

**2021 IRRIGATED FARM LEASING
ARRANGEMENTS IN KANSAS**

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2021 Irrigated Farm Leasing Arrangements in Kansas

Sources of Kansas Irrigated Lease Information

Understanding lease arrangements is important for Kansas agricultural landowners and operators to make better decisions and be sustainable and remain competitive. Each year, the Land Use Survey Office (LUSO)¹ in the Department of Agricultural Economics at Kansas State University (KSU) conducts one of four surveys in conjunction with the Kansas Department of Revenue. The LUSO rotates irrigated, non-irrigated, pasture, and input cost related surveys on a four-year basis. In 2021, the LUSO conducted a survey to collect information on Kansas irrigated farm lease arrangements.² Crop-share leasing arrangements had been the sole focus of the Kansas irrigated farm lease survey until 2017. Given the increasing use of cash leases, questions regarding cash leases were included in the survey at that point. In the 2021 survey, questions on both crop-share leases and cash leases continue to be included. Similar to the previous surveys, the 2021 Kansas Irrigated Farm Lease Arrangement Survey requested information for the 2020-21 crop year. The following information represents a summary of the 2021 survey results. This information should be useful to extension personnel, consultants, lenders, producers, and landowners regarding various farm leasing arrangements that exist for irrigated land in Kansas.

NASS divides Kansas into nine crop reporting districts (CRD). Because irrigated crop production in Kansas is largely confined to the western two-thirds of the state, six regions established by the Division of Property Valuation (PVD) are used in the irrigated cropland analysis. The six districts roughly correspond to the NASS CRD. They are: Northwest-10, West Central-20, Southwest-30, North Central-40, Central-50, and South Central-60. Figure 1 displays the area covered by each district. The 2021 Kansas Irrigated Farm Lease Arrangement survey was distributed to a representative sample of owners and operators of irrigated cropland across these six CRD in Kansas. An online version of the survey was made available for a more user-friendly presentation. Respondents to the survey were contacted through traditional mail outlets, as well as email and online outlets. Additional information pertaining to the survey is available from Leah Tsoodle (ltsoodle@ksu.edu) at Kansas State University Department of Agricultural Economics.

General Statewide Lease Information

The 2021 Kansas Irrigated Farm Lease Agreement Survey provides information about the distribution and characteristics of irrigated crop lease arrangements in Kansas. Various types of lease agreements are currently used to rent irrigated farmland in Kansas. The *Crop Share* type of

¹ The Land Use Survey Office (LUSO) was formerly known and referenced in previous publications as the Agricultural Land Use Survey Center (ALUSO).

² The irrigated farm leasing arrangement surveys were conducted by the National Agricultural Statistics Service-Kansas Office (NASS), in conjunction with the Kansas Department of Revenue and the Land Use Value Project in the Department of Agricultural Economics at Kansas State University before 2015. The last survey conducted by NASS was in 2012. The most recent survey on irrigated land farm leases was conducted in 2017. The 2017 survey report is available at: https://www.agmanager.info/sites/default/files/pdf/IrrigatedReport_2017.pdf.

lease is the most commonly used lease arrangement, where the landlord receives a percentage of the crop as the rental payment and pays a percentage of the crop input expenses. The *Fixed Cash* lease entails a fixed cash rental payment to the landlord each year. In *Fixed Cash* lease arrangements, landowners are capable of shifting production risk to producers, and tenants must be able to pay cash rents to compete for land. The *Crop & Cash* type is a combination of the fixed cash and crop share arrangements. *Flexible Cash* leases vary the cash rent each year according to the tenant's crop income. With *Net Share* leases, the landlord receives a set percentage of each year's crop but pays no crop expenses. Because of that expense distribution, the crop share percentage is typically smaller than a traditional crop share lease percentage. Although the landlord crop share percentage is stable across years with this type of arrangement, the actual rental income will change as crop yields and prices vary. *Other* lease types are any lease arrangements that do not fall into the aforementioned categories.

Table 1 contains information on the distribution of the different types of leases across the six CRD. *Crop Share* rental arrangements remained the most common method of leasing irrigated cropland in Kansas, followed by fixed cash leases. Approximately 51.0% of the respondents utilized *Crop share* leases, while 33.3% used *Fixed Cash* leases. The respective percentages were 48.7% and 38.8% in 2017. In 2012, those percentages were 63.5% and 23.0%. Other types of leases, e.g., *Crop and Cash*, *Flexible Cash*, *Net Share*, and *Other*, were used by roughly 15.7% of the respondents in 2021, a slight increase from the 14.5% in 2017. Among these types of leases, the use of *Flexible Cash* agreements increased to 6.1% from 5.3% in 2017. and the use of *Net Share* agreements increased to 6.1% from 5.9% in 2017. The *Crop Share & Fixed Cash* rental agreement was used by 2.5% of the respondents in 2021, higher than the 1.3% in 2017. The changes in the percentage of each lease type used by Kansas irrigated cropland farmers from 2017 to 2021, however, are not statistically significant.

The lease arrangement among irrigated farmers varied across the six crop reporting districts (Table 1). The percent of respondents using *Crop Share* leases ranged from 23.8% in Northwest Kansas to 64.3% in West Central Kansas. The use of *Fixed Cash* leases ranged from 21.4% in West Central Kansas to 53.8% in central Kansas. *Crop Share* lease was the leading arrangement in the West Central, Southwest, North Central, and South Central districts with 64.3%, 59.3%, 45.5% and 54.0% of the respondents, respectively, in 2021. In the Northwest and Central districts, *Fixed Cash* leases were the most common lease arrangements for irrigated cropland.

The survey shows that the predominant source of irrigation water was from a well (Table 2). About 91.1% of the reported irrigated lease units used a well as the water source. Wells were the predominant source in all the six districts. In North Central Kansas, 25.5% of the irrigated lease units used a river as the water source. Low pressure pivot systems (<40 psi) dominated the irrigation systems, accounting for 64.7%. About 24.6% of the reported units used high pressure irrigation systems (>40 psi). Gated pipe and subsurface drip irrigation (SDI) accounted for 6.6% and 3.3%, respectively, of the systems used in the reported lease units. Electric and natural gas were the two major energy types, accounting for 40.2% and 39.4% of the energy types reported. Statewide, 19.3% of the reported lease units used diesel as the energy type.

Tables 3-5 present characteristics of and leasing information on well and major irrigation equipment in each district. The data for gated pipe, drip lines, valve, filter, and flow meter are not included, because we received too few responses about those pieces of equipment. The average well depth was about 240 feet; depths ranged from 77.1 feet in North Central Kansas to 432.6 feet in Southwest Kansas. Well output averaged 685 gallons per minute (GPM), and average output across the state ranged from 400 GPM in West Central Kansas to 771 GPM in South Central Kansas. In the 2017 survey, the well depth averaged 247 feet, and the well output averaged 840.4 GPM. Although the average well depth and average well output decreased from 2017 to 2021, the differences were not statistically significant.

The average age of the well was about 33 years. The average ages of pump & gearhead and the power unit were 19 and 11 years, respectively. The reported average ages of the underground pipe and center pivot unit were 23 year and 15 years, respectively. Average landlord repair and maintenance shares and average landlord ownership shares of major irrigation equipment expenses in each district are shown in Tables 4 and 5, respectively. Percentages varied across the state and across equipment. As expected, landlord share of repairs and maintenance and percentage of equipment ownership were the highest in the well category, followed by underground pipe, and pump & gearhead. Landlords owned about 90.5% of wells and were responsible for 81.6% of well repair and maintenance expenses in 2021. The ownership and expense participation by landlords was under 50% for power units. The landlord share of the center pivot repairs was only about 38%, while the landlord share of ownership was almost 58%.

Crop Share Leasing Arrangements

In the 2021 Kansas Irrigated Farm Lease Arrangement Survey, respondents were asked to provide information on a maximum of four crop share leases for the 2021 crop year. If the respondents had more than four leases, they were asked to respond regarding their most typical leases. If the respondents had leases for more than one crop on the same acreage, they were asked to respond for each crop separately.

Table 6 shows the general characteristics of the crop share leases. The number of landlords per respondent averaged 2.7 at the state level, an increase from 2.4 in the 2017 survey. The average acres per lease unit also increased from 240.1 acres in 2017 to 418.2 acres in 2021. On average, each lease unit had been rented for 13.8 years, lower than the 17.5 years in 2017. Tenant and landlord were related in 21.3% of the reported lease units in 2021, lower than the 29.3% in 2017. The percent of written leases decreased from 76.7% in 2017 to 59.3% in 2021. The changes in the 2021 results from the 2017 survey, regarding average acres per lease unit, and percentage of written leases, were statistically significant at the 1% level. The decreases in average percentage of related tenant and landlord were statistically significant at the 5% level. In 2021, the landlord received an average of 37.1% of the government payments and 34.9% of insurance indemnity payments, higher than the corresponding 34.4% and 31.8%, respectively, in 2017. The increases in 2021 from 2017 were statistically significant at the 10% level.

The 2021 survey results show that, statewide, the 33/67 landlord tenant crop share arrangement was the most common split reported in irrigated farmland rental arrangements (Table 7). About 29% of the reported irrigated lease units in Kansas used the 33/67 crop share. Landlords received 50% of the crop share in 24.5% of the reported irrigated lease units. The 40/60 landlord tenant crop share arrangement accounted for 18.1% of the reported irrigated lease units and the 25/75 landlord tenant crop share arrangement was used in 15.7% of the reported lease units. Crop share arrangements varied across districts. Tables 8-13 contain response information specific to each crop reporting district. These tables show the percent of leases in different crop share splits and the percent of leases where landowners share expenses at the same rate as the crop for each of the major crops. The following section details regional crop share leasing arrangements by crop reporting districts.

Northwest Kansas

About 63.6% of the crop share leases in Northwest Kansas were a one-quarter/three-quarter (25/75) landlord/tenant split (table 7). The 20/80 and 40/60 crop share arrangements were used by 18.2% and 9.1% of respondents, respectively. In 2017, the 25/75 split was also the most common split, at 47.8%. Most respondents produced corn in both 2021 and 2017; soybeans and sorghum were the other crops in production in the Northwest. Most of the respondents in this crop reporting district indicated net share leases were utilized for irrigated cropland and landlords did not share production expenses. As a result, two irrigated leases were included in the Northwest Irrigated Crop Share Arrangements Table (table 8). These two irrigated leases were for corn production. One used the 25/75 arrange, and the other used the 40/60 arrangement in the 2021 survey. In the 25/75 arrangement, landlords paid 25% of the corn fertilizer expenses, insecticide expenses, and irrigation energy costs. Landlords with the 25/75 arrangement did not share the herbicide expense. In the 40/60 arrangement for corn, landlords were responsible for 40% of the fertilizer expenses, herbicide expenses, insecticide expenses, and irrigation energy expenses.

West Central Kansas

In West Central Kansas, within crop share leases, a 33/67 landlord/tenant arrangement was predominant, with 53.8% of the leases (table 7). The 25/75 crop share arrangement comprised another 30.8% of the total district lease responses in 2021. In 2017, the 25/75 lease arrangement was the most common arrangement, with 36.8% of respondents using this split, and the 33/67 landlord/tenant crop share accounted for 34.2% of the district leases. In both the 2017 and 2021 surveys, the majority of respondents produced corn (table 9). Wheat and sorghum crop production were also reported. In the 33/67 arrangement, 100% of landlords paid 33% of fertilizer costs for corn, wheat, and sorghum. Twenty percent of landlords who received 33% of the corn crop paid 33% of herbicide costs and insecticide costs; 50% of landlords paid 33% of herbicide costs and insecticide costs for wheat; 0% of landlords paid 33% of herbicide and insecticide costs for sorghum. In the 25/75 crop share arrangement, fertilizer expenses and insecticide expenses were shared in the same percentage as the crop for corn. Zero percent of the landlords with the 25/75 split for corn shared the same percentage of herbicide expenses.

Landlords with crop share arrangement other than the 33/67 split and the 25/75 split shared same percentage of fertilizer expenses for corn and sorghum crop. None of these landlords shared the same percentage of herbicide and insecticide expenses for corn and sorghum. None of the landlords paid the same share of irrigation energy costs as the crop share they received.

Southwest Kansas

In Southwest Kansas, the predominant crop share arrangement was a 33/67 split. This arrangement was used by 43.9% of the respondents (table 7). The 40/60 crop share and the 25/75 crop share arrangements were used by 19.5% and 18.3% of the respondents, respectively, in the district. In the 2017 survey, these rates were 58.3%, 13.9% and 16.7%, respectively. The majority of respondents produced corn in 2021 and 2017; with wheat as the second most reported crop (table 10). Soybeans, sorghum, cotton, and alfalfa were also reported in this district. The 33/67 crop share lease was predominant for all crops, except cotton; the 40/60 arrangement was used by 66.7% of the reported cotton leases. In the 33/67 arrangement, 92.3% of landlords paid 33% of fertilizer expenses for corn; 77.8% of landlords paid 33% of fertilizer cost for wheat. All landlords who received 33% of the soybean and cotton crops paid 33% of fertilizer expenses; and 50% of landlords paid 33% of fertilizer costs for sorghum. In corn leases under the 33/67 arrangement, the percentage of landlords sharing the same percentage of herbicide, insecticide, and irrigation energy costs was 60%, 84%, and 92%, respectively. For the 25/75 and other % splits for wheat, fertilizer, herbicide, and insecticide expenses were shared in the same percentage as the crop. In the 40/60 arrangement, none of landlords shared the same percent of input cost for wheat. For sorghum and cotton crops, all landlords paid 40% of fertilizer, herbicide, and insecticide when they received 40% of the crop. All landlords with alfalfa crop leases paid the same share of input expenses as the crop share, except irrigation energy costs.

North Central Kansas

In North Central Kansas, the predominant crop share arrangement was a 50/50 split. In 2021, about 68% of the respondents used a 50/50 landlord/tenant split (table 7). About 8% of the respondents used the 40/60 crop share arrangement. In 2017, 40/60 splits and 50/50 splits were the two most commonly used arrangements, comprising 50% and 43.8%, respectively, of the district leases. Corn and soybeans were the two crops reported in the 2021 survey (table 11). Corn and soybeans were also the two major crops in 2017. For both corn and soybeans in the 2021 survey, 100% of landlords shared fertilizer, herbicide, and insecticide expenses in the same percentage as the crop share. This pattern was similar to the 2017 survey. An exception to this pattern was for soybeans under the 40/60 arrangement. Fifty percent of landlords shared 40% of fertilizer, herbicide, and insecticide expenses. For landlords with 50/50 arrangement in 2021, percentages of landlords sharing 50% of irrigation energy costs were 27.3% for corn and 60% for soybeans. For other % lease arrangements, none of landlords shared the same percent of irrigation energy costs.

Central Kansas

In Central Kansas, 54.5% of respondents used a 40/60 landlord/tenant crop share (table 7). The 33/67 and 50/50 crop share arrangements were also common in 2021, each comprising 18.2%. In 2017, the 33/67 split occurred 37.9% of the time, whereas the 50/50 crop share arrangements comprised 24.1% of the district total. Most respondents produced corn, soybeans, or wheat (table 12), as was the case in 2017. Alfalfa was also reported in 2021. Regardless of lease arrangement or crop, 100% of landlords shared in fertilizer, herbicide, and insecticide, and irrigation energy costs in the same percent share as the crop. The 2017 pattern was quite similar; the only difference was that a smaller percentage of landlords shared the same percentage of irrigation energy costs as they did in the crop in 2017. In the 2021 leases with the 33/67 landlord/tenant split, no landlords shared 33% of herbicide and irrigation energy costs for soybeans. For corn, 50% of those landlords paid 33% of herbicide and irrigation energy costs. In 2017 in the other % arrangements, it was not common for landlords to pay the same percentage of fertilizer, herbicide, and insecticide expenses as they received of the crop for corn and soybeans.

South Central Kansas

The 50/50 and 33/67 landlord/tenant splits were used by 45.9% and 21.6% of the respondents, respectively, in South Central Kansas (table 7). The 40/60 arrangement was reported for 18.9% of the lease units. In the 2017 survey, the 50/50 arrangement was predominant, comprising 47.8% of the total district leases; the 33/67 arrangement accounted for 28.3% of the district total. In 2021, most respondents produced corn; soybean was the second most important crop (table 13). These were also the main crops in 2017. Wheat, sorghum, cotton, and alfalfa were also reported in 2021. In the 50/50 arrangement, 100% of landlords shared in fertilizer, herbicide, and insecticide costs at an equal percentage as the share of crop they received in 2021 in all crops, except corn. The percentages of landlords who shared 50% of fertilizer, herbicide, and insecticide were 95.8%, 91.7%, and 91.7%, respectively. The 33/67 and 40/60 arrangement were also commonly used in corn leases in 2021. For corn, the percentages of landlords who shared in fertilizer, herbicide, and insecticide costs at an equal percentage as they share of the crop were 88.9%, 77.8%, and 77.8%, respectively. For soybeans, all landlords paid the same percentage of fertilizer, herbicide, and insecticide expenses as the share of crop they received, except in the 33/67 split in soybean leases. The percentages of landlords paying 33% of fertilizer, herbicide, and insecticide expenses were 100%, 66.7%, and 66.7%, respectively. A relatively smaller percentage of landlords paid the same share of irrigation energy costs as the share of the crop that they received.

Cash Rent Leasing Arrangements

Arrangements involving cash rent are also commonly used in Kansas irrigated farmland leases. In the 2021 crop year, 33.3% of the respondents reported the use of fixed cash lease arrangements, and 6.1% used flexible cash leases (table 1). The cash rent information was first collected in the 2017 survey and was also included in the 2021 survey. Similar to the crop share lease arrangements, respondents were asked to provide information on a maximum of four

irrigated leases units involving cash rent for the 2021 crop year. If the respondents had more than four leases, they were asked to respond regarding their most typical leases. Also, if the respondents had leases for more than one crop on the same acreage, they were asked to respond for each crop separately. Because there are only a few responses for flexible cash arrangements, flexible cash arrangements and fixed cash arrangements were combined in the following discussion.

Table 14 contains general characteristics of the 2021 Kansas irrigated farmland cash leases. The average number of landlords per respondents for cash leases was 2.5, an increase from 1.7 in the 2017 survey. Acreage under cash leases averaged 295.6 acres, an increase from the 2017 average of 225.9 acre. On average, land had been rented for 14 years in the cash leases, higher than the average of 12 years in 2017. In 43.0% of the reported irrigated cash leases the landlords and tenants were related; 71.6% of the cash rent leases were written. In the 2017 survey, about 41.5% of the landlords and tenants reported they were related, and 80.8% of the leases were written. For cash leases, the differences between the 2021 survey results and the 2017 survey results for the average acres per lease, the number of years land has been rented, and the percentage of tenant related to landlords were not statistically significant. The difference in the percentages of written leases was statistically significant at the 5% level. Statewide in cash lease units, 25% of the rent was based on well output. About 7.5% of the reported cash leases for the state had bonus rent based on yield.

In the 2021 survey, the cash rent averaged \$127.84 per acre, an increase of \$12.52 from the \$115.32 per acre in 2017. This increase in the average cash rent was statistically significant at the 5% level. Among the crops, hay and alfalfa had the highest rent of \$168.38 per acre per year, slightly higher than the 2017 average of \$165.00 per acre (table 15). The average cash rent for corn, soybeans, and wheat were \$129.03, 127.00, and \$97.62 per acre per year, respectively. The corresponding cash rents in 2017 were \$114.83, \$133.83, and \$85.82 per acre, respectively. Cash rent also varied across crop reporting districts (table 16). Average cash rent was the highest in Northwest Kansas at \$167.45 per acre, followed by North Central Kansas, at \$139.41 per acre per year. Cash rent was lowest in the West Central district, at \$88.33 per acre. There were large differences in individual cash rent payments, even within the same crop reporting district. For example, the lowest reported cash rent payment for corn in the State was \$25 per acre, while the highest reported cash rent payment for corn was \$300 per acre. In South Central Kansas, cash rent payments ranged from \$45 to \$200 per acre per year.

Table 17 shows the average cash rent payment for each crop by crop reporting district. The average cash rent payment for corn was highest in Northwest Kansas, at \$167.43 per acre per year, and lowest in West Central Kansas, at \$87.50 per acre per year. Cash rent for soybean acreage averaged highest in Central Kansas, at \$150.00 per acre, and lowest in the Southwest district, at \$112.33 per acre per year.

Conclusion

Results of the 2021 Irrigated Farm Lease Arrangement Survey indicate that crop share rental

arrangements remain the most popular type of lease in Kansas. However, these results, along with extension specialists' comments, suggest that other lease types, especially cash leases, are increasing in popularity. Fixed cash arrangements were used by 33.3% of the respondents in the 2021 crop year, and flexible cash rent arrangements were reported by 6.1% of the respondents. The lease unit with crop share arrangements averaged 418.2 acres, statistically significantly higher than the average 295.6 acres for cash rent lease units at the 5% level. The irrigated crop share lease unit had been rented for an average of 13.8 years, slightly lower than the average 14.0 years for cash rent lease unit. However, the difference was not statistically significant. In 21.3% of the reported irrigated crop share leases, landlords and tenants were related, statistically significantly lower than the 43.0% average for cash leases. About 59.3% of the crop share leases were written, statistically significantly lower than the 71.6% for cash leases.

In 2021, the 33/67 landlord tenant arrangement was still the most common split among crop share leases in the state. Twenty-nine percent of landlords received 33% of the crop in the reported lease units in 2021. Lease arrangements for irrigated land are more variable than those for non-irrigated land, when comparing the 2021 Kansas Irrigated Farm Lease Arrangement Survey results with the 2020 Kansas Non-Irrigated Farm Lease Arrangement Survey results (Tsoodle and Li, 2020). The 33/67 split on non-irrigated land is overwhelmingly dominant across the state, except in the Northeast and East Central Kansas. The 50/50 split and 40/60 split, respectively, dominated in those districts. For irrigated land, however, the 33/67 split dominated only in West Central and Southwest Kansas. The 25/75 split was the most popular arrangement in Northwest. The 50/50 landlord/tenant split dominated in North Central and South Central Kansas. In Central Kansas, 40/60 arrangement was most commonly used. The 2021 results confirmed extension specialists' acknowledgement that higher landlord crop shares are more popular in the central third of the state than in the western third of the state. As landlords negotiate rental arrangements, their perceptions of production risk and expectations for crop income play key roles (Albright, O'Brien, and Sartwelle, 1996).

The 2021 survey suggests that a high percentage of landlords shared in fertilizer, herbicide, and insecticide costs in the same percent share as the crop. It was less common for landlords to share the same percentage of irrigation energy costs as they shared in the crop. The crop mix has not changed much since 2012. Corn was the crop reported most in the six crop reporting districts. Soybeans were the second major crop planted in the central third of the state. In Southwest Kansas, wheat was the second major crop in 2021.

The 2021 Kansas Irrigated Farm Lease Arrangement Survey included questions about cash lease arrangements because of the increased use of cash rental arrangements in farmland. The survey results show that the average cash rent per acre per year was \$127.84 in 2021. As expected, the 2021 cash rent for irrigated farmland was higher than the average \$57.70 per acre per year for non-irrigated farmland in 2020. Cash rent varied widely across crops, districts, and across each individual lease.

Rental arrangements can be affected by many factors. Changes in farm policy, commodity prices, and technology obviously affect farm structure, rental arrangements, and crop diversity. It

is difficult to determine exactly what forces have been driving current rental changes. Respondents were asked to rate influences of some possible factors in the 2021 survey. Table 18 summarizes respondents' opinions towards various factors. The tenant stewardship and the relationship between landowners and operators were regarded as the two most important factors in determining the rental rate for irrigated cropland. About 72.2% the respondents regarded tenant stewardship as the most important factor for deciding rental rates and rated it as a two or one on the scale of importance, and only 3.6% of the respondents considered it the least important factor, rating it either 6 or 7. Water quantity and land quality were two other important factors for irrigated farm lease arrangements. More than 63% of the respondents rated those as a two or one in the scale of importance; and about 7% of the respondents thought they were the least important factor. Land location and crop price were also considered important in deciding rental rate. About 65.5% and 61% of the respondents rated land location and crop price, respectively, as a three or above in the scale of importance. Water quality, input costs, availability of irrigation equipment, and length of the lease could also play roles in determining lease arrangements. Respondents considered land size the least important of all the factors listed in the 2021 survey.

Related K-State Research and Extension publications:

Albright, Martin, Daniel O'Brien, and James Sartwelle. "Crop Lease Arrangement Market Issues and Trends." Kansas State University, Department of Agricultural Economics, Manhattan, Kansas, 1996.

Garrett, R.B., Leah J. Tsoodle, and B.B. Golden. "Crop share Leasing Arrangements for Irrigated Land in Kansas." Kansas State University, Department of Agricultural Economics Staff Paper No. 05-01, Manhattan, Kansas, 2004.

Dhuyvetter, Kevin and Dumler, Troy. "Ethics of Leasing Agricultural Land." Kansas State University, Department of Agricultural Economics, Manhattan, Kansas, September 1, 2006. <https://www.agmanager.info/ethics-leasing-agricultural-land>.

Dhuyvetter, Kevin and Kastens, Terry. "Determining Cropland Cash Rental Arrangements." Kansas State University, Department of Agricultural Economics, Manhattan, Kansas, February 1, 1999. <https://www.agmanager.info/land-leasing/land-rental-rates/determining-cropland-cash-rental-arrangements>.

Dhuyvetter, Kevin and Kastens, Terry. "Determining Cropland Share Rental Arrangements." Kansas State University, Department of Agricultural Economics, Manhattan, Kansas, February 1, 1999. <https://www.agmanager.info/determining-cropland-share-rental-arrangements>.

Langemeier, Larry N. "Irrigated Crop Share and Cash Rental Arrangements for Your Farm." North Central Regional Publication #146 (NCR 146), revised 1997.

- Langemeier, Larry N. "Trends in Irrigated Crop Lease Arrangements on Kansas Farms." Report of Progress 811 (SRP 811), 1998.
- O'Brien, Daniel. "Crop Share Leasing Arrangements in Kansas." Kansas State University, Department of Agricultural Economics, Manhattan, Kansas, 1998.
- Schlegel, Jen and Tsoodle, Leah J. "Irrigated Crop Share Leasing Arrangements in Kansas." Kansas State University, Department of Agricultural Economics Staff Paper No. 09-02, Manhattan, Kansas, 2008.
- Taylor, Mykel. "2017 Kansas County-Level Cash Rents for Non-Irrigated Cropland." Kansas State University, Department of Agricultural Economics, Manhattan, Kansas, March 10, 2017. <https://www.agmanager.info/land-leasing/land-rental-rates/2017-kansas-county-level-cash-rents-non-irrigated-cropland>.
- Taylor, Mykel and Leah J. Tsoodle. "2017 Kansas County-Level Cash Rents for Irrigated Cropland." Kansas State University, Department of Agricultural Economics, Manhattan, Kansas, March 15, 2017. <https://www.agmanager.info/land-leasing/land-rental-rates/2017-kansas-county-level-cash-rents-irrigated-cropland>.
- Tsoodle, Leah J. and Xianghong Li. "2012 Irrigated Crop-Share Leasing Arrangements in Kansas." Kansas State University, Department of Agricultural Economics Manhattan, Kansas, July 6, 2017. <https://www.agmanager.info/2012-irrigated-crop-share-leasing-arrangements-kansas>.
- Tsoodle, Leah J. and Xianghong Li. "2017 Irrigated Farm Leasing Arrangements In Kansas." Kansas State University, Department of Agricultural Economics Manhattan, Kansas, April 2018. https://www.agmanager.info/sites/default/files/pdf/IrrigatedReport_2017.pdf.
- Tsoodle, Leah J. and Xianghong Li. "2020 Non-irrigated Crop Leasing Arrangements in Kansas." Kansas State University, Department of Agricultural Economics Manhattan, Kansas, November 2020. https://www.agmanager.info/sites/default/files/pdf/2020_NonIrrigated_AgManager.pdf.

Figure 1. Irrigated Land Use Districts

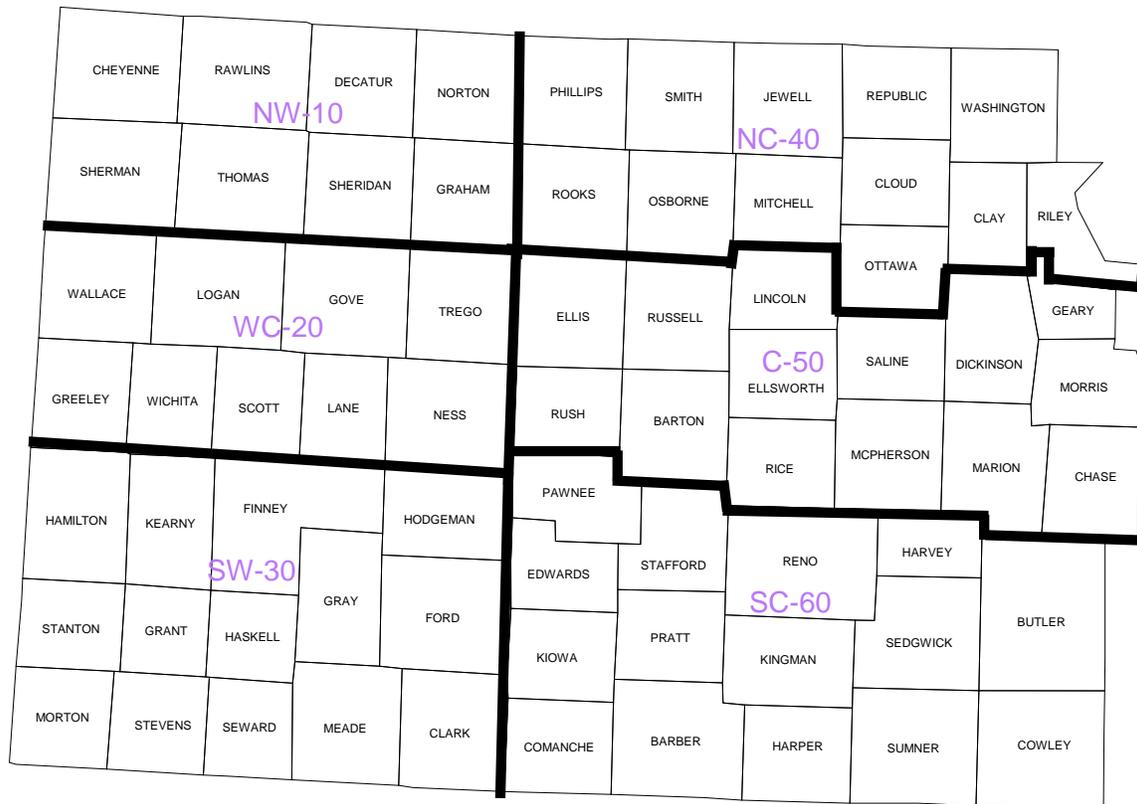


Table 1. Irrigated Lease Types

District	Crop Share	Fixed Cash	Crop Share & Fixed Cash	Flexible Cash	Net Share	Other
Northwest-10	23.8%	33.3%	4.8%	14.3%	19.0%	4.8%
West Central-20	64.3%	21.4%	0.0%	14.3%	0.0%	0.0%
Southwest-30	59.3%	27.8%	0.0%	3.7%	9.3%	0.0%
North Central-40	45.5%	42.4%	3.0%	6.1%	3.0%	0.0%
Central-50	46.2%	53.8%	0.0%	0.0%	0.0%	0.0%
South Central-60	54.0%	31.7%	4.8%	4.8%	3.2%	1.6%
State	51.0%	33.3%	2.5%	6.1%	6.1%	1.0%

Table 2. General Irrigation Information

District	Source of Water				Irrigation System					Energy Type			
	Well	River	Lake	Ditch	Pivot (High Pressure>40 psi)	Pivot (Low Pressure<40 psi)	Gated Pipe	SDI	Other	Electric	Natural Gas	Propane (L.P.)	Diesel
Northwest-10	100.0%	0.0%	0.0%	0.0%	17.4%	78.3%	0.0%	0.0%	4.3%	26.1%	73.9%	0.0%	0.0%
West Central-20	94.4%	0.0%	0.0%	0.0%	35.0%	60.0%	0.0%	0.0%	5.0%	46.7%	53.3%	0.0%	0.0%
Southwest-30	95.7%	0.0%	0.0%	4.3%	16.5%	78.0%	5.5%	0.0%	0.0%	38.6%	58.0%	0.0%	3.4%
North Central-40	60.8%	25.5%	7.8%	0.0%	33.3%	45.2%	16.7%	4.8%	0.0%	39.5%	2.3%	7.0%	51.2%
Central-50	100.0%	0.0%	0.0%	0.0%	22.2%	33.3%	22.2%	22.2%	0.0%	75.0%	15.0%	0.0%	10.0%
South Central-60	100.0%	0.0%	0.0%	0.0%	30.4%	68.1%	0.0%	1.4%	0.0%	35.4%	30.8%	0.0%	33.8%
State	91.1%	4.6%	1.4%	1.4%	24.6%	64.7%	6.6%	3.3%	0.7%	40.2%	39.4%	1.2%	19.3%

Table 3. Average Age of Well & Irrigation Equipment

District	Average Well Depth (Feet)	Average Output (Gallons/Min.)	Average Age (Years)				
			Well	Pump & Gearhead	Power Unit	Underground Pipe	Center Pivot Unit
Northwest-10	207.1	556.9	44.8	18.3	8.5	29.7	20.2
West Central-20	192.2	400.0	25.6	13.2	12.3	18.9	14.3
Southwest-30	432.6	710.6	33.9	22.3	9.3	27.7	15.2
North Central-40	77.1	740.3	32.6	16.7	15.2	16.2	14.2
Central-50	130.5	512.5	24.4	11.4	7.5	16.4	12.2
South Central-60	112.1	771.5	31.1	20.2	12.8	23.4	12.6
State	240.7	685.0	32.7	18.7	11.3	23.2	14.6

Table 4. Average Landlord Repairs & Maintenance Share of Irrigation Equipment

District	Repairs and Maintenance (%)				
	Well	Pump & Gearhead	Power Unit	Underground Pipe	Center Pivot Unit
Northwest-10	71.3%	53.6%	28.5%	72.3%	48.9%
West Central-20	86.7%	45.0%	13.3%	73.3%	38.5%
Southwest-30	84.0%	66.1%	13.7%	81.1%	27.5%
North Central-40	57.4%	46.6%	33.8%	33.1%	40.9%
Central-50	94.1%	79.8%	58.7%	94.4%	40.4%
South Central-60	92.6%	77.7%	54.0%	88.9%	48.7%
State	81.6%	64.1%	32.0%	75.0%	38.3%

Table 5. Average Landlord Ownership Share of Irrigation Equipment

District	Ownership (%)				
	Well	Pump & Gearhead	Power Unit	Underground Pipe	Center Pivot Unit
Northwest-10	82.6%	68.2%	34.8%	77.3%	73.7%
West Central-20	86.7%	88.2%	13.3%	73.3%	53.8%
Southwest-30	91.4%	70.4%	19.2%	87.3%	36.5%
North Central-40	85.3%	70.7%	60.0%	79.3%	72.8%
Central-50	100.0%	92.1%	71.1%	100.0%	57.1%
South Central-60	93.3%	85.4%	60.7%	90.7%	74.2%
State	90.5%	76.8%	42.6%	85.9%	57.8%

Table 6. General Leasing Characteristics: Crop Share Leases

District	Crop share Leases						
	Ave. Landlords Per Respondent	Ave. Acres Per Lease	Ave. # Years Rented Land	% Related To Landlord	% With A Written Lease	% Government Payment Landlord Received	% Insurance Indemnity payments Landlord Received
Northwest-10	1.6	165.5	8.4	9.1%	30.0%	24.7%	24.7%
West Central-20	1.6	284.5	10.1	7.7%	46.2%	25.6%	23.0%
Southwest-30	3.5	681.0	18.2	11.1%	54.3%	33.5%	31.6%
North Central-40	2.4	168.1	13.8	44.0%	52.0%	43.0%	43.5%
Central-50	2.3	119.4	13.6	8.3%	75.0%	41.3%	38.9%
South Central-60	2.9	320.9	10.8	31.1%	71.2%	42.8%	38.7%
State	2.7	418.2	13.8	21.3%	59.3%	37.1%	34.9%

Table 7. Percent of Respondents Using Specific Landlord Crop Share Arrangements by District

Landlord Share	Northwest-10	West Central-20	Southwest-30	North Central-40	Central-50	South Central-60	State
20%	18.2%	0.0%	2.4%	4.0%	0.0%	0.0%	2.3%
25%	63.6%	30.8%	18.3%	16.0%	0.0%	5.4%	15.7%
30%	0.0%	0.0%	3.7%	0.0%	0.0%	5.4%	3.2%
33%	0.0%	53.8%	43.9%	4.0%	18.2%	21.6%	28.7%
40%	9.1%	0.0%	19.5%	8.0%	54.5%	18.9%	18.1%
45%	0.0%	0.0%	6.1%	0.0%	0.0%	0.0%	2.3%
50%	0.0%	0.0%	0.0%	68.0%	18.2%	45.9%	24.5%
Other	9.1%	15.4%	6.1%	0.0%	9.1%	2.7%	5.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8. Northwest-10 Irrigated Crop Share Arrangements*

Crop	Landlord's Percent of Crop Received (and of Costs Paid)*				
	25%	33%	40%	50%	Other %
Corn (2 Leases)					
Total Leases in Lease Arrangement	1		1		
% of Total Leases in Lease Arrangement	50.0%		50.0%		
% of Leases Sharing Fertilizer Costs	100.0%	No	100.0%	No	No
% of Leases Sharing Herbicide Costs	0.0%	Responses	100.0%	Responses	Responses
% of Leases Sharing Insecticide Costs	100.0%		100.0%		
% of Leases Sharing Irrigation Energy Costs	100.0%		100.0%		

*The percentages calculated in this table represent the percent of landlords sharing the same percent of costs as they share of the crop. For example, 85.7% of landlords receiving 33% of the corn crop paid 33% of fertilizer expenses.

Table 9. West Central-20 Irrigated Crop Share Arrangements*

Crop	Landlord's Percent of Crop Received (and of Costs Paid)*				
	25%	33%	40%	50%	Other %
Corn (7 Leases)					
Total Leases in Lease Arrangement	1	5			1
% of Total Leases in Lease Arrangement	14.3%	71.4%			14.3%
% of Leases Sharing Fertilizer Costs	100.0%	100.0%	No	No	100.0%
% of Leases Sharing Herbicide Costs	0.0%	20.0%	Responses	Responses	0.0%
% of Leases Sharing Insecticide Costs	100.0%	20.0%			0.0%
% of Leases Sharing Irrigation Energy Costs	0.0%	0.0%			0.0%
Sorghum (2 Leases)					
Total Leases in Lease Arrangement		1			1
% of Total Leases in Lease Arrangement		50.0%			50.0%
% of Leases Sharing Fertilizer Costs	No	100.0%	No	No	100.0%
% of Leases Sharing Herbicide Costs	Responses	0.0%	Responses	Responses	0.0%
% of Leases Sharing Insecticide Costs		0.0%			0.0%
% of Leases Sharing Irrigation Energy Costs		0.0%			0.0%
Wheat (2 Leases)					
Total Leases in Lease Arrangement		2			
% of Total Leases in Lease Arrangement		100.0%			
% of Leases Sharing Fertilizer Costs	No	100.0%	No	No	No
% of Leases Sharing Herbicide Costs	Responses	50.0%	Responses	Responses	Responses
% of Leases Sharing Insecticide Costs		50.0%			
% of Leases Sharing Irrigation Energy Costs		0.0%			

*The percentages calculated in this table represent the percent of landlords sharing the same percent of costs as they share of the crop. For example, 100.0% of landlords receiving 33% of the wheat crop paid 33% of fertilizer expenses.

Table 10. Southwest-30 Irrigated Crop Share Arrangements*

Crop	Landlord's Percent of Crop Received (and of Costs Paid)*				
	25%	33%	40%	50%	Other %
Alfalfa (2 Leases)					
Total Leases in Lease Arrangement	1	1			
% of Total Leases in Lease Arrangement	50.0%	50.0%			
% of Leases Sharing Fertilizer Costs	100.0%	100.0%	No Responses	No Responses	No Responses
% of Leases Sharing Herbicide Costs	100.0%	100.0%			
% of Leases Sharing Insecticide Costs	100.0%	100.0%			
% of Leases Sharing Irrigation Energy Costs	0.0%	0.0%			
Corn (47 Leases)					
Total Leases in Lease Arrangement	7	26	8		6
% of Total Leases in Lease Arrangement	14.9%	55.3%	17.0%		12.8%
% of Leases Sharing Fertilizer Costs	100.0%	92.3%	62.5%	No Responses	66.7%
% of Leases Sharing Herbicide Costs	85.7%	60.0%	28.6%	Responses	60.0%
% of Leases Sharing Insecticide Costs	85.7%	84.0%	62.5%		60.0%
% of Leases Sharing Irrigation Energy Costs	83.3%	92.0%	57.1%		60.0%
Cotton (6 Leases)					
Total Leases in Lease Arrangement		2	4		
% of Total Leases in Lease Arrangement		33.3%	66.7%		
% of Leases Sharing Fertilizer Costs	No Responses	100.0%	100.0%	No Responses	No Responses
% of Leases Sharing Herbicide Costs		50.0%	100.0%		
% of Leases Sharing Insecticide Costs		50.0%	100.0%		
% of Leases Sharing Irrigation Energy Costs		100.0%	0.0%		
Sorghum (6 Leases)					
Total Leases in Lease Arrangement		4	2		
% of Total Leases in Lease Arrangement		66.7%	33.3%		
% of Leases Sharing Fertilizer Costs	No Responses	50.0%	100.0%	No Responses	No Responses
% of Leases Sharing Herbicide Costs		25.0%	100.0%		
% of Leases Sharing Insecticide Costs		50.0%	100.0%		
% of Leases Sharing Irrigation Energy Costs		33.3%	0.0%		
Soybeans (7 Leases)					
Total Leases in Lease Arrangement		4	2		1
% of Total Leases in Lease Arrangement		57.1%	28.6%		14.3%
% of Leases Sharing Fertilizer Costs	No Responses	100.0%	100.0%	No Responses	100.0%
% of Leases Sharing Herbicide Costs		100.0%	25.0%		100.0%
% of Leases Sharing Insecticide Costs		100.0%	75.0%		100.0%
% of Leases Sharing Irrigation Energy Costs		100.0%	0.0%		0.0%
Wheat (14 Leases)					
Total Leases in Lease Arrangement	1	9	1		3
% of Total Leases in Lease Arrangement	7.1%	64.3%	7.1%		21.4%
% of Leases Sharing Fertilizer Costs	100.0%	77.8%	0.0%	No Responses	100.0%
% of Leases Sharing Herbicide Costs	100.0%	44.4%	0.0%		100.0%
% of Leases Sharing Insecticide Costs	100.0%	71.4%	0.0%		100.0%
% of Leases Sharing Irrigation Energy Costs	100.0%	57.1%	0.0%		100.0%

*The percentages calculated in this table represent the percent of landlords sharing the same percent of costs as they share of the crop. For example, 100.0% of landlords receiving 33% of the wheat crop paid 33% of fertilizer expenses.

Table 11. North Central-40 Irrigated Crop Share Arrangements*

Crop	Landlord's Percent of Crop Received (and of Costs Paid)*				
	25%	33%	40%	50%	Other %
Corn (16 Leases)					
Total Leases in Lease Arrangement		1		14	1
% of Total Leases in Lease Arrangement		6.3%		87.5%	6.3%
% of Leases Sharing Fertilizer Costs	No Responses	100.0%	No Responses	100.0%	100.0%
% of Leases Sharing Herbicide Costs		100.0%		100.0%	100.0%
% of Leases Sharing Insecticide Costs		100.0%		100.0%	100.0%
% of Leases Sharing Irrigation Energy Costs		0.0%		27.3%	0.0%
Soybeans (10 Leases)					
Total Leases in Lease Arrangement			2	7	1
% of Total Leases in Lease Arrangement			20.0%	70.0%	10.0%
% of Leases Sharing Fertilizer Costs	No Responses	No Responses	50.0%	100.0%	100.0%
% of Leases Sharing Herbicide Costs			50.0%	100.0%	100.0%
% of Leases Sharing Insecticide Costs			50.0%	100.0%	100.0%
% of Leases Sharing Irrigation Energy Costs			0.0%	60.0%	0.0%

*The percentages calculated in this table represent the percent of landlords sharing the same percent of costs as they share of the crop. For example, 100.0% of landlords receiving 33% of the wheat crop paid 33% of fertilizer expenses.

Table 12. Central-50 Irrigated Crop Share Arrangements*

Crop	Landlord's Percent of Crop Received (and of Costs Paid)*				
	25%	33%	40%	50%	Other %
Alfalfa (1 Lease)					
Total Leases in Lease Arrangement			1		
% of Total Leases in Lease Arrangement			100.0%		
% of Leases Sharing Fertilizer Costs	No Responses	No Responses	100.0%	No Responses	No Responses
% of Leases Sharing Herbicide Costs			100.0%		
% of Leases Sharing Insecticide Costs			100.0%		
% of Leases Sharing Irrigation Energy Costs			100.0%		
Corn (6 Leases)					
Total Leases in Lease Arrangement		2	2	1	1
% of Total Leases in Lease Arrangement		33.3%	33.3%	16.7%	16.7%
% of Leases Sharing Fertilizer Costs	No Responses	100.0%	100.0%	100.0%	100.0%
% of Leases Sharing Herbicide Costs		50.0%	100.0%	100.0%	100.0%
% of Leases Sharing Insecticide Costs		100.0%	100.0%	100.0%	100.0%
% of Leases Sharing Irrigation Energy Costs		50.0%	100.0%	100.0%	100.0%
Soybeans (7 Leases)					
Total Leases in Lease Arrangement		1	3	2	1
% of Total Leases in Lease Arrangement		14.3%	42.9%	28.6%	14.3%
% of Leases Sharing Fertilizer Costs	No Responses	100.0%	100.0%	100.0%	100.0%
% of Leases Sharing Herbicide Costs		0.0%	100.0%	100.0%	100.0%
% of Leases Sharing Insecticide Costs		100.0%	100.0%	100.0%	100.0%
% of Leases Sharing Irrigation Energy Costs		0.0%	100.0%	100.0%	100.0%
Wheat (4 Leases)					
Total Leases in Lease Arrangement			2	2	
% of Total Leases in Lease Arrangement			50.0%	50.0%	
% of Leases Sharing Fertilizer Costs	No Responses	No Responses	100.0%	100.0%	No Responses
% of Leases Sharing Herbicide Costs			100.0%	100.0%	
% of Leases Sharing Insecticide Costs			100.0%	100.0%	
% of Leases Sharing Irrigation Energy Costs			100.0%	100.0%	

*The percentages calculated in this table represent the percent of landlords sharing the same percent of costs as they share of the crop. For example, 100.0% of landlords receiving 33% of the wheat crop paid 33% of fertilizer expenses.

Table 13. South Central-60 Irrigated Crop share Arrangements*

Crop	Landlord's Percent of Crop Received (and of Costs Paid)*				
	25%	33%	40%	50%	Other %
Alfalfa (2 Lease)					
Total Leases in Lease Arrangement				2	
% of Total Leases in Lease Arrangement				100.0%	
% of Leases Sharing Fertilizer Costs	No	No	No	100.0%	No
% of Leases Sharing Herbicide Costs	Responses	Responses	Responses	100.0%	Responses
% of Leases Sharing Insecticide Costs				100.0%	
% of Leases Sharing Irrigation Energy Costs				100.0%	
Corn (48 Leases)					
Total Leases in Lease Arrangement	1	9	9	24	2
% of Total Leases in Lease Arrangement	2.1%	18.8%	18.8%	50.0%	10.4%
% of Leases Sharing Fertilizer Costs	100.0%	88.9%	88.9%	95.8%	80.0%
% of Leases Sharing Herbicide Costs	100.0%	77.8%	77.8%	91.7%	60.0%
% of Leases Sharing Insecticide Costs	100.0%	77.8%	77.8%	91.7%	80.0%
% of Leases Sharing Irrigation Energy Costs	0.0%	55.6%	44.4%	91.3%	20.0%
Cotton (2 Lease)					
Total Leases in Lease Arrangement				2	
% of Total Leases in Lease Arrangement				100.0%	
% of Leases Sharing Fertilizer Costs	No	No	No	100.0%	No
% of Leases Sharing Herbicide Costs	Responses	Responses	Responses	100.0%	Responses
% of Leases Sharing Insecticide Costs				100.0%	
% of Leases Sharing Irrigation Energy Costs				100.0%	
Sorghum (2 Lease)					
Total Leases in Lease Arrangement		1		1	
% of Total Leases in Lease Arrangement		50.0%		50.0%	
% of Leases Sharing Fertilizer Costs	No	100.0%	No	100.0%	No
% of Leases Sharing Herbicide Costs	Responses	0.0%	Responses	100.0%	Responses
% of Leases Sharing Insecticide Costs		0.0%		100.0%	
% of Leases Sharing Irrigation Energy Costs		0.0%		100.0%	
Soybeans (24 Lease)					
Total Leases in Lease Arrangement	1	3	7	12	1
% of Total Leases in Lease Arrangement	4.2%	12.5%	29.2%	50.0%	4.2%
% of Leases Sharing Fertilizer Costs	100.0%	100.0%	100.0%	100.0%	100.0%
% of Leases Sharing Herbicide Costs	100.0%	66.7%	100.0%	100.0%	100.0%
% of Leases Sharing Insecticide Costs	100.0%	66.7%	100.0%	100.0%	100.0%
% of Leases Sharing Irrigation Energy Costs	0.0%	66.7%	71.4%	91.7%	0.0%
Wheat (5 Leases)					
Total Leases in Lease Arrangement		4		1	
% of Total Leases in Lease Arrangement		80		20.0%	
% of Leases Sharing Fertilizer Costs	No	100.0%	No	100.0%	No
% of Leases Sharing Herbicide Costs	Responses	75.0%	Responses	100.0%	Responses
% of Leases Sharing Insecticide Costs		75.0%		100.0%	
% of Leases Sharing Irrigation Energy Costs		0.0%		100.0%	

*The percentages calculated in this table represent the percent of landlords sharing the same percent of costs as they share of the crop. For example, 100.0% of landlords receiving 33% of the corn crop paid 33% of fertilizer expenses.

Table 14. General Leasing Characteristics: Cash Rent Leases

Cash Rent Leases							
District	Ave. Landlords Per Respondent	Ave. Acres Per Lease	Ave. # Years Rented Land	% Related to Landlord	% With A Written Lease	% of Rent Based on Well Output	% Bonus Rent Based on Yield
Northwest-10	1.9	261.3	11.8	50.0%	60.0%	20.0%	0.0%
West Central-20	2.3	153.0	8.1	87.5%	75.0%	62.5%	57.1%
Southwest-30	2.9	512.3	16.8	28.2%	74.4%	46.5%	10.5%
North Central-40	2.1	168.8	16.7	59.1%	78.3%	0.0%	5.9%
Central-50	3.0	174.9	12.3	58.3%	66.7%	0.0%	0.0%
South Central-60	2.4	206.5	12.6	30.6%	71.8%	18.4%	0.0%
State	2.5	295.6	14.0	43.0%	71.6%	25.0%	7.5%

Table 15. Average Cash Rent Payment by Crop

Crop	# Reports	Cash Rent Payment (\$/Acre per Year)		
		Average Payment	Min	Max
Corn	82	129.03	25	300
Soybeans	30	127.00	50	200
Wheat	14	97.62	25	165
Sorghum	9	99.44	60	150
Sunflower	1	70.00	70	70
Cotton	1	150.00	150	150
Rice	1	150.00	150	150
Alfalfa & Hay	16	168.38	75	250
Brome	1	100.00	100	100
All Crop	155	127.84	25	300

Table 16. Average Cash Rent Payment by Crop Reporting District (CRD)

District	# Reports	Cash Rent Payment (\$/Acre per Year)		
		Average Payment	Min	Max
Northwest-10	20	167.45	100	227
West Central-20	9	88.33	35	125
Southwest-30	47	111.27	25	300
North Central-40	27	139.41	40	200
Central-50	12	135.00	100	200
South Central-60	40	126.46	45	200
State	155	127.84	25	300

Table 17. Average Cash Rent Payment by Crop and Crop Reporting District

District	Cash Rent Payment (\$/Acre per Year)									
	Corn	Soybeans	Wheat	Sorghum	Sunflower	Cotton	Rice	Alfalfa & Hay	Brome	All Crop
Northwest-10	167.43	-	157.50	-	-	-	-	172.50	-	167.45
West Central-20	87.50	-	105.00	60.00	-	-	-	75.00	100.00	88.33
Southwest-30	101.68	112.33	73.98	97.00	70.00	-	-	205.83	-	111.27
North Central-40	138.86	141.11	-	-	-	-	150.00	133.33	-	139.41
Central-50	136.00	150.00	125.00	120.00	-	-	-	-	-	135.00
South Central-60	130.28	118.52	73.76	110.00	-	150.00	-	147.00	-	126.46
State	129.03	127.00	97.62	99.44	70.00	150.00	150.00	168.38	100.00	127.84

- indicates no response

Table 18. Importance of Factors Affecting Rental Rate

Factors Affecting Rental Rate	# of Responses	Avg.	Percentage of Responses (%)							
			Most Important				Least Important			Not Applicable
			1	2	3	4	5	6	7	8
Tenant Stewardship	83	2.24	34.9%	37.3%	8.4%	13.3%	2.4%	1.2%	2.4%	0.0%
Relationship between Landowner & Operator	92	2.28	50.0%	18.5%	9.8%	10.9%	3.3%	1.1%	6.5%	0.0%
Water Quantity	88	2.58	34.1%	29.5%	11.4%	11.4%	3.4%	3.4%	6.8%	0.0%
Land Quality	84	2.58	28.6%	34.5%	14.3%	9.5%	6.0%	0.0%	7.1%	0.0%
Land Location	84	3.10	16.7%	34.5%	14.3%	13.1%	9.5%	2.4%	9.5%	0.0%
Crop Price	82	3.11	23.2%	23.2%	14.6%	19.5%	6.1%	6.1%	6.1%	1.2%
Water Quality	79	3.35	17.7%	24.1%	17.7%	11.4%	12.7%	7.6%	8.9%	0.0%
Input Cost	80	3.46	12.5%	20.0%	20.0%	28.8%	3.8%	5.0%	10.0%	0.0%
Irrigation Equipment Availability	83	3.58	13.3%	20.5%	26.5%	10.8%	7.2%	7.2%	14.5%	0.0%
Length of Lease	86	3.76	8.1%	17.4%	24.4%	18.6%	15.1%	4.7%	11.6%	0.0%
Land Size	80	4.29	2.5%	20.0%	13.8%	20.0%	15.0%	11.3%	17.5%	0.0%