on-off" situation centering around the choice of a site for a new airport for the Twin Cities

Averages of reported estimates for the five- and seven-county areas showed substantial underestimation with respect to sales values in 1969-70 and quite significant overestimation with respect to sales values in 1971-72. This emphasizes the speculative nature of land buying in the Metropolitan area and should not be regarded as atypical.

Table 21: Population in Five- and Seven-County Metropolitan Areas, Minnesota, 1960-1970.

	Population			Annual Rates of Growth	
	1960[1]	1965[2]	1970[3]	1960-65	1965-70
	—thousands—			—percent—	
Anoka	85.9	124.9	154.6	7.8	4.4
Carver	21.3	24.5	28.3	2.8	2.9
Dakota	78.3	104.0	139.8	6.0	6.1
Scott	21.9	28.4	32.4	5.5	2.6
Washington	52.4	67.0	82.9	5.0	4.3
5 counties	259.8	348.8	438.0	6.1	4.7
Chisago	13.4	13.8	17.5	0.6	5.4
Wright	29.9	332.9	38.9	2.0	3.6
7 counties	303.1	395.5	494.4	6.1	5.0
Minnesota	3413.9	3555.0	3805.1	0.8	1.4

Sources: 1—U.S. Census of Population, 1960
2—Minnesota Department of Health, Division of Vital Statistics, 1965
3—U.S. Census of Population, 1970

The peak reached by sales prices paid by non-farm users in the region in 1971 was not confined to the five-county area but was also reflected in values over the seven counties (Table 24). As the market settled down in 1972 the prices paid by non-farm users declined 17 percent in the five counties, and 25 percent in the seven counties. In both cases non-farm users dominated the market with around 40 percent of all transactions. Sales to other types of buyers showed no marked divergences in proportionate terms although 13 percent of sales was to expansion buyers in the seven counties against only 9 percent in the five counties. This was at the expense of agricultural investor buyers who were more active in the five-county area in 1972. Prices paid by all types of buyers are higher in the five-county area but only substantially so in the case of operating farmers and non-farm users. It must be remembered that the inclusion of Wright county in this analysis invoIes the inclusion of a large area in the western part of the county still relatively unaffected by urban influences.

Operating farmers paid proportionately more in 1972 for land in the five counties than the seven counties (an increase of 13 as against 4 percent over 1971). The biggest price increases were paid by agricultural investor buyers who paid 52 and 43 percent more for land in the five- and seven-county areas respectively in 1972 over 1971. Agricultural investors increased their proportion of sales in 1972 over 1971 but have not yet reached the 38 percent of all sales they accounted for in 1970. Operating farmers account for a decreasing share of the market as agricultural investor buyers and non-farm users increase their share.

Table 22: Proportion of Farmland in the Five- and Seven-County Metropolitan Areas, Minnesota, 1959, 1964 and 1969.

County	Total Land Area	Percent of Land Area in Farms 1959	1964	1969
	—000 acres—		—percent—	
Anoka	271.0	52.4	42.2	35.3
Carver	229.0	93.3	92.6	84.9
Dakota	368.4	81.6	78.9	69.6
Scott	225.7	90.4	86.6	74.7
Washington	246.9	78.2	70.6	57.9
Chisago	268.1	78.6	75.7	64.6
Wright	431.5	91.7	90.9	78.2

Source: U.S. Census of Agriculture, 1959 and 1969.

Table 23: Average Value Per Acre of Farm Land by Reporters' Estimates and Reported Sales, Five- and Seven-County Metropolitan Areas, Minnesota, 1969-1972.

County	Reporters' Estimates 1969-70	1971-72	—Reported Sales— 1969	1970	1971	1972	Average 1969-70	Average 1971-72
				—dollars—				
Carver	478	745	514	491	598	866	503	732
Dakota	512	850	786	830	551	696	808	623
Scott	412	606	374	412	575	562	393	568
Washington	437	778	632	432	935	641	532	788
Anoka	540[a]		472	602	1 030	837	537	933
5 counties	464	756	551	584	642	724	567	683
Chisago	264	337	253	446	358	442	349	400
Wright	394	490	358	379	396	477	368	436
7 counties	425	645	484	563	581	617	523	599

[a] Average 1969-1972

Table 24: Sales Price and Percent of Sales by Type of Buyer, Five- and Seven-County Metropolitan Areas, Minnesota, 1971-72.

Type of Buyer	Price per Acre 1971	Price per Acre 1972	Change in Price 1971-72	Percent of Sales 1971	Percent of Sales 1972
	—dollars—		—percent—	—percent—	
Operating Farmer					
5 counties	476	540	13	25	17
7 counties	450	467	4	25	17
Expansion buyer					
5 counties	429	451	5	15	9
7 counties	408	439	8	15	13
Investor (Agricultural)					
5 counties	447	681	52	24	35
7 counties	437	623	43	27	30
Non Farm User					
5 counties	1,230	1,017	−17	36	39
7 counties	1,102	822	−25	33	40

The impact of non-farm buyers is reflected in the fact that in the five-county area land of average quality sold for $799 per acre in 1972 against $670 for good quality land. Even poor quality land sold for more than good quality land, at $724 (Table 25). Good quality land declined in value in 1972 while average and poor quality land substantially increased in sales value over 1971. For the enlarged seven-county area, average quality land sold for 12 per cent more than land of good quality for agricultural use.

Distances that buyers lived from the tracts they purchased are quite different in the metropolitan area from the state as a whole (Table 26). For both the five- and seven-county areas, slightly over one-fourth of the buyers lived less than 5 miles from the tracts they purchased. For the state as a whole, the comparable figure was 45 percent. In contrast, 55 percent of the buyers in the five-county area (50 percent for the 7 counties) lived 10 to 49 miles from the lands they bought, compared to 22 percent for the state as a whole. The rural land market in the metropolitan area is thus much less local in nature than is the case in more rural parts of the state. In both the five- and seven-county areas, 58 percent of the buyers lived more than 10 miles from the tracts they purchased, as against 38 percent for Minnesota.

Table 25: Price Paid per Acre and Percent of Sales by Quality of Land, Five- and Seven-County Metropolitan Areas, Minnesota, 1971 and 1972.

Land Quality Class	5 Counties				7 Counties			
	1971		1972		1971		1972	
	$	%	$	%	$	%	$	%
Good	832	39	670	24	761	36	593	30
Average	477	41	799	58	452	43	667	55
Poor	638	20	719	18	557	21	535	15
All Grades	642	100	724	100	581	100	617	100

Table 26: Classification of Farm Land Sales by Distance of Buyer's Residence from Tract, Five- and Seven-County Metropolitan Areas, and Minnesota, 1972.

Miles	5 counties	7 counties	Minnesota
		—percent—	
Less than 2	21	17	20
2-4	6	9	25
5-9	15	16	17
10-49	55	50	22
50-299	0	6	10
300 and over	3	2	6
		—Miles—	
Median Distance	15	13.5	5

PART III: THE RURAL LAND MARKET IN THE RED RIVER VALLEY

There was a 6 percent increase in reported sales prices in 1972 over 1971 in the Northwest District (see Table 3), and this was entirely due to appreciation in land values outside the Red River Valley (Table 27). Although the 9 percent decline in sales prices in the valley was less than the 14 percent decline reported from 1970 to 1971, the turnaround in trend over the same periods for the non-Valley area was from a decrease of 4 percent in 1970-71 to an increase of 18 percent in 1971-72. This is even more dramatic when it is considered that non-Valley sales prices declined 34 percent in 1969-70, indicating that the non-Valley area still has substantial leeway to make up before reaching the high of recent years of $104 per acre of 1969.

Market activity was low in 1971 with only 106 sales being reported from the whole area, evenly split between Valley and non-Valley areas.

Statewide, approximately three-quarters of all reported sales in 1972 were of improved land. In the four years 1969-72 half of the sales in the Valley were of unimproved land (Table 28) and, in contrast to previous years, the average acreage sold for less per acre than improved land in 1972, reversing the 1970 and 1971 situation.

There was a sharp drop in the proportion purchases by expansion buyers in 1972 over 1971, from 90 to 69 percent of the total, but this type of buyer still dominates the market in the Valley area (Table 29). The slack has been taken up by operating farmers (21 percent) and agricultural investors (10 percent). Valley prices declined for all types of buyers, but expansion buyers, who paid $163 per acre in 1972, still pay highest prices for their land. Given the importance of expansion buying, primary responsibility for the decrease in volume of reported sales and in prices per acre in the Valley area must be attributed to slack demand from expansion buyers.

In the non-Valley area, over half of all sales were to expansion buyers in 1972 but price paid per acre was identical to that paid by operating farmers, who accounted for 31 percent of sales. Also noticeable is a substantial increase of prices paid by agricultural investors, from $44 per acre in 1971 to $63 in 1972.

Sales prices were down for all grades of land in 1972 over 1971 in the Valley area, and were up in the non-Valley area (Table 30). The biggest declines were for good and average quality land in the Valley (about $20 per acre), while the biggest increase was for poor quality land in the non-Valley area ($15).

The use of contracts for deed declined markedly in popularity as a means of financing in the Valley, from 58 percent of sales in 1971 to 37 percent in 1972 (Table 31). Mortgages as a method of finance gained correspondingly over 1971, accounting for 53 percent of sales in 1972. The frequency of cash sales was relatively unchanged. There was a smaller decline in contract for deed sales in the non-Valley area, with the slack being taken up by cash financed sales, which accounted for 17 percent of sales in 1971 and 27 percent in 1972.

Table 27: Number of Sales, Acres Reported Sold, and Sales Price Per Acre of Rural Land in the Red River Valley and the Non-Valley Area, Northwest District, Minnesota, 1970-72.

Item	Red River Valley			Non-Valley Area		
	1970	1971	1972	1970	1971	1972
Number of Sales, January – June	70	50	53	52	67	53
Acres Reported Sold	16,660	12,770	16,741	17,680	17,085	13,802
Sales Price Per Acre (dollars)	194	166	151	69	66	78
Percent Change of Sales Price Over Preceding Period	9	–14	–9	–34	–4	18

FIG. 3. THE RED RIVER VALLEY AND COMPARISON AREAS

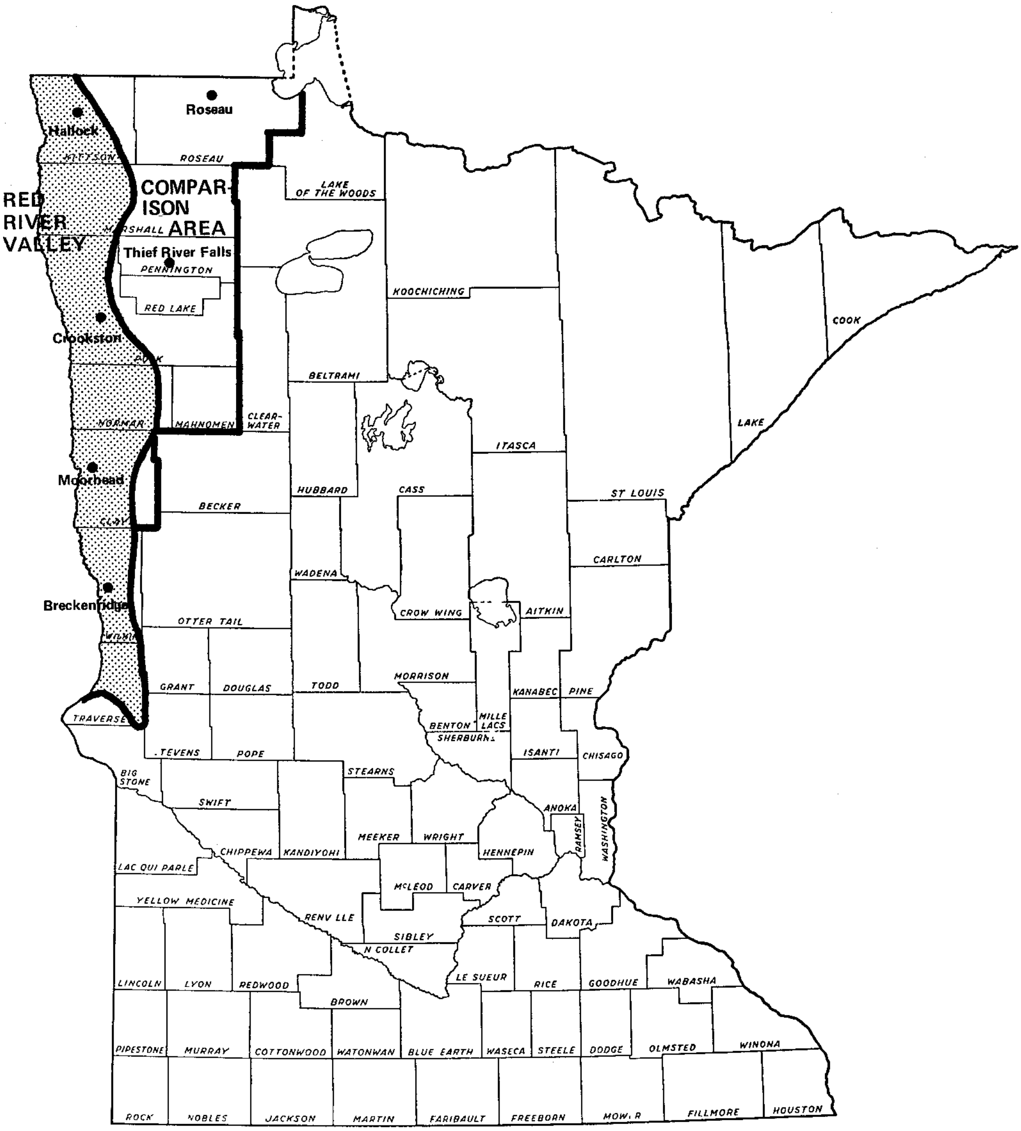


Table 28: Sales of Improved and Unimproved Land, Northwest District, Minnesota, 1969-1972.

	Number of Sales	Average Acreage Per Sale	Sales Price (dollars)
Red River Valley:			
Improved:			
1969	37	342	184
1970	32	307	184
1971	29	286	161
1972	25	316	169
Unimproved:			
1969	34	187	166
1970	38	181	208
1971	21	209	173
1972	28	316	134
Non-Valley Area:			
Improved:			
1969	92	276	99
1970	38	242	80
1971	48	243	75
1972	35	254	84
Unimproved:			
1969	25	158	70
1970	14	605	58
1971	19	287	48
1972	18	273	67

Table 29: Percent of Sales and Price Per Acre by Type of Buyer, Red River Valley and Non-Valley Area, Northwest District, Minnesota, 1971-72.

Type of Buyer	Red River Valley 1971		Red River Valley 1972		Non-Valley Area 1971		Non-Valley Area 1972	
	%	$	%	$	%	$	%	$
Operating Farmer	8	144	21	134	29	75	31	81
Expansion Buyer	90	174	69	163	47	79	54	81
Investor (Agricultural)*	2	130	10	102	24	44	15	63

*Excluding investor buyers for non-farm purposes.

Table 30: Sales Price per Acre and Percent of Sales by Quality of Land, Red River Valley and Non-Valley Area, Northwest District, Minnesota, 1971-72.

Land Quality	Red River Valley 1971		Red River Valley 1972		Non-Valley Area 1971		Non-Valley Area 1972	
	%	$	%	$	%	$	%	$
Good	48	180	58	162	30	118	29	128
Average	42	173	37	153	50	71	42	80
Poor	10	70	6	61	20	31	29	46

Table 31: Method of Finance, Red River Valley and Non-Valley Area, Northwest District, Minnesota, 1970-72.

Method of Financing	Red River Valley 1970	Red River Valley 1971	Red River Valley 1972	Non-Valley 1970	Non-Valley 1971	Non-Valley 1972
			—percent—			
Cash	16	12	10	23	17	27
Mortgage	41	30	53	37	34	33
Contract for Deed	43	58	37	40	49	40

PART IV: THE RURAL LAND MARKET IN EAST CENTRAL MINNESOTA

In many respects the East Central district is the most heterogeneous in the state. It includes Anoka and Chisago counties in the East, which are heavily under the influence of the Twin Cities. These contrast sharply with the marginal farming areas found in Hubbard and Crow Wing counties, devoid of any strong urban influences. The unifying feature of the district is the Mississippi Valley, historically and presently an important corridor for communications. With the present concentration of surface routes in this corridor it is not surprising that the desire of many urban workers to live in the countryside whilst remaining within relatively easy distance of their place of work has had its impact in the eastern areas of the East Central district, where it meets the Twin Cities Metropolitan Area.

The influence of the Twin Cities is most heavily felt in Anoka County, the most built-over county in Minnesota outside Hennepin and Ramsey. It was noted in Part I above that 1971-1972 witnessed a remarkable decline of 21 percent in reported sales prices for the district as a whole, from $193 per acre in 1971 to $152 in 1972 (Tables 3 and 32). This compared with reporters' estimates indicating a 4 percent increase over the same period (see Table 2). If Anoka and Chisago counties are excluded from the analysis of sales for the years 1970, 1971 and 1972 a much more realistic trend emerges (Table 32). Reported sales in the modified district averaged $131 per acre in 1970, $142 in 1971 and $143 in 1972. Apparently 1971 was an abnormal year for market activity in Anoka and Chisago counties, and the decline in prices between 1971 and 1972 is merely an indication of more normal market forces reasserting themselves in these two counties.

This finding does not detract from the fact that it is possible to regard the East Central district as two distinct regions, comprising a block of counties in the east and a block in the west (see Figure 4). The intuitive justification for such a division is the greater influences of the Twin Cities on land values in the eastern counties. This is reflected both in values per acre (estimated and sales price), and especially the pattern of value increases between the survey periods 1969-70 and 1971-72 (Table 33). Reporters' estimates of value increased by 41 percent over this period in the eastern counties (ranging from 14 percent in Pine County to 93 percent in Sherburne), and by 9 percent in the western counties. Reported sales prices increased by 71 percent in the eastern counties (from 14 percent in Chisago county to 84 percent in Pine county), and only 6 percent in western counties. Land values in the eastern counties are substantially higher at the aggregate level than those in western counties.

Average size of tract is smaller and declining more rapidly in the eastern area of the district (Table 34). The 95 acre lot in the east in 1971-72 compares with 174 acres in the west. The average acreage per sale in 1972 was 156 acres for the East Central district as a whole, and 173 acres for the state (see Table 6). This lends weight to the general supposition that much rural land in the eastern part of the district is bought for residential, recreational and other non-farm use.

FIG. 4. EASTERN AND WESTERN COUNTIES, EAST CENTRAL DISTRICT, MINNESOTA

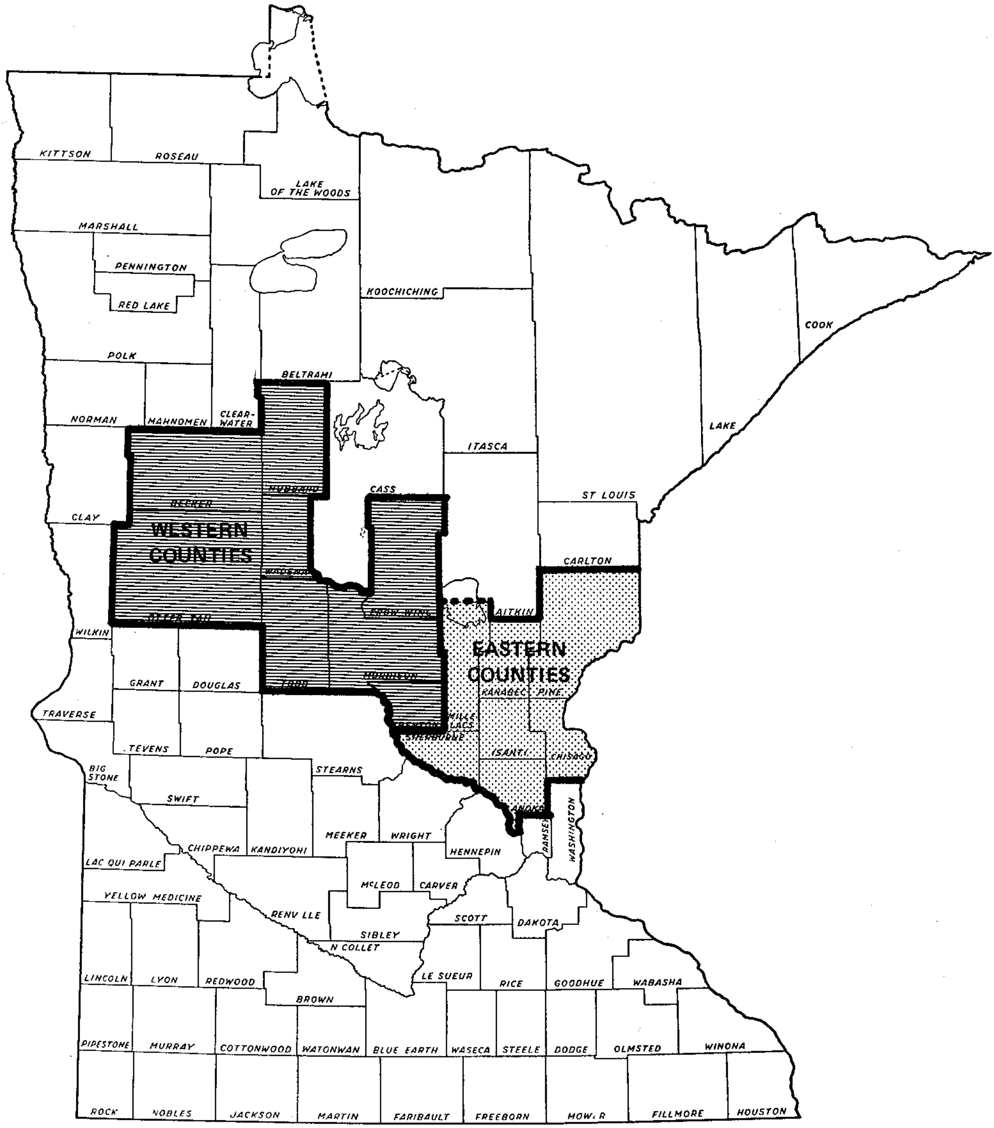


Table 32: Analysis of Farm Sales in East Central District, Minnesota, 1970-72.

	East Central District			% Change	East Central District excluding Anoka, Chisago			% Change
	1970	1971	1972	1971-72	1970	1971	1972	1971-72
Number of Sales (January—June)	217	192	187	−3	204	170	174	2
Sales Price	141	193	152	−21	131	142	143	0

Table 33: Average Value of Rural Land Per Acre by Reporters' Estimates and Reported Sales Prices by County, East Central District, Minnesota, 1969-1970 and 1971-72.

	Reporters' Estimates		Change	Actual Sales		Change
	1969-70	1971-72		1969-70	1971-72	
	—dollars—		percent	—dollars—		percent
Eastern Counties						
Anoka	540[a]		—	537	934	74
Chisago	264	337	28	349	400	14
Isanti	221	268	21	227	314	38
Kanabec	127	200	57	115	173	50
Mille Lacs	135	228	68	142	238	68
Pine	99	114	14	73	135	84
Sherburne	156	301	93	163	196	20
Total	177	250	41	178	305	71
Western Counties						
Becker	152	163	8	115	119	4
Benton	149	182	22	153	162	6
Crow Wing	84	113	34	90	81	−10
Hubbard	79	93	17	57	88	55
Morrison	89	118	33	110	107	−3
Otter Tail	144	142	−1	137	132	−4
Todd	126	141	12	118	135	14
Wadena	93	90	−3	102	103	1
Total	126	137	9	117	124	6

[a] Average 1969-72

Improved land (that with buildings) accounted for a high proportion of all sales in both regions in all years 1969-72 (Table 35) although prices paid per acre for improved land were considerably higher in the eastern than in the western counties ($244 against $136 per acre in 1972). It is noticeable that there was very little difference between prices paid for improved and unimproved land in the eastern counties in 1972 and that this difference narrowed significantly in the four years 1969 to 1972. With the exception of 1970, the differential in the western counties is much wider.

In the eastern counties operating farmers and non-farm users accounted for identical proportions of purchases in 1969-70 and 1971-72, about 35 percent each (Table 36). This stands in sharp contrast to the western counties where the market is dominated by operating farmers and expansion buyers (46 and 29 percent respectively in 1971-72). Investor buyers and non-farm users accounted for 59 percent of the sales in the eastern counties, and only 25 percent in the western counties.

Prices paid by non-farm users for land in the eastern counties were substantially higher than those paid by operating farmers ($509 and $213 respectively in 1971-72) and showed a 114 percent increase over 1969-70. All types of buyers paid substantially increased prices for land in the east in 1971-72 over 1969-70, the smallest increase in price paid being by agricultural investors at 30 percent. The relatively high price increase for non-farm users in the western counties may reflect recreational development in Becker and Otter Tail counties and possibly similar recreational and amenity development in Crow Wing county.

There was no significant change in method of finance from 1969-70 to 1971-72 and no sharp differentiation between eastern and western counties (Table 37). Cash sales were about 23 percent of all sales, mortgages about 32 percent, and contract for deed about 45 percent. Highest prices were paid for mortgage sales in 1971-72 in the eastern counties, at $341 per acre.

In the eastern counties 38 percent of all buyers lived over 50 miles away from the tracts they purchased (Table 38). This compares with 39 percent of buyers of tracts in the western counties (by no means an insignificant proportion) and 16 percent for Minnesota as a whole. In the case of the eastern counties it is evident that many buyers either reside or work in the Twin Cities and have purchased properties in the eastern counties for recreational or residential purposes.

Table 34: Analysis of Reported Sales, East Central District, Minnesota, 1969-70 and 1971-72.

	Eastern Counties			Western Counties		
	1969-70	1971-72	Change %	1969-70	1971-72	Change %
Number of Sales	192	144	−25	306	234	−23
Average Size of Tract (acres)	112	95	−15	178	174	−2
Average Sales Price per acre	178	305	71	117	124	6

Table 35: Average Sales Price Per Acre and Percent of Sales of Improved and Unimproved Land, for East Central District, Minnesota, 1969-72.

	Eastern Counties				Western Counties			
	1969	1970	1971	1972	1969	1970	1971	1972
Improved Land								
Percent of sales	81	80	81	76	84	88	84	83
Price paid per acre	195	177	358	244	112	130	124	136
Unimproved Land								
Percent of Sales	29	20	19	24	16	12	16	17
Price paid per acre	148	136	264	235	78	126	81	86
All Land								
Percent of Sales	100	100	100	100	100	100	100	100
Price paid per acre	184	171	346	242	108	129	119	128

Table 36: Sales Price and Percent of Sales by Type of Buyer, East Central District, Minnesota 1969-70 and 1971-72.

Type of Buyer	Price per Acre		Change in Price	Percent of Sales	
	1969-70	1971-72		1969-70	1971-72
	—dollars—		—percent—	—percent—	
Eastern Counties					
Operating Farmer	154	213	38	35	35
Expansion Buyer	125	206	65	11	6
Investor (Agricultural)	194	253	30	20	23
Non-Farm user	238	509	114	34	36
Western Counties					
Operating Farmer	118	126	7	47	46
Expansion Buyer	123	123	0	30	29
Investor (agricultural)	194	129	8	13	13
Non-farm user	83	104	25	10	12

Table 37: Price Paid per Acre and Percent of Sales by Method of Financing, East Central District, Minnesota, 1969-70 and 1971-72.

Method of Financing	Eastern Counties				Western Counties			
	1969-70		1971-72		1969-70		1971-72	
	%	$	%	$	%	$	%	$
Cash	24	159	21	244	20	95	26	114
Mortgage	30	200	31	341	32	133	33	127
Contract for deed	46	159	48	312	48	117	40	127

Table 38: Classification of Rural Land Sales by Distance of Buyer's Residence from Tract, East Central District, Minnesota, 1972.

Miles	Eastern Counties	Western Counties	Minnesota
		—percent—	
Less than 2	20	18	20
2-4	8	9	25
4-9	10	14	17
10-49	24	30	22
50-299	36	14	10
300 and over	2	15	6
		—miles—	
Median Distance	19	12	5

One disadvantage in the use of average prices based on actual sales is that the averages do not indicate the degree of variation in the data. Quality of land varies greatly in any one county or district, for example, but it is not possible to derive an accurate measure of land quality from this survey. Over time, the quality of land involved in the sales in any one year may also vary.

One measure of this variability in prices is indicated in Table 41. The standard deviation represents the dollar range from the average within which approximately two-thirds of the reported sales fall. Assume, for example, a district average of $100 per acre with a standard deviation of $50. This means that approximately two-thirds of the sales in that district fell between $50 and $150 per acre. The coefficient of variation is the standard deviation divided by the average sales price, and multiplied by 100 to convert it to a percentage form. In the above example, the coefficient of variation is 50 per cent. Wider variations in sales price above and below the average create larger coefficients of variation.

In the East Central district a high coefficient of variation (85.3 percent) results from the wide variation in sales prices in this district, ranging from under $200 per acre to over $1000 per acre, as a consequence of proximity to the Twin Cities.

Another district that is heavily affected by urban influences is the Southeast, which also had a high coefficient of variation when compared to the Southwest and West Central farming districts. Although the Northwest district is predominantly agricultural, its coefficient of variation at 61.6 is as high as the Southeast because of variations in prices of land sales from under $50 to over $300. Wide variations in price are also characteristic of the Northeast district, which typically has one of the highest coefficients of variation of any district in the state.

Table 39: Average Estimated Price Per Acre of Farm Real Estate in Minnesota by Districts, 1910-1911 through 1944-1945, by Two-Year Periods, and Annually, 1946 through 1972.

Years	South-east	South-west	West Central	East Central	North-west	North-east	Minn.
1910-11	58	54	39	24	24	11	41
1912-13	69	69	46	29	29	13	49
1914-15	82	84	56	34	32	14	58
1916-17	92	100	67	41	37	15	68
1918-19	117	118	78	50	40	18	82
1920-21	141	152	98	68	57	24	104
1922-23	114	119	82	56	44	23	85
1924-25	104	110	74	49	44	22	78
1926-27	106	109	72	49	36	22	76
1928-29	100	102	67	44	33	21	71
1930-31	88	88	51	36	22	18	60
1932-33	64	65	42	27	20	14	45
1934-35	52	58	38	26	22	15	40
1936-37	59	64	38	29	22	24	44
1938-39	60	68	37	28	22	25	45
1940-41	59	68	36	26	22	24	43
1942-43	65	76	40	29	24	25	48
1944-45	78	90	48	35	29	28	56
1946	88	104	56	39	33	32	65
1947	96	116	62	43	37	35	72
1948	104	129	69	47	41	38	79
1949	107	136	73	49	44	39	83
1950	109	141	76	50	46	40	85
1951	125	166	89	59	54	46	99
1958	131	175	96	65	68	42	107
1953	130	175	95	62	64	40	105
1954	139	187	99	66	72	40	113
1955	150	205	103	68	73	45	121
1956	156	214	107	70	76	42	126
1957	165	230	122	77	86	49	138
1958	179	242	123	84	90	65	147
1959	191	255	134	89	103	58	157
1960	188	248	133	94	99	64	155
1961	189	247	133	95	100	64	156
1962	192	250	138	99	104	69	159
1963	194	246	142	103	114	68	161
1964	206	252	145	111	115	59	166
1965	219	261	146	112	113	51	171
1966	242	277	153	122	112	58	183
1967	262	303	163	128	108	62	194
1968	286	333	181	134	122	57	211
1969	308	350	196	146	120	54	223
1970	317	347	198	161	120	62	227
1971	333	351	204	155	119	63	232
1972	370	379	208	163	117	76	248

Table 40: Annual Percentage Change in Estimated Farm Values Per Acre, Minnesota 1946-1972.

Year July-July	Change	Year July-July	Change
	%		%
1945-46	30.0	1958-59	6.8
1946-47	10.8	1959-60	−1.3
1947-48	9.7	1960-61	0.6
1948-49	5.1	1961.62	1.9
1949-50	2.4	1962-63	1.3
1950-51	16.5	1963-64	3.1
1951-52	8.1	1964.65	3.0
1952-53	−1.9	1965-66	7.0
1953-54	7.6	1966-67	6.0
1954-55	7.1	1967-68	8.8
1955-56	4.1	1968-69	5.7
1956-57	9.5	1969-70	1.8
1957-58	6.5	1970-71	2.2
		1971-72	9.2

Table 41: Average Price Per Acre of Reported Farm Sales, Standard Deviation and Coefficient of Variation, by District, Minnesota, 1960-72*

	Year	South-east	South-west	West Central	East Central	North-west	North-east	Minn.
Average Price Per Acre (dollars)	1960	189.1	240.4	136.4	69.3	100.8	49.5	160.9
	1961	189.1	255.8	130.3	89.0	92.0	37.9	165.2
	1962	195.7	228.5	140.5	76.3	73.9	30.3	161.1
	1963	214.1	221.9	136.2	86.2	108.8	47.6	168.1
	1964	213.3	234.3	150.3	86.3	103.6	51.6	178.1
	1965	202.0	232.7	133.2	95.8	106.2	39.7	178.0
	1966	253.4	260.4	164.3	113.0	103.4	30.6	203.4
	1967	272.4	306.1	178.6	92.9	116.6	51.2	214.8
	1968	316.0	329.0	186.0	104.0	90.0	47.0	232.0
	1969	340.7	334.1	193.6	129.7	120.8	50.7	238.3
	1970	346.0	340.0	206.0	141.0	113.0	45.0	243.0
	1971	372.1	341.6	205.1	192.5	99.3	46.4	269.3
	1972	420.1	367.1	223.0	151.6	104.9	76.7	301.8
Standard Deviation (dollars)	1960	90.4	77.0	47.7	48.6	76.6	42.1	95.8
	1961	83.5	71.9	40.0	47.8	54.1	20.1	86.8
	1962	80.7	68.6	45.1	39.1	57.2	29.7	88.5
	1963	79.4	77.1	50.8	43.7	69.4	26.1	88.6
	1964	91.6	77.3	70.1	52.4	89.9	39.0	97.2
	1965	96.3	87.0	82.1	63.5	91.1	31.7	98.1
	1966	142.7	95.3	56.7	66.5	65.7	32.2	199.4
	1967	115.3	106.2	62.8	67.6	85.4	29.8	127.6
	1968	179.0	124.2	77.5	108.5	70.5	41.6	160.7
	1969	228.6	123.4	64.5	104.2	83.9	45.0	174.0
	1970	189.7	129.6	75.4	105.6	89.5	29.3	162.5
	1971	247.6	128.4	71.9	237.4	66.6	34.5	202.6
	1972	258.5	137.4	86.5	129.3	64.6	39.3	206.2
Coefficients of variations (percent)	1960	47.8	32.0	35.0	70.2	76.0	85.1	59.5
	1961	44.2	31.8	30.7	53.7	58.7	53.1	52.6
	1962	41.2	30.0	32.2	51.2	77.3	98.0	54.9
	1963	37.1	34.8	37.3	40.7	63.8	54.8	52.7
	1964	42.9	33.0	46.6	60.8	86.7	75.5	54.6
	1965	47.6	37.4	61.6	66.2	85.8	79.8	55.1
	1966	56.4	36.7	32.6	58.9	63.8	105.4	58.7
	1967	42.3	34.7	35.2	72.8	73.2	58.2	59.4
	1968	56.6	37.3	41.6	103.8	78.3	88.5	69.2
	1969	67.1	36.9	33.3	80.3	69.5	88.9	73.0
	1970	54.8	38.1	36.6	74.9	79.2	65.1	66.9
	1971	66.5	37.6	35.1	123.3	67.1	74.4	75.2
	1972	61.5	37.4	38.8	85.3	61.6	51.2	68.3

*Each acre is treated as a unit in calculating standard deviations and coefficients of variation.