

**COMPETITIVE TRANSPORTATION  
RATE RANGES FOR NORTH DAKOTA  
HARD RED SPRING AND DURUM  
WHEATS AND FLOUR**

**By**

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**COMPETITIVE TRANSPORTATION RATE RANGES  
FOR NORTH DAKOTA HARD RED SPRING  
AND DURUM WHEATS AND FLOUR  
IN DOMESTIC AND EXPORT MARKETS  
1965 AND PROJECTED TO 1970 AND 1975**

**BY**

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**in cooperation with**

**North Dakota State Wheat Commission  
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## FOREWARD

This report is one of a series of five reports prepared for the North Dakota State Wheat Commission under a project entitled IMPACT OF CHANGING RAIL FREIGHT RATES ON MARKETS FOR NORTH DAKOTA HARD RED SPRING AND DURUM WHEAT. The preparation of this report was financed in part through a contract grant from the Commission to the Upper Great Plains Transportation Institute. Other reports in this series are:

Optimum Distribution Patterns for Durum Wheat and Flour in Domestic and Export Markets, 1965, and Projected to 1970 and 1975, UGPTI Report No. 3

Optimum Distribution Patterns for Hard Red Spring Wheat and Flour in Domestic and Export Markets, 1965, and Projected to 1970 and 1975, UGPTI Report No. 4

Optimum Distribution Patterns for Durum, Hard Red Spring, Hard Red Winter Wheat and Flour, Considering Substitutability in Domestic and Export Markets, 1965, and Projected to 1970 and 1975, UGPTI Report No. 5

Statistical Appendix to UGPTI Reports 3, 4, 5, and 6, UGPTI Report No. 7

Alternative market outlets for wheat production of North Dakota and the Upper Great Plains are important. Hard red spring and durum wheat produced in this area can now be sold in either domestic or export markets. These alternatives provide more competition among buyers for these products. This situation provides a partial solution to a basic problem that has faced area farmers for many years. That is, the production of spring wheat has been tied to the activity of the Minneapolis and Duluth markets. During periods of labor problems and/or when the Great Lakes become impassable, these markets become narrower or disappear. There is evidence that the remaining mills located in the Twin Cities and southern Minnesota are looking toward hard winter wheat supply areas for more and more wheat inputs. In addition, a trend exists toward moving milling capacity to points of consumption, i.e., where population is centralizing and expanding at rapid rates. Reductions in the costs of hauling the raw product encourage these types of changes.

Reductions in westbound export rail rates on wheat have played an important role in providing an additional market outlet for spring wheat produced in the Upper Great Plains. It is important to recognize, however, that these reductions apply only on westbound movements consigned to destinations outside of the United States. Therefore, this product is not legally available to millers of the Northwest and the West Coast of the United States except through the existing structure of high domestic freight rates.

In order to intelligently negotiate adjustments in rail rates, railroad management and farm producers must possess objective analyses of the impact of such adjustments. The effects of adjustments on existing distribution patterns for substitutable wheats must be known. The several reports from this study are intended to partially satisfy the requirements for information to answer the questions of carriers and producers.

David C. Nelson  
Director

COMPETITIVE TRANSPORTATION RATE RANGES FOR NORTH DAKOTA  
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INTRODUCTION

The Nature of the Problem

The wheat-flour-bakery industry is constructed from the wheat-grain producer to the bakery product buyer or consumer. Country elevators, subterminals, terminals, numerous marketing interests, flour millers, flour blenders and processors, and bakeries exist between the two ends of this spectrum. The movement of raw wheat from the farm to the consumer is influenced by a myriad of artificial, metrological, economical, and political forces. As wheat is moved from the producer to the consumer, several participants compete for their share of the consumer's dollar for the final product in this movement. In recent years, the wheat producer has been receiving relatively the same reward (price) for his participation in this movement, whereas the consumer has to pay a considerable amount more than he did in previous years. It is consequential for the producer to be aware and soberly concerned about his fair share of the marketing value to the consumer.

North Dakota grown wheat can be marketed in two types of markets: the domestic market and the export market. Wheat that is produced in a state and not used in the same state is said to be in surplus or available for transport to states or areas that are in short supply of wheat. These states or areas are said to be in deficit. The wheat marketing system has to perform the function of distributing wheat from the surplus area to the deficit area (from the producer to the consumer). The specific means used to implement this distribution function is the available transportation system.

North Dakota wheat can be marketed only where it is in demand. The demand for North Dakota wheat is primarily influenced by the price at which the buyers will take it off the market. The difference between the price of wheat in a surplus area and a deficit area is theoretically a transportation bill, shipping cost, or freight rate. Therefore, relationships between prices in surplus and deficit areas (defined here as transportation costs) influence the volume of wheat moving within the marketing distribution system.

A reduction in a transportation cost between two areas would tend to increase prices for the producer in the surplus area, decrease prices to the buyers in the deficit area, and increase the volume transported or shipped between the two areas. An additional effect such a decrease

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in transportation cost will have is that this decrease will sometimes also affect the prices and volume transported to other surplus and deficit areas.

A change in supply or demand (price - defined as transportation cost) between surplus and deficit areas will create a new equilibrium distribution pattern and will cause changes in volume of grain moving between particular areas. Changes in supply-demand relationships (price) or transportation costs are basically short-run changes. Long-run changes, such as production and use in each of the areas, also affect movements of wheat distribution.<sup>1</sup>

There are basically three alternatives in the transportation of wheat: rail, truck, or barge. Basically, trucks are used for short transporting distances, whereas railroads and barges are basically used for longer transportation distances. All three modes of transportation are used for intermediate hauls. Each method has inherent advantages that lead to varying transportation costs. Transportation costs appear to be one of the main causes in the changes of the grain marketing structure. Both the size and location of merchandising, processing, and storage facilities are influenced by the transportation costs or freight rates. The number, size, and location of merchandising, processing, and storage facilities that handle the volume of grain and its by-products and perform an efficient marketing process, can do so only when the inherent advantages of the three modes of transportation are realized.

### Objectives

Basically, the three objectives of this study are:

1. To determine the potential West Coast market for hard red spring and durum wheat.
2. To assess the existing and potential capacity for producing spring wheat in North Dakota.
3. To determine the impact on the North Coast and Intermountain flour milling industry of reductions in westbound domestic rail freight rates on hard red spring and durum wheat.

The following procedure and methodology were used in fulfilling these objectives.

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<sup>1</sup>Marketing Grain, Proceedings of NCM-30 Grain Marketing Symposium, North Central Regional Research Publication No. 7, Agricultural Experiment Station, Purdue University, Lafayette, Indiana, January, 1968, pp. 109-110.

RESEARCH PROCEDURE, ASSUMPTIONS,  
AND DATA USED

Major Assumption

The western half of the United States was divided into smaller areas than the eastern half. This was done because Thompson's study<sup>2</sup> showed that about 80 percent of the expected increase in the domestic demand by 1975 for hard red spring wheat will occur in the western area. The export market on the West Coast is also expanding. One hundred percent of the expected increase for the domestic demand for durum by 1975 will occur in this area. This half of the United States also supplies 99 percent of the spring wheat, 100 percent of the durum wheat, and over 70 percent of the winter wheat. Therefore, a more specific analysis of this area was needed. The western portion of the United States was divided into 17 states representing the domestic market and one export area representing the West Coast export market. The remaining portion of the country was divided into nine regions representing the domestic market and three areas representing the Great Lakes export market, the Gulf export market, and the Atlantic export market. This division was made on the basis of production, consumption, population, geographic size, number of flour mills, and the existing markets for wheat and flour (Figure 1).

A particular point was selected within each area to represent an origin or destination of particular shipments for that region or state. These points were selected on the basis of population, existence of markets, and available railroad service (Table 1).

A number of different points were selected according to the distance from the supply area for the export areas considered. For further illustrations, see the export rate appendix tables in the Statistical Report.

Time Periods of Analysis

There were three time periods that were analyzed. The first time period analyzed was the year 1965. This year was chosen because it is the latest year in which actual data was available. The years 1970 and 1975 were chosen to provide a basis for future decisions for those concerned. To predict beyond this point would certainly involve some highly intuitive reasoning.

The calendar year defined the years of 1965, 1970, and 1975 for production data. The calendar year also defined the years 1965, 1970,

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<sup>2</sup>Nelson, David C., and Robert G. Thompson, An Economic Analysis of the Domestic Demand for Wheat by Class in the United States, Agricultural Economics Report No. 64, Department of Agricultural Economics, North Dakota State University, Fargo, North Dakota, March, 1969, pp. 41-42.

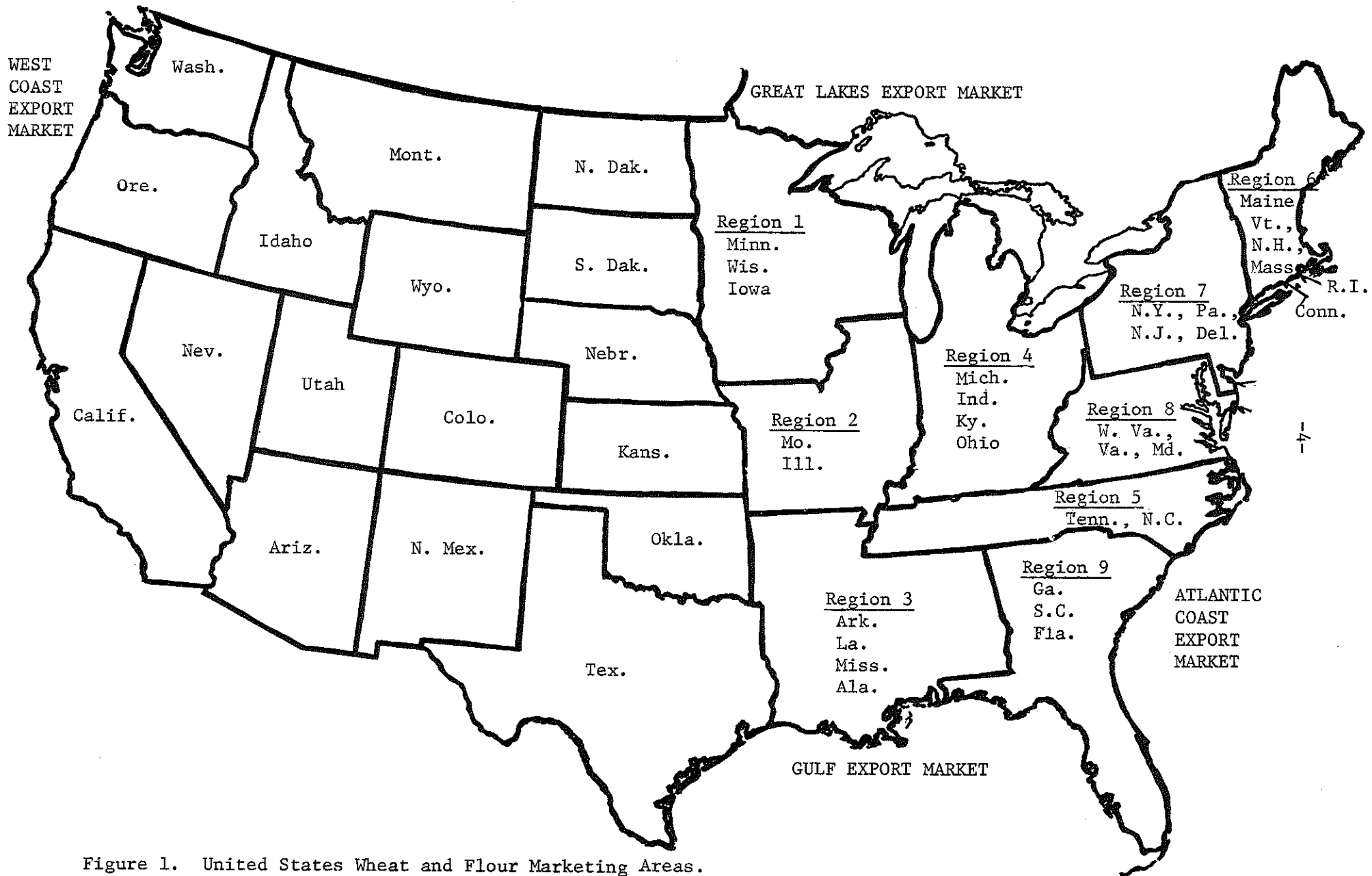


Figure 1. United States Wheat and Flour Marketing Areas.



and 1975 for flour millers' demand for raw wheat. These same years were also defined for total per capita consumption of wheat by the calendar year.

TABLE 1. DOMESTIC SURPLUS AND DEFICIT AREAS WITH THEIR SELECTED POINTS OF ORIGIN AND DESTINATION

State	Origin and Destination
Washington	Spokane
Oregon	Portland
California	Los Angeles
Idaho	Idaho Falls
Nevada	Winnemucca
Utah	Salt Lake City
New Mexico	Albuquerque
Arizona	Phoenix
Montana	Billings
Wyoming	Cheyenne
Colorado	Denver
North Dakota	Minot
South Dakota	Huron
Nebraska	Lincoln
Kansas	Hutchinson
Oklahoma	Oklahoma City
Texas	Houston
Minnesota, Iowa, Wisconsin	Minneapolis
Illinois, Missouri	St. Louis
Arkansas, Louisiana, Mississippi, Alabama	New Orleans
Michigan, Indiana, Ohio, Kentucky	Cincinnati
Tennessee, North Carolina	Knoxville
Maine, Vermont, New Hampshire, Rhode Island, Connecticut, Massachusetts	Boston
New York, Pennsylvania, New Jersey, Delaware	Buffalo
West Virginia, Virginia, Maryland	Baltimore
South Carolina, Georgia, Florida	Savannah

The government fiscal year of June 30 through July 1 was used for export data. The reason for this was that export sales are usually made well in advance (months in advance) of actual exportation. Therefore, in order to match export sales with more immediate sales to flour millers, a "slack" time period for export shipments was used to correspond with the calendar year purchases, production, and consumption data.

Production Data Used

Production data for the 1965 analysis were taken from statistics of the U. S. Department of Agriculture. Production data for the 1970

and 1975 analyses were derived from a supply response study conducted by the departments of agricultural economics at universities in the Great Plains and Pacific Northwest states in cooperation with the U. S. Department of Agriculture.<sup>3</sup> This study was a result of a joint venture of two regional technical committees. The two projects of these committees were GP-5 and W-54. They determined profitable adjustments on typical wheat farms which include individual and aggregate farm supply response for alternative price relationship and levels with emphasis on wheat, feed grains, and livestock. The studies included over 98 percent of the 1964 acreage and production of hard red winter wheat and 90 percent of the acreage and production of hard red spring wheat.

Total production was estimated from the ratio of production by class of each state in the study to the total production by class for the United States in the 1964-1965 crop year. The states that were not included in this study were allocated a portion of the estimated total which was based on the percentage of total production of each state by class in the 1964-1965 crop year.<sup>4</sup>

Durum wheat that was not included in the supply response study was assumed to have production increases by the average percentage increase of the classes included in the study. The estimated total was allocated according to the proportion of production by class and state to the total production by class for the 1964-1965 crop year.

Production data by state and region for the classes of hard red spring, hard winter, and durum wheat appear in the Statistical Report, Appendix Tables 1, 2, and 3.

#### Domestic Consumption Data Used

The consumption data used in this analysis consisted of three types: total flour millers' demand for raw wheat, total per capita demand for raw wheat and flour, and total per capita demand for flour.

#### Flour Millers' Demand for Raw Wheat

Data on domestic wheat purchases by flour millers were based on a mail survey of all wheat processors in the United States.<sup>5</sup> Ratio

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<sup>3</sup>Proceedings of the Meeting of the Great Plains Agricultural Council, Denver, Colorado, August 1-2, 1968, mimeograph paper, p. 151-.

<sup>4</sup>Luessen, Frederick W., Wheat Distribution Patterns by Class, Master of Science Thesis, Department of Agricultural Economics, North Dakota State University, Fargo, North Dakota, September, 1968, pp. 8-9.

<sup>5</sup>Survey made by Robert G. Thompson, former Graduate Assistant, Department of Agricultural Economics, North Dakota State University, Fargo, North Dakota.

estimators or total wheat ground divided by reported wheat ground were used to expand the data received from the millers who did report (Statistical Report, Appendix Table 4). Thus, by multiplying reported wheat purchases (Statistical Report, Appendix Table 5) by class and by state times the ratio estimator for that area would yield the total purchases for that class of wheat for that particular area (Statistical Report, Appendix Table 6). This procedure was used to estimate the 1965 domestic wheat purchases by the millers.

Projected total wheat purchases for 1970 and 1975 (Statistical Report, Appendix Table 7) were estimated by adding the average change in the proportion of the total wheat purchased in that region or state to the proportion of the total wheat purchased in that region for 1965 (Statistical Report, Appendix Table 8). Projected wheat purchases by class for 1970 and 1975 were made by adding the average changes in the proportion of that particular class of wheat purchased in that region or state to the proportion of that class of wheat purchased in that region or state for 1965. The quantity of wheat purchases by region or state and by class was derived by multiplying the proportions by the projected total wheat purchases. Statistical Report, Appendix Table 9 contains the proportions of wheat purchased by class.

Total Per Capita Demand for  
Raw Wheat and Flour

Population estimates that appear in the Statistical Report, Appendix Table 10 are the Series I-B type which is considered to be one of the more liberal projection types. These population figures are multiplied by the actual and projected per capita consumption requirements for the years 1965, 1970, and 1975 (Table 2).

TABLE 2. PER CAPITA CONSUMPTION OF FLOUR FROM HARD WHEATS, UNITED STATES, 1965, 1970, AND 1975<sup>a</sup>

Year	Class of Flour		
	Hard Red Winter	Hard Red Spring	Durum
		pounds	
1965	49.62	24.34	5.63
1970	47.42	23.26	5.38
1975	45.22	22.19	5.13

<sup>a</sup>Estimated from data reported in the Wheat Situation, U. S. Department of Agriculture, Washington, D. C., November, 1967, p. 5.

The per capita consumption figures are based on the assumption of a decrease in the total per capita wheat consumption of one pound per year. It is also assumed that the proportion of each class consumed will remain constant. Combining the data from the Statistical Report, Appendix Table 10 and Table 2 yields the Statistical Report, Appendix Tables 1, 2, and 3 which include the total per capita consumption of wheat and flour by class, region or state, and year. These data were obtained by multiplying population figures times the per capita consumption figures.

#### Total Demand for Flour From Existing Milling System

The third and final set of consumption demand data necessary in this analysis is the demand for the flour that has been milled by the existing milling industry. Bakeries purchase at least three-fourths of all domestic flour produced. After the flour is transformed into bakery products, the market for these products typically consists of a metropolitan area and a rural-urban fringe. Most of the bread is distributed within 50 miles of the bakery.<sup>6</sup> Therefore, bakeries appear to be located according to population density. Since sufficient data representing the actual flour demand by bakeries was not available, a population density method was used to estimate the flour demand of the bakeries. In comparison, the wheat-flour consumed by bakeries and the total per capita demand for flour were very close in magnitude when analyzing the data that was available.

In the population density method that was used, after the amount of flour produced by class and by region or state had been determined, the total per capita demand was subtracted from this. Therefore, it was assumed that the needs of a region will be satisfied first. If this demand cannot be satisfied within the region, it is said to be a deficit region. If a region can oversupply its own flour needs, it is said to be in surplus of flour and will be in a position to distribute to other deficit regions. The surplus and deficit regions and states are listed in the Statistical Report, Appendix Tables 1, 2, and 3.

#### Export Data Used

Since wheat has two alternative markets: the export market and the domestic market, both had to be considered. The four export market areas analyzed were the Great Lakes area, the Gulf area, the West Coast area, and the Atlantic Coast area.

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<sup>6</sup>Organization and Competition in the Milling and Baking Industries, Technical Study No. 5, National Commission on Food Marketing, U. S. Government Printing Office, Washington, D. C., June, 1966, p. 51 (Based on a survey of 78 plants milling hard wheat).

Actual export figures for wheat-grain were used for 1965 (Statistical Report, Appendix Table 11). Flour exports were eliminated from all years, because flour exports are not broken down by class of wheat. Exports of flour do not make up a large portion of the total wheat-flour export market; therefore, no attempt was made to determine the amount of flour exports by class and coastal area. No projections were made for flour exports for 1970 and 1975.

For 1970 and 1975, estimates or projections were made for the amount of wheat-grain that will be exported. The determinants of changes in volume of United States exports are many and very complicated. The 1970 projections were based on a study designed to project exports (Statistical Report, Appendix Table 11).<sup>7</sup> To determine shares of the total market by class of wheat, an average proportional change method was utilized to show the growth and decline in the particular export areas. An allowance was also made for those export areas in which large volume changes have occurred in recent years. The 1975 projections were based on the assumption that India and Pakistan would no longer import United States hard wheats. The assumption in no way asserts a probability but only provides a contrast to the normal "growth in exports" projection year of 1970.

### Transportation Costs

#### Truck Costs

Since there were no available truck rates on hauling the exempt commodity of wheat by either regulated or unregulated truckers, a system of estimating truck rates was employed.

The truck rates used in this study were computed from estimates of the operating costs of trucking firms.<sup>8</sup> Truck rates (Statistical Report, Appendix Tables 14--domestic and 15--export) were computed assuming a 22 cent per mile one-way operating cost and a trailer capacity of 750 bushels of wheat. A one cent per mile one-way charge was added to the 22 cent charge to allow for increases in cost due to inflation. Therefore, to obtain an estimated truck rate, the highway distance (Statistical Report, Appendix Tables 12 and 13) between the origin and destination is multiplied by 46 cents.

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<sup>7</sup> Bratland, Robert P., World Wheat Trade Projections for 1975 and 1985, Master of Science Thesis, Department of Agricultural Economics, North Dakota State University, Fargo, North Dakota, January, 1968, p. 94.

<sup>8</sup> Casavant, Kenneth L., and David C. Nelson, An Economic Analysis of the Costs of Operating Grain Trucking Firms in North Dakota, Agricultural Economics Report No. 54, Department of Agricultural Economics, North Dakota State University, Fargo, North Dakota, July, 1967, p. 41.

### Barge Costs

Barging was the second mode of transportation considered in this study. The obtained barge rates (Statistical Report, Appendix Table 16) apply at ports on the Mississippi, Illinois, Ohio, Cumberland, and Tennessee rivers and the Gulf ports. These are published rates and do not necessarily indicate that they are effective or actual rates (rates may be negotiable on exempt products such as grain). These rates are general indications of what is charged, but the actual charge may be lower or higher.

### Rail Costs

The following two types of rail transportation costs were considered: the costs experienced under the existing railroad rate structure and the costs reported under a railroad rate structure based on fully distributed costs.

#### Existing Rail Rate Structure

The existing rail rate structure was developed by obtaining rates from railroads and government sources. They generally represent the lowest applicable rate between the specific origin and destination.

Rail rates for raw wheat are listed in the Statistical Report, Appendix Tables 17--domestic and 18--export. Rail rates for flour are listed in the Statistical Report, Appendix Table 19. Both types of rail rates are based upon a variety of factors. They may or may not be the same for wheat and flour.

#### Rail Rate Structure Based on Fully Distributed Costs

Fully distributed or fully apportioned costs reflect costs over a long-run period. They include all revenue needs covering 100 percent of the freight operating expenses, rents, taxes (excluding Federal income taxes), the passenger train and less than carload operating deficits, and a return of 4 percent after the Federal income taxes on 100 percent of road property and 100 percent of equipment used in freight service. These revenue needs were given a pro rata ton and ton-mile distribution over all revenue traffic without distinction as to type or class.

Fully distributed carload costs were obtained from Summary I of the rail cost formula, Rail Form A, and based on the 1966 operations. An allowance of 13 percent circuitry is used to adjust short line distances. The short line mileage was increased by 13 percent and the resulting increased mileage used as the actual mileage.

The carload mileage cost scales for the Western, Official, and Southern regions were used in calculating "cost-oriented rates". The

particular cost scale used corresponded to the region in which all or most of the distance occurred. If the distance appeared to be equally distributed between regions, the region with the highest cost scale was used (Statistical Report, Appendix Table 20).

By applying the carload mileage costs to the short line rail distances between various points (Statistical Report, Appendix Tables 21--domestic and 22--export), rail rates were developed that were based on fully distributed costs. Two fully distributed cost rate structures were developed for wheat-grain shipments and one developed for wheat-flour shipments.

The first rate structure assumed that an average load of wheat-grain was 1,300 hundredweight, one transit included (Statistical Report, Appendix Tables 23--domestic and 24--export); and the average load of wheat-flour was 800 hundredweight, one transit included (Statistical Report, Appendix Table 25). The second rate structure assumed that an average load of wheat was 1,800 hundredweight, a covered hopper was utilized, and included one transit (Statistical Report, Appendix Tables 26--domestic and 27--export); and the same average load of flour was used as in the first rate structure.

#### Transportation Costs Used in the Analysis

Five systems of transportation costs were used in the analysis. Each system represented the least-cost combination of the three modes of transportation discussed previously. The best rates to use in this type of analysis would be the true least-cost rates determined by a weighted average method, but these rates are too difficult to obtain.

#### Least-Priced Rate System I

Least-priced Rate System I is a formation of existing least-priced rates from all modes of transportation for the distribution of wheat-grain (Statistical Report, Appendix Table 30).

#### Least-Priced Rate System II

With the exception of railroad rates, the least-priced Rate System II is a formation of existing least-priced rates from all modes of transportation. Rail rates were based on fully distributed costs adjusted to short line mileages for general service boxcars (Statistical Report, Appendix Table 28).

#### Least-Priced Rate System III

With the exception of railroad rates, the least-priced Rate System III is a formation of existing least-priced rates from all modes

of transportation. Rail rates were based on fully distributed costs adjusted to short line mileages for covered hopper cars (Statistical Report, Appendix Table 29).

#### Least-Priced Rate System IV

Least-priced Rate System IV is a formation of existing least-priced rail rates for wheat-flour distribution (Statistical Report, Appendix Table 19). Rate System I rates were used for export shipments.

#### Least-Priced Rate System V

Least-priced Rate System V is a formation of least-priced rail rates for wheat-flour distribution and were based on fully distributed costs adjusted to short line mileages for general service boxcars (Statistical Report, Appendix Table 25). Rate System II rates were used for export shipments.

In all five systems of transportation costs, no rates were obtained or developed for flour shipped by truck or flour shipped in large size rail shipments such as the hopper car. Truck rates for flour were not used, because the trucking of bulk flour has not been particularly adaptive either economically or technologically.<sup>9</sup> The rates for large shipments of flour by rail were not determined on the fully distributed cost basis, because individual flour deliveries historically have only been a fraction of the size of individual wheat shipments.<sup>10</sup> However, the importance of the cost of shipping large flour shipments should not be overlooked. If large shipments become adaptable to the marketing system, then more favorable rates for flour as compared to wheat should be sought.

### THEORETICAL FRAMEWORK OF THE STUDY

#### Discussion of the Models Used

Transportation costs are contracted in three separate distributions of the wheat-flour economy.<sup>11</sup> They are:

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<sup>9</sup>Maillie, Jeff, and Dale Solum, An Analysis and Evaluation of Factors Which are Deleterious to the Competitive Interests of the Mid-America Wheat Flour Milling Industry, Midwest Research Institute, Kansas City, Missouri, July 1, 1968, p. 22

<sup>10</sup>Ibid., p. 16

<sup>11</sup>Wright, Bruce H., Impacts of Alternative Transportation Policies on Industrial Location and Regional Agricultural Development, Doctor's Thesis, Department of Economics, Iowa State University, Ames, Iowa, 1968, p. 66.



Distribution I. Transportation costs incur in effective rates on raw grain from the production area to the location of the flour mill.

Distribution II. Transportation costs incur in effective flour rates from the location of the mill to the consuming location.

Distribution III. Transportation costs incur in effective export rates for wheat from the production area to the point of export.

Assuming that the bulk of transportation costs in the wheat-flour economy remain within these three phases, the analysis will follow this procedure:

Step 1. Transportation costs of all three phases outlined will be determined under least-cost existing rates of any rail-truck-barge combination or individualization. The present location and flour production of existing flour mills will be honored.

Step 2. Transportation costs will again be measured in the same manner as Step 1 with the exception that any rail rate involved will not reflect the effective rate, but the rate will be based on fully distributed costs.

Step 3. Transportation costs will again be measured in the same manner as Step 2 with the exception that the present location and flour production of existing flour mills will be ignored.

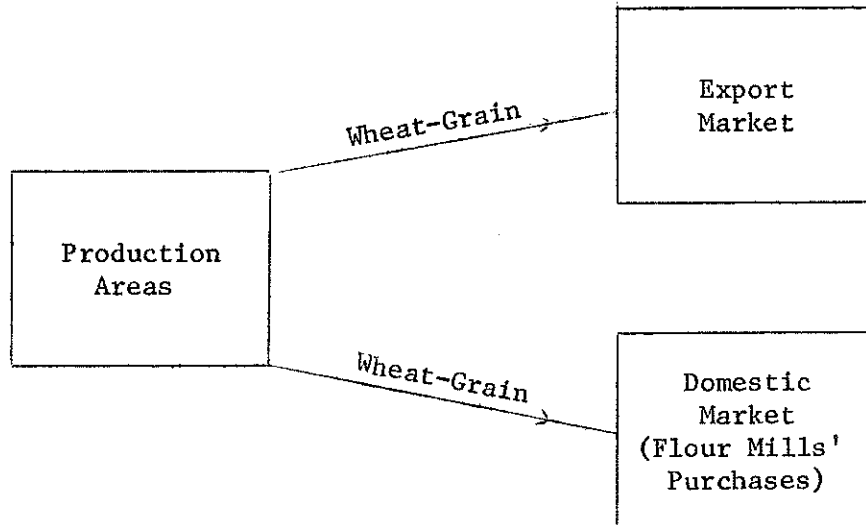
This analysis was performed through the use of three models illustrated as follows:

Model I. In Model I there were two phases of the distribution system: Phase I considered wheat-grain going from production or surplus areas to export markets and flour mills and Phase II considered wheat-flour from flour mills to consumption areas. This model was used to show transportation costs under existing flour milling capacities and locations. Both Phase I and Phase II together make up the total distribution system under these assumptions (Figure 2).

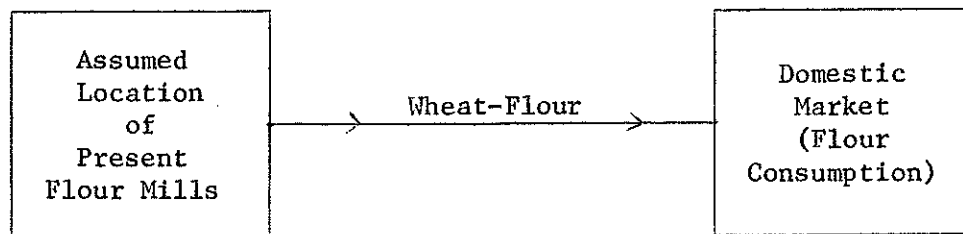
Model II. Model II consisted of only one phase which was wheat-grain going to the export markets and wheat-flour going to the consumption areas. Flour mills were assumed to be located in the production areas (Figure 3).

Model III. Model III also consists of only one phase which was wheat-grain going to the export markets and wheat-grain going to flour mills. The flour mills were assumed to be located in the consumption areas (Figure 4).

Model I, Phase I



Model I, Phase II



1965 Flour Mill Locations Assumed

Figure 2. Wheat-Grain and Wheat-Flour Market Flow Chart for Model I, Phases I and II.

Model II, Phase I

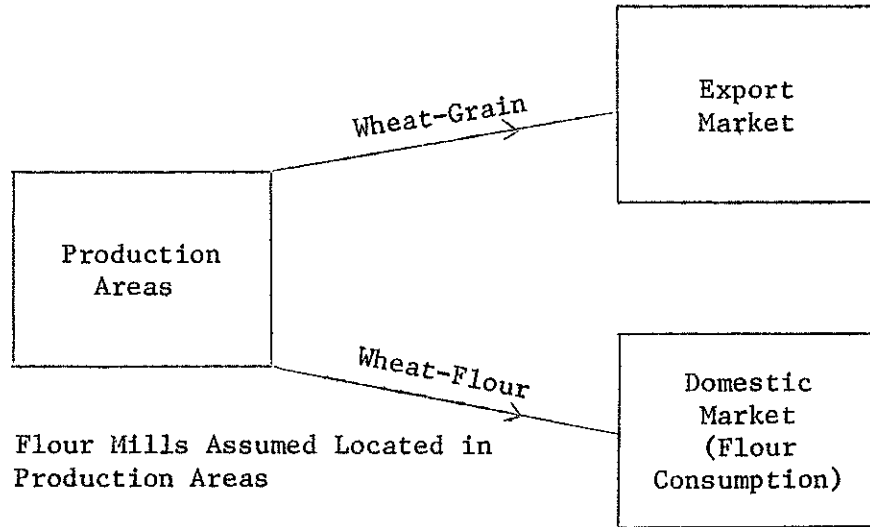


Figure 3. Wheat-Grain and Wheat-Flour Market Flow Chart for Model II, Phase I.

Model III, Phase I

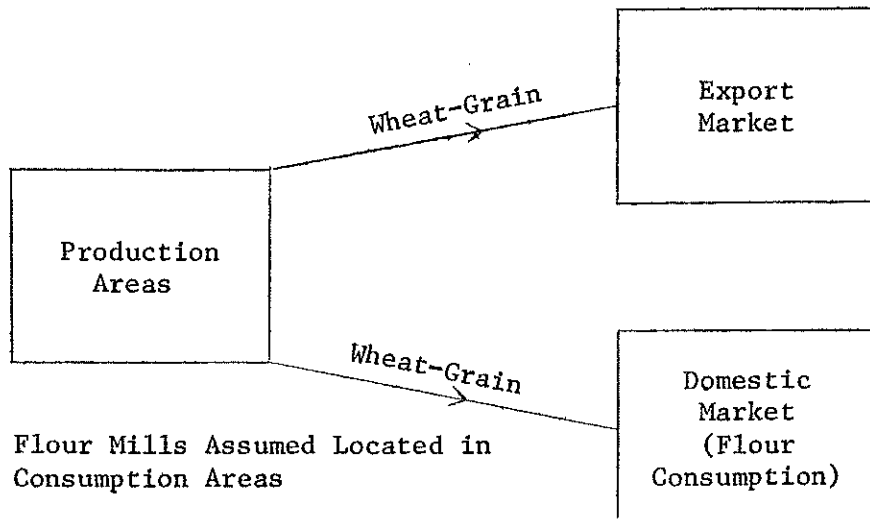


Figure 4. Wheat-Grain Market Flow Chart for Model III, Phase I.

Importance of Mathematical System  
Used in the Analysis

The analysis performed in this study was facilitated through the application of a special class of linear programming.<sup>12</sup> This class of programming is known as a spatial or transportation model. In this model, the objective is to determine the least-cost flow of wheat from surplus areas to deficit areas.

By using the 1965, 1970, and 1975 data, the application of this model will determine the minimum cost distribution pattern for wheat. The minimum cost distribution pattern will be determined under each of the five systems of transportation rates used.

There are many conditional assumptions under which this model functions.<sup>13</sup> They are as follows:

1. The supply of any one region or origin serves equally well to satisfy the demands of any destination or consuming center.
2. Each region meets its demand from its own domestic production; and in this process, intraregional transportation costs are not considered in the analysis.
3. Total demand has to equal total supply. If the supply is greater than the quantity demanded in terms of consumption, then the excess supply moves into storage.
4. The cost (rate) of moving supply from origins to destinations is known and is independent of the number of units moved. Particularly, the total cost of inter-regional transfers must be constant or linear.
5. There is a cost minimizing objective.
6. Movements from origins to destinations can only be carried on at non-negative levels.
7. Each region will be expected to make buying and selling decisions on the basis of perfect knowledge and maximization of profits.
8. There can be no cross hauling of the product, deficit regions cannot ship out, and surplus regions can only ship to deficit regions.

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<sup>12</sup>The data compiled was applied to linear programming through the use of the Mathematical Programming System/360 (360A-CO-14X) Linear and Separable Application Program.

<sup>13</sup>Heady, E. O., and Wilfred Candler, Linear Programming Methods, Iowa State College Press, Ames, Iowa, 1963, p. 332.

9. The buying or selling activities of a surplus or deficit area will have no effect on the buying or selling activities of another area.

10. There is a complete mobility of supply.

#### TRANSPORTATION RATE RANGES

A sensitivity analysis is an investigation to detect the effects of variations in the distribution process. The purpose of the analysis is to determine ranges in which these variations do not affect the optimal solution or distribution pattern. When one coefficient varies, all others are held to their original values. There are three types of coefficient variations that may occur. They are: cost (transportation) variations, surplus quantity variations, and deficit quantity variations.

The only type of variations analyzed here were those changes which might occur in costs or transportation rates. No attempt was made to investigate changes which might occur in surplus or deficit areas. Although an investigation on allowable variations in surplus and deficit quantities may prove worthy, this analysis will assume a more "transportation rate" concentration.

The sensitivity analysis of variations in transportation rates must also be limited because of the number of possible variations. Therefore, only the variations in transportation rates that affect North Dakota have been chosen for this report.

The sensitivity analysis presented here has a number of purposes. The first purpose provides information as to how much the volume shipped will change in response to a downward adjustment in the transportation rate. The general relationship of transportation rates and the amount distributed for a particular shipping point is that as the rate is decreased, the amount shipped will increase. Therefore, a rate increase will also decrease the volume shipped.

The second purpose provides information as to how much a transportation rate can fluctuate before the optimum distribution pattern or shipment changes. Transportation rates may change from those used in the analysis because of rate increases, rate decreases, or incorrect usage of rates in the model. If the variation from the rate used in the analysis is within the determined range, the optimum distribution patterns will not change. However, if the variation from the rate used in the analysis is out of the determined range, there will be some affected distribution patterns.

The third purpose provides information on how total distribution costs may be decreased without affecting optimum distribution patterns. If a transportation rate is reduced on a particular active distribution, the total transportation cost would be reduced. If the reduction in the rate was within the determined range, no distribution patterns would be affected.

In general, transportation rates are mutatis mutandis or subject to change. The transportation rates used in this analysis were always the least-cost intermodal rates. The purpose of the sensitivity analysis was to consider possible changes in these rates.

### Inactive Markets

There are two sections in this analysis. Section A concentrates on inactive markets or distributions. The inactive markets were those which had no activity or shipments from various origins and destinations under the least-cost distribution solution (Tables 3-29). In Table 3 the rate used in the analysis for the Minot-Los Angeles market was 145.5 cents per hundredweight. There were no shipments from this origin and to this destination in 1965. The rate that would be required for this market to be active in an optimum or least-cost distribution would have to be less than 79.5 cents per hundredweight. If a less than 79.5 rate was used instead of the 145.5 rate, a shipment of 1,361,000 hundredweight of wheat-grain would occur since this shipment is under the assumptions of Model I, Phase I.

There is also something else to look at here. If the less than 79.5 rate was used, there would accordingly be another market or distribution pattern affected. In this case, Idaho Falls-Los Angeles would lose the 1,361,000 hundredweight shipment under the optimum distribution solution. A reduction in a rate used may not always affect other distribution areas. For example, in Table 3 if the the Minot-Minneapolis rate was reduced to anything less than 44.5 cents per hundredweight, there would be an increase in the shipment of 6,304,000 hundredweight of wheat-grain. North Dakota would then gain this much for this particular distribution, but it would lose just the same amount in the Minot-Gulf Export distribution.

Another point should be made about Section A of the analysis. In some cases such as the Minot-West Coast Export, if the rate was reduced to anything less than 65.0 cents per hundredweight (Table 3), this distribution would increase to 8,511,000 hundredweight; and the Billings-West Coast Export distribution would lose that much. However, the amount of market gain for the Minot-West Coast Export distribution is limited by the available surplus in North Dakota which was 8,511,000 hundredweight.

A reduction in the transportation rate for one origin to one destination may also affect an entirely different origin and destination. For example, if the Minot-New Orleans rate was reduced from 132.5 cents per hundredweight to anything below 117.0 cents per hundredweight, the Hutchinson-Houston distribution would lose 143,000 hundredweight of wheat-flour shipments (Table 9). Furthermore, the Minneapolis-New Orleans distribution would lose 143,000 hundredweight of shipments.

The effects of rate reductions from origins other than Minot that affected Minot distributions are also included in Section A. For example, if the Idaho Falls-Oklahoma City rate was reduced from 114.5 to anything less than 26.0 cents per hundredweight, there would be an increase in

shipments for the Idaho Falls-Oklahoma City distribution of 109,000 hundredweight of wheat-grain (Table 3); and the Minot-Oklahoma City distribution would lose equally that amount.

#### Active Markets

Section B concentrates on active markets or distributions. The active markets were those which had activity or shipments from various origins and destinations under the least-cost distribution solutions.

Section B has two purposes. The first purpose analyzes how much a transportation rate can be increased before the volume of wheat-grain or wheat-flour will change from the original least-cost solution. When the upper limit of the rate involved is broken, there would be a decrease in the volume of shipments. Another effect that occurs is that another distribution would be affected from the rate increase. For example, in Table 30 if the Minot-Oklahoma City rate was increased to anything above 89.5 cents per hundredweight, there would be a market loss of 79,000 hundredweight of wheat-grain. Also, the market loss attributable to North Dakota would be a market gain of 7,900,000 pounds to Cheyenne, Wyoming.

The second purpose of Section B shows how much of a rate decrease is needed to gain additional marketings or shipments if there is available markets. For example, if the Minot-Buffalo rate is decreased from 69.5 to anything below 66.9 cents per hundredweight, the Huron-Buffalo distribution would be decreased by 10,100,000 pounds of wheat-grain. The Cheyenne-Oklahoma City distribution would be increased by 4,800,000 pounds of wheat-grain; and, of course, the Minot-Buffalo distribution would increase to 10,100,000 pounds (Table 31).

#### Substitution Analysis

Tables 27-29 (inactive markets) and Tables 54-56 (active markets) are rate stability indicators when considering substitution among the classes of hard wheat.

The assumptions used to form a basis for determining substitution were as follows:

1. One bushel of hard red spring wheat will substitute for one bushel of hard red winter wheat and vice versa for making bread products.
2. One bushel of hard red winter wheat will substitute for one bushel of durum wheat for making macaroni products.
3. One bushel of hard red spring wheat will substitute for one bushel of durum wheat for making macaroni products.
4. All substitutes between classes and among classes are on an equal grade basis.

The hard wheats are very substitutable as indicated in a small questionnaire study which was sent to domestic flour millers. The following responses were obtained from the millers assuming average quality crops for the past five-year period and equal acquisitions prices at each mill:

1. One bushel of Pacific Northwest grown hard red spring wheat equals .84 bushel of Plains grown hard red spring wheat.
2. One bushel of Pacific Northwest grown hard red spring wheat equals .92 bushel of Plains grown hard red winter wheat.
3. One bushel of Pacific Northwest grown hard red winter wheat equals .72 bushel of Plains grown hard red spring wheat.
4. One bushel of Pacific Northwest grown hard red winter wheat equals .75 bushel of Plains grown hard red winter wheat.
5. One bushel of Pacific Northwest grown hard red spring wheat equals 1.18 bushels of Pacific Northwest grown hard red winter wheat.
6. One bushel of Plains grown hard red spring wheat equals 1.07 bushels of Plains grown hard red winter wheat.
7. One bushel of Pacific Northwest grown hard red spring wheat equals .70 bushel of Plains grown durum wheat.
8. One bushel of Pacific Northwest grown hard red winter wheat equals .80 bushel of Plains grown durum wheat.
9. One bushel of Plains grown hard red winter wheat equals .93 bushel of Plains grown durum wheat.
10. One bushel of Plains grown hard red spring wheat equals .88 bushel of Plains grown durum wheat.

All figures indicated represent averages. They clearly show intra-class and interclass substitution. Consequently, these figures may represent more accurate substitution ratios than the 1:1 used in this study's substitution analysis. Due to the time limitation, they could not be used.

Responses from the survey of millers may not, however, be representative of any one mill. Each mill has its own mix specifications which vary a great deal from one mill to another. The buying of the right mix of classes of wheat is a complicated process for the miller, and many are using computers to determine their least-cost mix.

No specific ratios could be obtained pertaining to the substitution of classes for exports, but there was indication that there is the same substitution process taking place. The substitution that does occur is with respect to price and quality of the class of wheat.



Some more comparisons should be made between the substitution analysis and the analyses made by class of wheat.

Substitution among classes of wheat may have been sufficiently identified in the analyses by class of wheat, i.e., for hard red spring analyzed alone and durum wheat analyzed alone. The millers and exporters were assumed to have identified their rates of substitution with respect to quality and price when purchasing the ingredients for the final demand or the flour produced from the various classes of wheat.

Therefore, to allow additional substitution of the ingredients as in this study's substitution analysis, allows exaggerated pressures on market outlets. Consequently, this allows distorted distribution patterns and transportation rate ranges. On the other hand, in case of exceptional or irregular crop quality years, such substitution as considered in this study's substitution analysis may be permissible.

For example, if the protein content of hard red winter wheat is equal or greater than that of hard red spring wheat, then the miller or exporter may substitute more hard red winter wheat for hard red spring wheat than normally expected.

The value of this substitution analysis then is to observe the consequences of abnormal conditions. The analyses of wheat by class represent a more natural set of circumstances, whereas the substitution analysis represents a more exceptional set of conditions.

SECTION A

Rate Stability Indicators  
Inactive Markets

Model I, Phase I  
Model I, Phase II  
Model II, Phase I  
Model III, Phase I  
Rate Systems I and IV

TABLE 3. RATE STABILITY INDICATORS OF HARD RED SPRING WHEAT INACTIVE MARKETS, 1965, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current	Required	Market	Distribution Affected
	Rate	Rate (Less Than)	Gain or Loss	
	cents	per cwt.	000 cwt.	
Minot-Los Angeles	145.5	79.5	+1,361	Idaho Falls-Los Angeles
Minot-Hutchinson	80.9	75.6	+1,560	Huron-Hutchinson
Minot-Houston	75.5	74.3	+90	Huron-Houston
Minot-Minneapolis	44.5	44.5	+6,304	Minot-Gulf Export
Minot-St. Louis	85.0	84.9	+1,861	Huron-St. Louis
Minot-West Coast Export	70.0	65.0	+8,511 <sup>a</sup>	Billings-West Coast Export
Minot-Spokane	94.5	51.5	+1,666 <sup>a</sup>	Billings-Spokane
Minot-Portland	129.0	65.0	+1,397	Idaho Falls-Portland
Minot-Denver	70.0	25.5	+79	Cheyenne-Denver
Idaho Falls-Oklahoma City	114.5	26.0	+109	Minot-Oklahoma City
Idaho Falls-Cincinnati	124.0	71.6	+1,361	Minot-Cincinnati
Idaho Falls-Baltimore	170.5	101.6	+76	Minot-Baltimore
Idaho Falls-Savannah	110.0	59.6	+182	Minot-Savannah
Salt Lake City-Oklahoma City	77.0	19.9	+109	Minot-Oklahoma City
Salt Lake City-Baltimore	138.0	95.5	+76	Minot-Baltimore
Salt Lake City-Savannah	100.0	53.5	+182	Minot-Savannah
Billings-Oklahoma City	139.0	46.4	+109	Minot-Oklahoma City
Billings-Minneapolis	87.5	44.5	+6,304	Minot-Gulf Export
Billings-Cincinnati	141.5	92.0	+1,361	Minot-Cincinnati
Billings-Baltimore	188.0	122.0	+76	Minot-Baltimore
Billings-Savannah	123.5	80.0	+182	Minot-Savannah
Billings-Great Lakes Export	80.0	44.5	+7,701	Minot-Great Lakes Export
Billings-Gulf Export	122.0	66.6	+6,304	Minot-Gulf Export
Huron-Oklahoma City	75.4	30.5	+109	Minot-Oklahoma City
Huron-Baltimore	112.0	106.1	+76	Minot-Baltimore
Huron-Savannah	64.6	64.1	+182	Minot-Savannah

<sup>a</sup>Minot is restricted by supply to gain full market potential.

TABLE 4. RATE STABILITY INDICATORS OF HARD RED SPRING WHEAT INACTIVE MARKETS, 1970, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current	Required	Market	Distribution Affected
	Rate	Rate (Less Than)	Gain or Loss	
	cents	per cwt.	000 cwt.	
Minot-Los Angeles	145.5	84.5	+1,409	Idaho Falls-Los Angeles
Minot-Hutchinson	80.9	62.8	+2,504	Huron-Hutchinson
Minot-Houston	75.5	61.5	+113	Huron-Houston
Minot-Minneapolis	44.5	31.7	+6,312	Huron-Minneapolis
Minot-St. Louis	85.0	72.1	+1,188	Huron-St. Louis
Minot-Baltimore	122.0	115.1	+65	Huron-Baltimore
Minot-Savannah	80.0	67.7	+292	Huron-Savannah
Minot-Great Lakes Export	44.5	43.1	+7,354	Huron-Great Lakes Export
Minot-Gulf Export	66.6	53.8	+6,428	Huron-Gulf Export
Idaho Falls-Oklahoma City	114.5	21.0	+149	Minot-Oklahoma City
Billings-Oklahoma City	139.0	41.4	+149	Minot-Oklahoma City
Billings-East Coast Export	188.0	90.5	+12,196	Minot-East Coast Export
Huron-Oklahoma City	75.4	43.3	+149	Minot-Oklahoma City

TABLE 5. RATE STABILITY INDICATORS OF HARD RED SPRING WHEAT INACTIVE MARKETS, 1975, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Los Angeles	145.5	84.5	+1,542	Idaho Falls-Los Angeles
Minot-Hutchinson	80.9	62.8	+2,473	Huron-Hutchinson
Minot-Houston	75.5	61.5	+133	Huron-Houston
Minot-Minneapolis	44.5	31.7	+5,195	Huron-Minneapolis
Minot-St. Louis	85.0	72.1	+516	Huron-St. Louis
Minot-Baltimore	122.0	115.1	+55	Huron-Baltimore
Minot-Savannah	80.0	67.7	+431	Huron-Savannah
Minot-Great Lakes Export	44.5	43.1	+7,354	Huron-Great Lakes Export
Minot-Gulf Export	66.5	53.8	+6,428	Huron-Gulf Export
Minot-Spokane	94.5	56.5	+1,218	Billings-Spokane
Minot-Portland	129.0	70.0	+1,640	Billings-Portland
Minot-Denver	70.0	12.7	+58	Cheyenne-Denver
Idaho Falls-Oklahoma City	114.5	21.0	+175	Minot-Oklahoma City
Salt Lake City-Oklahoma City	77.0	14.9	+175	Minot-Oklahoma City
Billings-Oklahoma City	139.0	41.4	+175	Minot-Oklahoma City
Billings-Buffalo	99.0	64.5	+8,025	Minot-Buffalo
Billings-East Coast Export	188.0	90.5	+12,197	Minot-East Coast Export
Huron-Oklahoma City	75.4	43.3	+175	Minot-Oklahoma City

TABLE 6. RATE STABILITY INDICATORS OF DURUM WHEAT INACTIVE MARKETS, 1965, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Portland	129.0	29.5	+84	Billings-Portland
Minot-Los Angeles	145.5	67.0	+78	Billings-Los Angeles
Minot-Idaho Falls	104.9	15.0	+32	Billings-Idaho Falls
Minot-West Coast Export	134.0	29.5	+105	Billings-West Coast Export

TABLE 7. RATE STABILITY INDICATORS OF DURUM WHEAT INACTIVE MARKETS, 1970, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Spokane	94.5	51.5	+578	Billings-Spokane
Minot-Portland	129.0	65.0	+318	Billings-Portland
Minot-Los Angeles	145.5	102.5	+49	Billings-Los Angeles
Minot-Idaho Falls	104.9	50.5	+9	Billings-Idaho Falls
Minot-West Coast Export	134.0	65.0	+719	Billings-West Coast Export

TABLE 8. RATE STABILITY INDICATORS OF DURUM WHEAT INACTIVE MARKETS, 1975, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Spokane	94.5	51.5	+610	Billings-Spokane
Minot-Portland	129.0	65.0	+258	Billings-Portland
Minot-Los Angeles	145.5	102.5	+128	Billings-Los Angeles
Minot-West Coast Export	134.0	65.0	+119	Billings-West Coast Export

TABLE 9. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR INACTIVE MARKETS, 1965, MODEL I, PHASE II, RATE SYSTEM IV

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Winnemucca	145.5	145.5	+105	Portland-Winnemucca
Minot-Idaho Falls	134.0	93.5	+136	Billings-Idaho Falls
Minot-Salt Lake City	145.5	137.5	+186	Portland-Salt Lake City
Minot-Lincoln	80.5	53.0	+143	Hutchinson-Houston
Minot-Oklahoma	111.0	95.5	+211	Minot-Albuquerque
Minot-Houston	113.0	109.0	+143	Hutchinson-Houston
Minot-St. Louis	81.5	67.0	+143	Hutchinson-Houston
Minot-New Orleans	132.5	117.0	+143	Hutchinson-Houston
Minot-Cincinnati	103.0	87.5	+143	Hutchinson-Houston
Minot-Knoxville	134.5	129.0	+143	Hutchinson-Houston
Minot-Boston	127.5	80.0	+143	Hutchinson-Houston
Minot-Baltimore	115.5	74.5	+143	Hutchinson-Houston
Minot-Savannah	158.5	142.5	+143	Hutchinson-Houston
Spokane-Phoenix	156.0	90.0	+383	Minot-Phoenix
Spokane-Cheyenne	115.0	13.0	+62	Minot-Cheyenne
Spokane-Denver	115.5	13.0	+358	Minot-Denver
Spokane-Albuquerque	156.0	57.0	+211	Minot-Albuquerque
Spokane-Oklahoma City	156.0	40.0	+211	Minot-Albuquerque
Portland-Phoenix	139.6	90.0	+383	Minot-Phoenix
Portland-Cheyenne	115.5	13.0	+62	Minot-Cheyenne
Portland-Denver	115.5	13.0	+358	Minot-Denver
Portland-Albuquerque	156.0	57.0	+211	Minot-Albuquerque
Billings-Phoenix	131.0	102.5	+383	Minot-Phoenix
Billings-Cheyenne	78.5	25.5	+62	Minot-Cheyenne
Billings-Denver	86.5	25.5	+358	Minot-Denver
Billings-Albuquerque	145.5	69.5	+211	Minot-Albuquerque
Billings-Oklahoma City	139.0	52.5	+211	Minot-Albuquerque

TABLE 10. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR INACTIVE MARKETS, 1970, MODEL I, PHASE II, RATE SYSTEM IV

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Winnemucca	145.5	145.5	+127	Portland-Winnemucca
Minot-Idaho Falls	134.0	93.5	+115	Billings-Idaho Falls
Minot-Salt Lake City	145.5	137.5	+196	Minot-Los Angeles

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TABLE 10. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR INACTIVE MARKETS, 1970, MODEL I, PHASE II, RATE SYSTEM IV - continued

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Phoenix	145.5	135.3	+196	Minot-Los Angeles
Minot-Albuquerque	112.5	86.3	+196	Minot-Los Angeles
Minot-Lincoln	80.5	26.8	+196	Minot-Los Angeles
Minot-Oklahoma City	111.0	69.3	+196	Minot-Los Angeles
Minot-Houston	113.0	82.8	+196	Minot-Los Angeles
Minot-St. Louis	81.5	40.8	+196	Minot-Los Angeles
Minot-New Orleans	132.5	90.8	+196	Minot-Los Angeles
Minot-Cincinnati	103.0	61.3	+196	Minot-Los Angeles
Minot-Knoxville	134.5	102.8	+196	Minot-Los Angeles
Minot-Boston	127.5	53.8	+196	Minot-Los Angeles
Minot-Baltimore	115.5	48.3	+196	Minot-Los Angeles
Minot-Savannah	158.5	116.3	+196	Minot-Los Angeles
Spokane-Cheyenne	115.5	13.0	+78	Minot-Cheyenne
Spokane-Denver	115.5	13.0	+335	Minot-Denver
Portland-Cheyenne	115.5	13.0	+78	Minot-Cheyenne
Portland-Denver	115.5	13.0	+335	Minot-Denver
Billings-Cheyenne	78.5	25.5	+78	Minot-Cheyenne
Billings-Denver	86.5	25.5	+335	Minot-Denver
Hutchinson-Cheyenne	51.5	37.2	+78	Minot-Cheyenne
Minneapolis-Cheyenne	77.0	68.2	+78	Minot-Cheyenne
Buffalo-Cheyenne	146.5	57.7	+78	Minot-Cheyenne

TABLE 11. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR INACTIVE MARKETS, 1975, MODEL I, PHASE II, RATE SYSTEM IV

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Winnemucca	145.5	145.5	+140	Spokane-Winnemucca
Minot-Idaho Falls	134.0	93.5	+169	Billings-Idaho Falls
Minot-Salt Lake City	145.5	137.5	+268	Portland-Salt Lake City
Minot-Albuquerque	112.5	96.5	+228	Minot-Phoenix
Minot-Lincoln	80.5	37.0	+228	Minot-Phoenix
Minot-Oklahoma City	111.0	79.5	+228	Minot-Phoenix
Minot-Houston	113.0	93.0	+228	Minot-Phoenix
Minot-St. Louis	81.5	51.0	+228	Minot-Phoenix
Minot-New Orleans	132.5	101.0	+228	Minot-Phoenix
Minot-Cincinnati	103.0	71.5	+228	Minot-Phoenix
Minot-Knoxville	134.5	113.0	+228	Minot-Phoenix
Minot-Boston	127.5	64.0	+228	Minot-Phoenix
Minot-Baltimore	115.5	58.5	+228	Minot-Phoenix
Minot-Savannah	158.5	126.5	+228	Minot-Phoenix
Spokane-Cheyenne	115.5	13.0	+79	Minot-Cheyenne
Portland-Phoenix	139.6	90.0	+228	Minot-Phoenix
Portland-Cheyenne	115.5	13.0	+79	Minot-Cheyenne
Portland-Denver	115.5	13.0	+354	Minot-Denver
Portland-Albuquerque	156.0	41.0	+228	Minot-Denver
Portland-Lincoln	115.5	18.5	+228	Minot-Phoenix
Portland-Oklahoma City	156.0	24.0	+228	Minot-Phoenix
Portland-Houston	115.5	37.5	+228	Minot-Phoenix
Portland-New Orleans	180.5	45.5	+228	Minot-Phoenix
Portland-Cincinnati	163.0	16.0	+228	Minot-Phoenix
Portland-Knoxville	192.0	57.5	+228	Minot-Phoenix
Portland-Boston	190.5	8.5	+228	Minot-Phoenix

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TABLE 11. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR INACTIVE MARKETS, 1975, MODEL I, PHASE II, RATE SYSTEM IV - continued

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Portland-Baltimore	185.5	3.0	+228	Minot-Phoenix
Portland-Savannah	169.7	71.0	+228	Minot-Phoenix
Billings-Phoenix	131.0	102.5	+228	Minot-Phoenix
Billings-Cheyenne	78.5	25.5	+79	Minot-Cheyenne
Billings-Denver	86.5	25.5	+354	Minot-Denver
Billings-Albuquerque	145.5	53.5	+228	Minot-Phoenix
Billings-Lincoln	106.5	6.0	+228	Minot-Cheyenne
Billings-Oklahoma City	139.0	36.5	+228	Minot-Cheyenne
Billings-Houston	115.5	50.0	+228	Minot-Cheyenne
Billings-St. Louis	122.5	8.0	+228	Minot-Cheyenne
Billings-New Orleans	177.5	58.0	+228	Minot-Cheyenne
Billings-Cincinnati	144.0	28.5	+228	Minot-Cheyenne
Billings-Knoxville	185.5	70.0	+228	Minot-Cheyenne
Billings-Boston	168.5	21.0	+228	Minot-Cheyenne
Billings-Baltimore	163.0	15.5	+228	Minot-Cheyenne
Billings-Savannah	199.0	83.5	+228	Minot-Phoenix
Hutchinson-Cheyenne	51.5	27.0	+79	Minot-Cheyenne
Buffalo-Cheyenne	146.5	47.5	+79	Minot-Cheyenne

TABLE 12. RATE STABILITY INDICATORS OF DURUM FLOUR INACTIVE MARKETS, 1965, MODEL I, PHASE II, RATE SYSTEM IV

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Los Angeles	145.5	134.0	+430	Lincoln-Los Angeles
Minot-Winnemucca	145.5	134.0	+53	Spokane-Winnemucca
Minot-Idaho Falls	134.0	82.0	+16	Billings-Idaho Falls
Minot-Phoenix	145.5	134.0	+90	Lincoln-Phoenix
Minot-Cheyenne	68.5	51.5	+19	Lincoln-Cheyenne
Minot-Denver	68.5	51.5	+110	Lincoln-Denver
Minot-Albuquerque	112.5	55.0	+57	Lincoln-Albuquerque
Minot-Huron	68.5	25.5	+39	Minneapolis-Huron
Minot-Hutchinson	112.5	38.0	+127	Lincoln-Hutchinson
Minot-Oklahoma City	111.0	54.0	+138	Lincoln-Oklahoma City
Minot-Houston	113.0	65.0	+596	Lincoln-Houston
Minot-St. Louis	81.5	40.5	+852	Minneapolis-St. Louis
Minot-New Orleans	132.5	73.2	+636	Lincoln-New Orleans
Minot-Cincinnati	103.0	61.0	+974 <sup>a</sup>	Minneapolis-Cincinnati
Minot-Knoxville	134.5	102.5	+495	Minneapolis-Knoxville
Minot-Boston	127.5	85.0	+627	Minneapolis-Boston
Minot-Buffalo	144.5	71.0	+974 <sup>a</sup>	Minneapolis-Buffalo
Minot-Baltimore	115.5	80.5	+578	Minneapolis-Baltimore
Minot-Savannah	158.5	41.5	+717	Lincoln-Savannah
Spokane-Salt Lake City	89.5	23.1	+56	Minot-Salt Lake City
Portland-Salt Lake City	82.0	23.1	+56	Minot-Salt Lake City
Billings-Salt Lake City	125.5	35.6	+56	Minot-Salt Lake City
Lincoln-Salt Lake City	121.0	67.1	+56	Minot-Salt Lake City
Minneapolis-Salt Lake City	134.0	67.1	+56	Minot-Salt Lake City

<sup>a</sup>Minot is restricted by supply to gain full market potential.

TABLE 13. RATE STABILITY INDICATORS OF DURUM FLOUR INACTIVE MARKETS, 1970, MODEL I, PHASE II, RATE SYSTEM IV

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents per cwt.		000 cwt.	
Minot-Los Angeles	145.5	134.0	+388	Lincoln-Los Angeles
Minot-Winnemucca	145.5	134.0	+30	Lincoln-Winnemucca
Minot-Idaho Falls	134.0	82.0	+37	Billings-Idaho Falls
Minot-Phoenix	145.5	134.0	+98	Lincoln-Phoenix
Minot-Cheyenne	68.5	51.5	+18	Lincoln-Cheyenne
Minot-Denver	68.5	51.5	+114	Lincoln-Denver
Minot-Albuquerque	112.5	55.0	+59	Lincoln-Albuquerque
Minot-Huron	68.5	25.5	+37	Minneapolis-Huron
Minot-Hutchinson	112.5	38.0	+124	Lincoln-Hutchinson
Minot-Oklahoma City	111.0	54.0	+136	Lincoln-Oklahoma City
Minot-Houston	113.0	65.0	+616	Lincoln-Houston
Minot-St. Louis	81.5	40.5	+847	Minneapolis-St. Louis
Minot-New Orleans	132.5	73.2	+643	Lincoln-New Orleans
Minot-Cincinnati	103.0	61.0	+1,025 <sup>a</sup>	Minneapolis-Cincinnati
Minot-Knoxville	134.5	102.5	+501	Minneapolis-Knoxville
Minot-Boston	127.5	85.0	+613	Minneapolis-Boston
Minot-Buffalo	144.5	71.0	+1,025 <sup>a</sup>	Minneapolis-Buffalo
Minot-Baltimore	115.5	80.5	+594	Minneapolis-Baltimore
Minot-Savannah	158.5	41.5	+758	Lincoln-Savannah
Spokane-Salt Lake City	89.5	23.1	+58	Minot-Salt Lake City
Portland-Salt Lake City	82.0	23.1	+58	Minot-Salt Lake City
Billings-Salt Lake City	125.5	35.6	+58	Minot-Salt Lake City
Lincoln-Salt Lake City	121.0	67.1	+58	Minot-Salt Lake City
Minneapolis-Salt Lake City	134.0	67.1	+58	Minot-Salt Lake City

<sup>a</sup>Minot is restricted by supply to gain full market potential.

TABLE 14. RATE STABILITY INDICATORS OF DURUM FLOUR INACTIVE MARKETS, 1975, MODEL I, PHASE II, RATE SYSTEM IV

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents per cwt.		000 cwt.	
Minot-Los Angeles	145.5	134.0	+226	Lincoln-Los Angeles
Minot-Winnemucca	145.5	134.0	+32	Spokane-Winnemucca
Minot-Idaho Falls	134.0	82.0	+39	Billings-Idaho Falls
Minot-Phoenix	145.5	134.0	+109	Lincoln-Phoenix
Minot-Cheyenne	68.5	51.5	+18	Lincoln-Cheyenne
Minot-Denver	68.5	51.5	+18	Lincoln-Cheyenne
Minot-Albuquerque	112.5	55.0	+52	Lincoln-Albuquerque
Minot-Huron	68.5	25.5	+36	Minneapolis-Huron
Minot-Hutchinson	112.5	38.0	+123	Lincoln-Hutchinson
Minot-Oklahoma City	111.0	54.0	+136	Lincoln-Oklahoma City
Minot-St. Louis	81.5	40.5	+857	Minneapolis-St. Louis
Minot-New Orleans	132.5	73.2	+658	Lincoln-New Orleans
Minot-Cincinnati	103.0	61.0	+1,071 <sup>a</sup>	Minneapolis-Cincinnati
Minot-Knoxville	134.5	102.5	+510	Minneapolis-Knoxville
Minot-Boston	127.5	85.0	+640	Minneapolis-Boston
Minot-Buffalo	144.5	71.0	+1,071 <sup>a</sup>	Minneapolis-Buffalo
Minot-Baltimore	115.5	80.5	+614	Minneapolis-Baltimore
Minot-Savannah	158.5	41.5	+807	Lincoln-Savannah
Spokane-Salt Lake City	89.5	23.1	+62	Minot-Salt Lake City
Portland-Salt Lake City	82.0	23.1	+62	Minot-Salt Lake City
Billings-Salt Lake City	125.5	35.6	+62	Minot-Salt Lake City
Lincoln-Salt Lake City	121.0	67.1	+62	Minot-Salt Lake City
Minneapolis-Salt Lake City	134.0	67.1	+62	Minot-Salt Lake City

<sup>a</sup>Minot is restricted by supply to gain full market potential.



TABLE 15. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR INACTIVE MARKETS, 1965, MODEL II, PHASE I, RATE SYSTEM IV

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Los Angeles	145.5	102.5	+146	Billings-Los Angeles
Minot-Phoenix	145.5	131.0	+383	Billings-Phoenix
Minot-Lincoln	80.5	58.2	+355	Huron-Lincoln
Minot-Hutchinson	112.5	90.2	+547	Huron-Hutchinson
Minot-Oklahoma City	111.0	107.7	+596	Huron-Oklahoma City
Minot-Buffalo	144.5	120.7	+3,661	Minneapolis-Gulf Export
Minot-West Coast Export	60.4	56.1	+2,725 <sup>a</sup>	Billings-West Coast Export
			(W-G)	
Minot-Gulf Export	57.5	53.9	+2,673	Minneapolis-Gulf Export
			(W-G)	
Idaho Falls-Denver	86.1	31.0	+459	Minot-Denver
Idaho Falls-Albuquerque	83.3	75.0	+212	Minot-Albuquerque
Idaho Falls-Houston	131.0	75.5	+2,578	Minot-Houston
Idaho Falls-St. Louis	110.5	44.0	+3,682	Minot-St. Louis
Idaho Falls-New Orleans	130.8	95.0	+2,658	Minot-New Orleans
Idaho Falls-Knoxville	127.5	97.0	+2,138	Minot-Knoxville
Idaho Falls-Boston	175.5	90.0	+2,714	Minot-Boston
Idaho Falls-Baltimore	170.5	78.0	+2,500	Minot-Baltimore
Idaho Falls-Savannah	142.5	121.0	+3,100	Minot-Savannah
Billings-Denver	86.5	68.5	+459	Minot-Denver
Billings-Albuquerque	145.5	112.5	+212	Minot-Albuquerque
Billings-Houston	115.5	113.0	+2,578	Minot-Houston
Billings-St. Louis	122.5	81.5	+3,683	Minot-St. Louis
Billings-New Orleans	177.5	132.5	+2,659	Minot-New Orleans
Billings-Knoxville	185.5	134.5	+2,138	Minot-Knoxville
Billings-Boston	168.5	127.5	+2,715	Minot-Boston
Billings-Baltimore	163.0	115.5	+2,500	Minot-Baltimore
Billings-Savannah	199.0	158.5	+3,100	Minot-Savannah
Huron-Denver	106.5	52.3	+459	Minot-Denver
Huron-Albuquerque	118.5	96.3	+212	Minot-Albuquerque
Minneapolis-Denver	77.0	13.0	+459	Minot-Denver
Minneapolis-Albuquerque	128.5	57.0	+212	Minot-Albuquerque
Minneapolis-Houston	82.5	57.5	+2,578	Minot-Houston
Minneapolis-Baltimore	80.5	60.0	+2,500	Minot-Baltimore

W-G - wheat-grain

<sup>a</sup>Minot is restricted by supply to gain full market potential.

TABLE 16. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR INACTIVE MARKETS, 1970, MODEL II, PHASE I, RATE SYSTEM IV

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Los Angeles	145.5	99.9	+4,886	Idaho Falls-Los Angeles
Minot-Phoenix	145.5	136.9	+425	Idaho Falls-Phoenix
Minot-Lincoln	80.5	57.0	+346	Huron-Lincoln
Minot-Oklahoma City	111.0	106.5	+590	Huron-Oklahoma City
Minot-St. Louis	81.5	81.0	+1,031	Minot-New Orleans
Minot-Buffalo	144.5	119.5	+1,031	Minot-New Orleans
Minot-Gulf Export	57.5	53.2	+753	Minot-New Orleans
			(W-G)	
Idaho Falls-Denver	86.1	33.6	+476	Minot-Denver
Idaho Falls-Albuquerque	83.3	77.6	+205	Minot-Albuquerque

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TABLE 16. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR INACTIVE MARKETS, 1970, MODEL II, PHASE I, RATE SYSTEM IV - continued

Origin-Destination	Current Rate	Required Rate (less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Billings-Denver	86.5	61.6	+476	Minot-Denver
Billings-Albuquerque	145.5	105.6	+205	Minot-Albuquerque
Billings-Houston	115.5	106.1	+2,664	Minot-Houston
Billings-St. Louis	122.5	74.1	+1,031	Minot-New Orleans
Billings-New Orleans	177.5	125.6	+1,031	Minot-New Orleans
Billings-Cincinnati	144.0	96.1	+6,431	Minot-Cincinnati
Billings-Knoxville	185.5	127.6	+2,164	Minot-Knoxville
Billings-Boston	168.5	120.6	+2,721	Minot-Boston
Billings-Buffalo	155.5	112.6	+1,031	Minot-New Orleans
Billings-Baltimore	163.0	108.6	+2,568	Minot-Baltimore
Billings-Savannah	199.0	151.6	+3,273	Minot-Savannah
Billings-Great Lakes Export	109.6	54.1	+5,368	Minot-Great Lakes Export
Billings-East Coast Export	118.5	76.9	+753	Minot-New Orleans
			(W-G)	
Billings-Gulf Export	105.3	48.8	+753	Minot-New Orleans
			(W-G)	
Huron-Denver	106.5	53.5	+476	Minot-Denver
Huron-Albuquerque	118.5	97.5	+205	Minot-Albuquerque
Minneapolis-Denver	77.0	14.2	+476	Minot-Denver
Minneapolis-Albuquerque	128.5	58.2	+205	Minot-Albuquerque

W-G - wheat-grain

TABLE 17. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR INACTIVE MARKETS, 1975, MODEL II, PHASE I, RATE SYSTEM IV

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Los Angeles	145.5	99.5	+5,354	Idaho Falls-Los Angeles
Minot-Phoenix	145.5	136.9	+472	Idaho Falls-Phoenix
Minot-Lincoln	80.5	57.0	+341	Huron-Lincoln
Minot-Hutchinson	112.5	89.0	+532	Huron-Hutchinson
Minot-Oklahoma City	111.0	106.5	+589	Huron-Oklahoma City
Minot-St. Louis	81.5	81.0	+1,335	Minot-New Orleans
Minot-Buffalo	144.5	119.5	+1,335	Minot-New Orleans
Minot-East Coast Export	82.4	81.7	+975	Minot-New Orleans
			(W-G)	
Minot-Gulf Export	82.4	57.5	+61	Minot-New Orleans
			(W-G)	
Minot-Spokane	134.0	51.5	+663	Billings-Spokane
Minot-Portland	134.0	71.9	+288	Billings-Portland
Minot-Winnemucca	134.0	17.6	+288	Billings-Portland
Billings-Denver	86.5	61.6	+501	Minot-Denver
Billings-Albuquerque	145.5	105.6	+221	Minot-Albuquerque
Billings-Houston	115.5	106.1	+2,770	Minot-Houston
Billings-St. Louis	122.5	74.1	+1,335	Minot-New Orleans
Billings-New Orleans	177.5	125.6	+1,335	Minot-New Orleans
Billings-Cincinnati	144.0	96.1	+6,554	Minot-Cincinnati
Billings-Knoxville	185.5	127.6	+2,206	Minot-Knoxville
Billings-Boston	168.5	120.6	+2,767	Minot-Boston
Billings-Buffalo	155.5	112.6	+1,335	Minot-New Orleans
Billings-Baltimore	163.0	108.6	+2,657	Minot-Baltimore
Billings-Savannah	199.0	151.6	+3,479	Minot-Savannah

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TABLE 17. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR INACTIVE MARKETS, 1975, MODEL II, PHASE I, RATE SYSTEM IV - continued

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Billings-Great Lakes Export	105.3	48.8	+3,919 (W-G)	Minot-Great Lakes Export
Billings-East Coast Export	118.5	77.3	+974 (W-G)	Minot-New Orleans
Huron-Denver	106.5	53.5	+501	Minot-Denver
Huron-Albuquerque	118.5	97.5	+221	Minot-Albuquerque
Minneapolis-Denver	77.0	14.2	+501	Minot-Denver
Minneapolis-Albuquerque	128.5	58.2	+221	Minot-Albuquerque

W-G - wheat-grain

TABLE 18. RATE STABILITY INDICATORS OF DURUM FLOUR INACTIVE MARKETS, 1965, MODEL II, PHASE I, RATE SYSTEM IV

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Spokane	134.0	51.5	+167	Billings-Spokane
Minot-Portland	134.0	65.0	+108	Billings-Spokane
Minot-Los Angeles	145.5	102.5	+911	Billings-Los Angeles
Minot-Winnemucca	145.5	105.5	+24	Billings-Winnemucca
Minot-Idaho Falls	134.0	50.5	+39	Billings-Idaho Falls
Minot-Salt Lake City	145.5	120.4	+56	Huron-Salt Lake City
Minot-Phoenix	145.5	131.0	+90	Billings-Phoenix
Minot-West Coast Export	60.4	56.1	+50 (W-G)	Billings-West Coast Export
Billings-Cheyenne	78.5	68.5	+19	Minot-Cheyenne
Billings-Denver	86.5	68.5	+110	Minot-Denver
Billings-Albuquerque	145.5	112.5	+57	Minot-Albuquerque
Billings-Lincoln	106.5	80.5	+82	Minot-Lincoln
Billings-Hutchinson	134.0	112.5	+127	Minot-Hutchinson
Billings-Oklahoma City	139.0	111.0	+138	Minot-Oklahoma City
Huron-Cheyenne	106.5	28.5	+19	Minot-Cheyenne
Huron-Denver	106.5	28.5	+110	Minot-Denver
Huron-Albuquerque	118.5	72.5	+57	Minot-Albuquerque
Huron-Lincoln	42.0	40.5	+82	Minot-Lincoln
Huron-Hutchinson	74.0	72.5	+127	Minot-Hutchinson
Huron-Oklahoma City	91.5	71.0	+138	Minot-Oklahoma City
Huron-Houston	99.0	73.0	+596	Minot-Houston
Huron-St. Louis	66.0	41.5	+852	Minot-St. Louis
Huron-New Orleans	117.5	92.5	+636	Minot-New Orleans
Huron-Knoxville	130.0	94.5	+495	Minot-Knoxville
Huron-Boston	117.5	87.5	+627	Minot-Boston
Huron-Baltimore	112.5	75.5	+578	Minot-Baltimore
Huron-Savannah	144.5	118.5	+717	Minot-Savannah
Minneapolis-Albuquerque	128.5	39.0	+57	Minot-Albuquerque
Minneapolis-Hutchinson	65.0	39.0	+127	Minot-Hutchinson
Minneapolis-Oklahoma City	77.5	37.5	+138	Minot-Oklahoma City
Minneapolis-Houston	82.5	39.5	+596	Minot-Houston
Minneapolis-New Orleans	90.5	59.0	+636	Minot-New Orleans
Minneapolis-Knoxville	102.5	61.0	+495	Minot-Knoxville
Minneapolis-Boston	85.0	54.0	+626	Minot-Boston
Minneapolis-Baltimore	80.5	42.0	+578	Minot-Baltimore

W-G - wheat-grain

TABLE 19. RATE STABILITY INDICATORS OF DURUM FLOUR INACTIVE MARKETS, 1970,  
MODEL II, PHASE I, RATE SYSTEM IV

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Spokane	134.0	58.4	+167	Billings-Spokane
Minot-Portland	134.0	71.9	+112	Billings-Portland
Minot-Los Angeles	145.5	109.4	+404	Minot-West Coast Export
Minot-Winnemucca	145.5	112.4	+29	Billings-Winnemucca
Minot-Idaho Falls	134.0	57.4	+39	Billings-Idaho Falls
Minot-Phoenix	145.5	137.9	+98	Billings-Phoenix
Minot-Buffalo	144.5	143.0	+106	Minot-Hutchinson
Billings-Cheyenne	78.5	61.6	+18	Minot-Cheyenne
Billings-Denver	86.5	24.9	+114	Minot-Denver
Billings-Albuquerque	145.5	105.6	+59	Minot-Albuquerque
Billings-Lincoln	106.5	73.6	+80	Minot-Lincoln
Billings-Hutchinson	134.0	105.6	+106	Minot-Hutchinson
Huron-Cheyenne	106.5	30.0	+18	Minot-Cheyenne

TABLE 20. RATE STABILITY INDICATORS OF DURUM FLOUR INACTIVE MARKETS, 1975,  
MODEL II, PHASE I, RATE SYSTEM IV

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Spokane	134.0	66.0	+6	Minot-Phoenix
Minot-Portland	134.0	79.5	+6	Minot-Phoenix
Minot-Los Angeles	145.5	117.0	+6	Minot-Phoenix
Minot-Winnemucca	145.5	120.0	+6	Minot-Phoenix
Minot-Idaho Falls	134.0	65.0	+6	Minot-Phoenix
Billings-Cheyenne	78.5	54.0	+18	Minot-Cheyenne
Billings-Albuquerque	145.5	98.0	+62	Minot-Albuquerque
Billings-Lincoln	106.5	66.0	+79	Minot-Lincoln
Billings-Buffalo	155.5	130.0	+10	Minot-Buffalo
Huron-Spokane	134.0	26.0	+6	Minot-Phoenix
Huron-Portland	134.0	39.5	+6	Minot-Phoenix
Huron-Los Angeles	145.5	77.0	+6	Minot-Phoenix
Huron-Winnemucca	145.5	80.0	+6	Minot-Phoenix
Huron-Idaho Falls	134.0	25.0	+6	Minot-Phoenix
Huron-Phoenix	135.0	105.5	+6	Minot-Phoenix
Huron-Cheyenne	106.5	28.5	+18	Minot-Cheyenne
Huron-Denver	106.5	28.5	+120	Minot-Denver
Huron-Albuquerque	118.5	72.5	+62	Minot-Albuquerque
Huron-Lincoln	42.0	40.5	+79	Minot-Lincoln
Huron-Hutchinson	74.0	72.5	+123	Minot-Hutchinson
Huron-Oklahoma City	91.5	71.0	+136	Minot-Oklahoma City
Huron-Houston	99.0	73.0	+640	Minot-Houston
Huron-St. Louis	66.0	41.5	+857	Minot-St. Louis
Huron-New Orleans	117.5	92.5	+658	Minot-New Orleans
Huron-Knoxville	130.0	94.5	+510	Minot-Knoxville
Huron-Boston	117.5	87.5	+640	Minot-Boston
Huron-Baltimore	112.5	75.5	+614	Minot-Baltimore
Huron-Savannah	144.5	118.5	+807	Minot-Savannah
Huron-West Coast Export	95.9	55.9	+525	Minot-West Coast Export
Minneapolis-Los Angeles	145.2	43.5	+6	Minot-Phoenix
Minneapolis-Winnemucca	145.2	46.5	+6	Minot-Phoenix
Minneapolis-Phoenix	135.0	72.0	+6	Minot-Phoenix
Minneapolis-Albuquerque	128.5	39.0	+62	Minot-Albuquerque
Minneapolis-Hutchinson	65.0	39.0	+123	Minot-Hutchinson

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TABLE 20. RATE STABILITY INDICATORS OF DURUM FLOUR INACTIVE MARKETS, 1975, MODEL II, PHASE I, RATE SYSTEM IV - continued

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minneapolis-Oklahoma City	77.5	37.5	+136	Minot-Oklahoma City
Minneapolis-Houston	82.5	39.5	+640	Minot-Houston
Minneapolis-New Orleans	90.5	59.0	+656	Minot-New Orleans
Minneapolis-Knoxville	102.5	61.0	+510	Minot-Knoxville
Minneapolis-Boston	85.0	54.0	+640	Minot-Boston
Minneapolis-Baltimore	80.5	42.0	+614	Minot-Baltimore
Minneapolis-Savannah	116.0	85.0	+807	Minot-Savannah
Minneapolis-West Coast Export	115.7	14.1	+383 (W-G)	Minot-West Coast Export

W-G - wheat-grain

TABLE 21. RATE STABILITY INDICATORS OF HARD RED SPRING WHEAT INACTIVE MARKETS, 1965, MODEL III, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Los Angeles	145.5	102.5	+192	Billings-Los Angeles
Minot-Spokane	94.5	51.5	+920	Billings-Spokane
Minot-Phoenix	145.5	117.2	+462	Billings-Phoenix
Minot-Portland	129.0	65.0	+440	Billings-Portland
Minot-Denver	70.0	68.9	+629	Huron-Denver
Minot-Winnemucca	128.7	82.4	+144	Billings-Winnemucca
Minot-Lincoln	59.4	55.4	+485	Huron-Lincoln
Minot-Hutchinson	80.9	75.1	+748	Huron-Hutchinson
Minot-Houston	74.5	73.8	+3,368	Minot-Savannah
Minot-St. Louis	85.0	79.8	+5,045	Minneapolis-St. Louis
Minot-Knoxville	74.7	74.2	+2,929	Huron-Knoxville
Minot-West Coast Export	70.0	65.0	+3,227 <sup>a</sup>	Billings-West Coast Export
Minot-Gulf Export	66.6	66.1	+3,368	Minot-Savannah
Idaho Falls-Albuquerque	83.3	69.1	+289	Minot-Albuquerque
Idaho Falls-Oklahoma City	114.5	111.5	+815	Minot-Oklahoma City
Idaho Falls-Houston	131.0	100.6	+3,368	Minot-Savannah
Idaho Falls-New Orleans	124.3	101.1	+3,642	Minot-New Orleans
Idaho Falls-Cincinnati	124.0	75.4	+5,272	Minot-Cincinnati
Idaho Falls-Boston	175.5	91.9	+3,719	Minot-Boston
Idaho Falls-Baltimore	170.5	78.6	+3,425	Minot-Baltimore
Idaho Falls-Savannah	110.5	73.9	+3,368	Minot-Savannah
Idaho Falls-Gulf Export	122.0	22.7	+3,368	Minot-Savannah
Billings-Albuquerque	113.6	112.5	+289	Minot-Albuquerque
Billings-Oklahoma City	139.0	46.4	+815	Minot-Oklahoma City
Billings-Houston	165.5	73.8	+3,368	Minot-Savannah
Billings-New Orleans	141.8	66.6	+3,643	Minot-New Orleans
Billings-Cincinnati	141.5	92.0	+5,272	Minot-Cincinnati
Billings-Boston	127.0	127.0	+3,719	Minot-Boston
Billings-Baltimore	188.0	122.0	+3,425	Minot-Baltimore
Billings-Savannah	123.5	80.0	+3,368	Minot-Savannah
Billings-Gulf Export	122.0	66.1	+3,368	Minot-Savannah
Huron-Albuquerque	104.3	97.1	+289	Minot-Albuquerque
Huron-Oklahoma City	75.4	31.0	+815	Minot-Oklahoma City
Minneapolis-Albuquerque	112.5	44.7	+289	Minot-Albuquerque
Minneapolis-Oklahoma City	77.5	21.4	+815	Minot-Oklahoma City
Minneapolis-Houston	29.8	6.0	+3,368	Minot-Savannah
Minneapolis-Baltimore	80.8	54.2	+3,425	Minot-Baltimore
Minneapolis-Savannah	36.0	12.2	+3,368	Minot-Savannah

<sup>a</sup>Minot is restricted by supply to gain full market potential.

TABLE 22. RATE STABILITY INDICATORS OF HARD RED SPRING WHEAT INACTIVE MARKETS, 1970, MODEL III, PHASE I, RATE SYSTEM I

Origin-Destination	Current	Required	Market	Distribution Affected
	Rate	Rate	Gain or	
	cents	per cwt.	Loss	000 cwt.
Minot-Los Angeles	145.5	84.5	+6,692	Idaho Falls-Los Angeles
Minot-Phoenix	145.5	23.3	+578	Billings-Phoenix
Minot-Denver	70.0	63.5	+652	Huron-Denver
Minot-Albuquerque	112.5	108.7	+280	Idaho Falls-Albuquerque
Minot-Lincoln	59.3	50.0	+473	Huron-Lincoln
Minot-Hutchinson	80.9	70.0	+734	Huron-Hutchinson
Minot-Houston	74.5	68.4	+1,717	Minot-Boston
Minot-St. Louis	85.0	79.0	+559	Huron-St. Louis
Minot-Cincinnati	92.0	91.2	+559	Huron-St. Louis
Minot-Knoxville	74.7	68.8	+1,717	Minot-Boston
Minot-Gulf Export	66.6	60.7	+1,717	Minot-Boston
Minot-Spokane	94.5	51.5	+894	Billings-Spokane
Minot-Portland	129.0	64.8	+376	Idaho Falls-Portland
Minot-Winnemucca	128.7	72.4	+174	Idaho Falls-Winnemucca
Huron-Oklahoma City	75.4	36.4	+808	Minot-Oklahoma City
Billings-Houston	165.5	63.4	+1,717	Minot-Boston
Billings-New Orleans	141.8	61.6	+3,809	Minot-New Orleans
Billings-Knoxville	117.7	63.8	+1,717	Minot-Boston
Billings-Boston	193.0	122.0	+1,717	Minot-Boston
Billings-Buffalo	99.0	64.5	+12,212	Minot-Buffalo
Billings-Baltimore	188.0	117.0	+3,518	Minot-Baltimore
Billings-Savannah	123.5	69.6	+1,717	Minot-Boston
Billings-Great Lakes Export	80.0	39.5	+7,354	Minot-Great Lakes Export
Billings-East Coast Export	188.0	90.5	+12,197	Minot-East Coast Export
Billings-Gulf Export	122.0	55.7	+1,717	Minot-Boston

TABLE 23. RATE STABILITY INDICATORS OF HARD RED SPRING WHEAT INACTIVE MARKETS, 1975, MODEL III, PHASE I, RATE SYSTEM I

Origin-Destination	Current	Required	Market	Distribution Affected
	Rate	Rate	Gain or	
	cents	per cwt.	Loss	000 cwt.
Minot-Los Angeles	145.5	84.5	+7,324	Idaho Falls-Los Angeles
Minot-Phoenix	145.5	122.2	+629	Billings-Phoenix
Minot-Denver	70.0	63.5	+685	Huron-Denver
Minot-Albuquerque	112.5	108.7	+300	Idaho Falls-Albuquerque
Minot-Lincoln	59.4	50.0	+467	Huron-Lincoln
Minot-Hutchinson	80.9	69.7	+727	Huron-Hutchinson
Minot-Houston	74.5	68.4	+1,260	Minot-Boston
Minot-St. Louis	85.0	79.0	+853	Huron-St. Louis
Minot-Cincinnati	92.0	91.2	+853	Huron-St. Louis
Minot-Knoxville	74.7	68.8	+1,260	Minot-Boston
Minot-Baltimore	122.0	122.0	+1,260	Minot-Boston
Minot-Savannah	80.0	74.6	+1,260	Minot-Boston
Minot-Gulf Export	66.6	60.7	+1,260	Minot-Boston
Minot-Spokane	94.5	37.8	+908	Billings-Spokane
Minot-Portland	129.0	64.8	+395	Idaho Falls-Portland
Minot-Winnemucca	128.7	72.4	+191	Idaho Falls-Winnemucca
Billings-Oklahoma City	139.0	41.4	+806	Minot-Oklahoma City
Billings-Houston	165.5	63.4	+1,260	Minot-Boston
Billings-New Orleans	141.8	61.6	+3,900	Minot-New Orleans
Billings-Knoxville	117.7	63.8	+1,260	Minot-Boston
Billings-Buffalo	99.0	64.5	+12,386	Minot-Buffalo
Billings-Baltimore	188.0	117.0	+1,260	Minot-Boston

TABLE 23. RATE STABILITY INDICATORS OF HARD RED SPRING WHEAT INACTIVE MARKETS, 1975, MODEL III, PHASE I, RATE SYSTEM I - continued

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Billings-Savannah	123.5	69.6	+1,260	Minot-Boston
Billings-Great Lakes Export	80.0	39.5	+7,354	Minot-Great Lakes Export
Billings-East Coast Export	188.0	90.5	+12,197	Minot-East Coast Export
Billings-Gulf Export	122.0	55.7	+1,260	Minot-Boston
Huron-Oklahoma City	75.4	36.4	+806	Minot-Oklahoma City
Minneapolis-Oklahoma City	77.5	20.6	+806	Minot-Oklahoma City

TABLE 24. RATE STABILITY INDICATORS OF DURUM WHEAT INACTIVE MARKETS, 1965, MODEL III, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Spokane	94.5	51.5	+229	Billings-Spokane
Minot-Portland	129.0	65.0	+149	Billings-Portland
Minot-Los Angeles	145.5	102.5	+1,248	Billings-Los Angeles
Minot-Winnemucca	128.7	82.4	+32	Billings-Winnemucca
Minot-Idaho Falls	104.9	50.5	+53	Billings-Idaho Falls
Minot-Salt Lake City	98.1	51.1	+76	Billings-Salt Lake City
Minot-Phoenix	145.5	117.2	+122	Billings-Phoenix
Minot-Denver	70.0	69.4	+150	Huron-Denver
Minot-Lincoln	59.4	55.9	+112	Huron-Lincoln
Minot-Hutchinson	80.9	75.6	+173	Huron-Hutchinson
Minot-Houston	74.5	74.3	+607	Minot-Knoxville
Minot-St. Louis	85.0	84.9	+243	Huron-St. Louis
Minot-West Coast Export	70.0	65.0	+95	Billings-West Coast Export
Billings-Cheyenne	71.6	59.6	+25	Minot-Cheyenne
Billings-Albuquerque	113.6	112.5	+78	Minot-Albuquerque
Huron-Cheyenne	45.1	43.7	+25	Minot-Cheyenne

TABLE 25. RATE STABILITY INDICATORS OF DURUM WHEAT INACTIVE MARKETS, 1970, MODEL III, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Spokane	94.5	51.5	+228	Billings-Spokane
Minot-Portland	129.0	70.0	+153	Billings-Portland
Minot-Los Angeles	145.5	107.5	+633	Minot-West Coast Export
Minot-Winnemucca	128.7	87.4	+40	Billings-Winnemucca
Minot-Idaho Falls	104.9	55.5	+53	Billings-Idaho Falls
Minot-Salt Lake City	98.1	56.1	+80	Billings-Salt Lake City
Minot-Phoenix	145.5	122.2	+135	Billings-Phoenix
Minot-Denver	70.0	69.4	+157	Huron-Denver
Minot-Lincoln	59.4	55.9	+107	Huron-Lincoln
Minot-Hutchinson	80.9	75.6	+170	Huron-Hutchinson
Minot-Houston	74.5	74.3	+396	Minot-Knoxville
Minot-St. Louis	85.0	79.8	+1,161	Minneapolis-St. Louis
Billings-Cheyenne	71.6	54.6	+25	Minot-Cheyenne

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TABLE 25. RATE STABILITY INDICATORS OF DURUM WHEAT INACTIVE MARKETS, 1970, MODEL III, PHASE I, RATE SYSTEM I - continued

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Billings-Albuquerque	113.6	107.5	+80	Minot-Albuquerque
Huron-Cheyenne	45.1	43.7	+25	Minot-Cheyenne
Huron-Albuquerque	104.3	96.6	+80	Minot-Albuquerque
Huron-Oklahoma City	75.4	30.5	+187	Minot-Oklahoma City
Minneapolis-Albuquerque	112.5	44.7	+80	Minot-Albuquerque

TABLE 26. RATE STABILITY INDICATORS OF DURUM WHEAT INACTIVE MARKETS, 1975, MODEL III, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Spokane	94.5	61.2	+99	Minot-Phoenix
Minot-Portland	129.0	93.3	+99	Minot-Phoenix
Minot-Los Angeles	145.5	130.8	+90	Minot-Phoenix
Minot-Winnemucca	128.7	110.7	+44	Billings-Winnemucca
Minot-Idaho Falls	104.9	78.8	+53	Billings-Idaho Falls
Minot-Salt Lake City	98.1	73.4	+85	Billings-Salt Lake City
Minot-Denver	70.0	69.4	+164	Huron-Denver
Minot-Lincoln	59.4	55.9	+110	Huron-Lincoln
Minot-Hutchinson	80.9	75.6	+168	Huron-Hutchinson
Minot-Houston	74.5	74.3	+447	Minot-Knoxville
Minot-St. Louis	85.0	79.8	+1,174	Minneapolis-St. Louis
Billings-Cheyenne	71.6	31.3	+25	Minot-Cheyenne
Huron-Spokane	104.4	45.3	+99	Minot-Phoenix
Huron-Los Angeles	145.5	114.9	+99	Minot-Phoenix
Huron-Phoenix	137.1	129.6	+99	Minot-Phoenix
Huron-Cheyenne	45.1	43.7	+25	Minot-Cheyenne
Huron-Albuquerque	104.3	96.6	+85	Minot-Albuquerque
Huron-Oklahoma City	75.4	30.5	+186	Minot-Oklahoma City
Minneapolis-Portland	134.0	25.5	+99	Minot-Phoenix
Minneapolis-Los Angeles	145.5	63.0	+99	Minot-Phoenix
Minneapolis-Phoenix	145.5	77.7	+99	Minot-Phoenix

TABLE 27. SUBSTITUTABILITY ANALYSIS RATE STABILITY INDICATORS OF DURUM, HARD RED SPRING, AND HARD RED WINTER WHEAT INACTIVE MARKETS, 1965, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Los Angeles (HRS) (HRW)	145.5	50.0	+309	Minot-Buffalo (HRS) (HRW)
Minot-Los Angeles (D) (D)	145.5	79.5	+78	Idaho Falls-California (HRW) (D)
Minot-Lincoln (D) (D)	59.4	44.5	+5,216	Minot-Minneapolis (D) (D)
Minot-West Coast Export (D) (D)	70.0	44.5	+95	Minot-Great Lakes Export (D) (D)

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TABLE 27. SUBSTITUTABILITY ANALYSIS RATE STABILITY INDICATORS OF DURUM, HARD RED SPRING, AND HARD RED WINTER WHEAT INACTIVE MARKETS, 1965, MODEL I, PHASE I, RATE SYSTEM I - continued

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Spokane (D) (D)	94.5	51.5	+494	Billings-Spokane (D) (D)
Minot-Los Angeles (HRS) (HRS)	145.5	50.0	+309	Minot-Buffalo (HRS) (HRW)
Minot-Minneapolis (HRS) (HRS)	44.5	44.5	+5,284	Oklahoma City-Gulf Export (HRW) (HRS)
Minot-St. Louis (HRS) (HRS)	85.0	55.2	+1,940	Hutchinson-St. Louis (HRW) (HRS)
Minot-Cincinnati (HRS) (HRS)	92.0	63.2	+1,361	Hutchinson-Cincinnati (HRW) (HRS)
Minot-Savannah (HRS) (HRS)	80.0	77.2	+182	Lincoln-Savannah (HRS) (HRS)
Minot-West Coast Export (HRS) (HRS)	70.0	35.5	+309	Minot-Buffalo (HRS) (HRW)
Minot-East Coast Export (HRS) (HRS)	95.5	77.4	+23,762	Lincoln-East Coast Export (HRW) (HRS)
Minot-Gulf Export (HRS) (HRS)	66.6	66.6	+5,284	Oklahoma City-Gulf Export (HRW) (HRS)
Minot-Spokane (HRS) (HRS)	129.0	30.3	+309	Minot-Buffalo (HRS) (HRW)
Minot-Portland (HRS) (HRW)	129.0	30.3	+309	Minot-Buffalo (HRS) (HRW)
Minot-Los Angeles (HRS) (D)	145.5	50.0	+78	Idaho Falls-Los Angeles (HRW) (D)
Minot-Minneapolis (HRS) (D)	44.5	44.5	+2,491	Huron-Minneapolis (HRS) (D)
Minot-East Coast Export (HRS) (D)	95.5	66.0	+309	Minot-Buffalo (HRS) (HRW)
Minot-Gulf Export (HRS) (D)	66.6	37.1	+309	Minot-Buffalo (HRS) (HRW)
Huron-Los Angeles (HRS) (HRW)	145.5	34.1	+309	Minot-Buffalo (HRS) (HRW)
Cheyenne-Los Angeles (HRW) (HRW)	121.4	52.4	+309	Minot-Buffalo (HRS) (HRW)
Denver-Los Angeles (HRW) (HRW)	115.9	49.5	+309	Minot-Buffalo (HRS) (HRW)
Huron-Los Angeles (HRW) (HRW)	145.5	34.1	+309	Minot-Buffalo (HRS) (HRW)
Lincoln-Los Angeles (HRW) (HRW)	134.0	13.4	+309	Minot-Buffalo (HRS) (HRW)
Cheyenne-Salt Lake City (HRW) (HRW)	46.8	24.0	+309	Minot-Buffalo (HRS) (HRW)
Denver-Salt Lake City (HRW) (HRW)	30.0	21.0	+309	Minot-Buffalo (HRS) (HRW)
Billings-Minneapolis (HRS) (HRW)	87.5	74.0	+8,639	Minot-Minneapolis (HRS) (HRW)
Spokane-Minneapolis (HRW) (HRW)	115.5	41.1	+8,639	Minot-Minneapolis (HRS) (HRW)
Billings-Minneapolis (HRW) (HRW)	87.5	74.0	+8,639	Minot-Minneapolis (HRS) (HRW)
Billings-Baltimore (HRW) (HRS)	188.0	151.5	+76	Minot-Baltimore (HRS) (HRS)
Billings-Great Lakes Export (HRW) (HRS)	80.0	74.0	+7,701	Minot-Great Lakes Export (HRS) (HRS)
Billings-East Coast Export (D) (D)	188.0	95.5	+1,132	Minot-Great Lakes Export (HRS) (D)
Huron-Great Lakes Export (D) (D)	40.0	28.6	+697	Minot-Great Lakes Export (HRS) (D)

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TABLE 27. SUBSTITUTABILITY ANALYSIS RATE STABILITY INDICATORS OF DURUM, HARD RED SPRING, AND HARD RED WINTER WHEAT INACTIVE MARKETS, 1965, MODEL I, PHASE I, RATE SYSTEM I - continued

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Huron-East Coast Export (D) (D)	122.0	50.1	+309	Minot-Buffalo (HRS) (HRW)
Huron-Great Lakes Export (D) (D)	50.7	50.1	+309	Minot-Buffalo (HRS) (HRW)
Idaho Falls-Baltimore (HRS) (HRS)	170.5	131.1	+76	Minot-Baltimore (HRS) (HRS)
Idaho Falls-Gulf Export (HRS) (D)	118.5	53.6	+697	Minot-Great Lakes Export (HRS) (D)
Billings-Baltimore (HRS) (HRS)	188.0	151.5	+76	Minot-Baltimore (HRS) (HRS)
Billings-Great Lakes Export (HRS) (HRS)	80.0	74.0	+7,701	Minot-Great Lakes Export (HRS) (HRS)
Billings-Minneapolis (HRS) (D)	106.5	44.5	+5,216	Minot-Minneapolis (D) (D)
Billings-West Coast Export (HRS) (D)	65.0	44.5	+95	Minot-Great Lakes Export (D) (D)
Billings-East Coast Export (HRS) (D)	188.0	95.5	+8,790	Minot-East Coast Export (D) (D)
Billings-Great Lakes Export (HRS) (D)	80.0	74.0	+697	Minot-Great Lakes Export (HRS) (D)
Billings-Gulf Export (HRS) (D)	122.0	66.6	+4,804	Minot-Gulf Export (D) (D)
Huron-Los Angeles (HRS) (HRS)	145.9	34.1	+309	Minot-Buffalo (HRS) (HRW)
Huron-Baltimore (HRS) (HRS)	112.0	106.1	+76	Minot-Baltimore (HRS) (HRS)
Huron-Buffalo (HRS) (HRW)	66.4	53.4	+309	Minot-Buffalo (HRS) (HRW)
Huron-West Coast Export (HRS) (D)	122.0	50.1	+309	Minot-Buffalo (HRS) (HRW)
Huron-Great Lakes Export (HRS) (D)	40.0	28.6	+697	Minot-Great Lakes Export (HRS) (D)
Huron-Gulf Export (HRS) (D)	50.7	21.2	+309	Minot-Buffalo (HRS) (HRW)
Idaho Falls-Lincoln (HRW) (D)	82.0	24.1	+5,216	Minot-Minneapolis (D) (D)
Idaho Falls-West Coast Export (HRW) (D)	44.6	24.1	+95	Minot-Great Lakes Export (D) (D)
Idaho Falls-Great Lakes Export (HRW) (D)	118.5	53.6	+697	Minot-Great Lakes Export (HRS) (D)
Idaho Falls-Gulf Export (HRW) (D)	122.0	46.2	+4,804	Minot-Gulf Export (D) (D)
Billings-West Coast Export (HRW) (HRS)	65.0	65.0	+11,957	Minot-Great Lakes Export (HRS) (HRS)
Billings-West Coast Export (HRW) (D)	65.0	44.5	+95	Minot-Great Lakes Export (D) (D)
Billings-East Coast Export (HRW) (D)	188.0	95.5	+8,790	Minot-East Coast Export (D) (D)
Billings-Great Lakes Export (HRW) (D)	80.0	74.0	+697	Minot-Great Lakes Export (HRS) (D)
Billings-Gulf Export (HRW) (D)	122.0	66.6	+4,804	Minot-Gulf Export (D) (D)

D - durum wheat

HRS - hard red spring wheat

HRW - hard red winter wheat

TABLE 28. SUBSTITUTABILITY ANALYSIS RATE STABILITY INDICATORS OF DURUM, HARD RED SPRING, AND HARD RED WINTER WHEAT INACTIVE MARKETS, 1970, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Los Angeles (HRS) (HRW)	145.5	79.5	+1,112	Billings-Spokane (HRW) (HRS)
Minot-Salt Lake City (HRS) (HRW)	98.1	30.5	+2,665	Denver-Salt Lake City (HRW) (HRW)
Minot-Los Angeles (D) (D)	145.5	79.5	+49	Idaho Falls-Los Angeles (HRS) (D)
Minot-Lincoln (D) (D)	59.4	44.5	+3,910	Minot-Minneapolis (D) (D)
Minot-West Coast Export (D) (D)	70.0	44.5	+719	Minot-Great Lakes Export (D) (D)
Minot-Los Angeles (HRS) (HRS)	145.5	78.4	+1,759	Huron-Los Angeles (HRW) (HRS)
Minot-Hutchinson (HRS) (HRS)	80.9	43.4	+2,086	Minot-Minneapolis (HRS) (HRW)
Minot-St. Louis (HRS) (HRS)	85.0	55.2	+1,289	Hutchinson-St. Louis (HRW) (HRS)
Minot-Savannah (HRS) (HRS)	80.0	77.2	+292	Hutchinson-Savannah (HRW) (HRS)
Minot-West Coast Export (HRS) (HRS)	70.0	65.0	+4,243	Billings-West Coast Export (HRW) (HRS)
Minot-East Coast Export (HRS) (HRS)	95.5	84.3	+3,910	Minot-Minneapolis (D) (D)
Minot-Gulf Export (HRS) (HRW)	66.6	66.6	+2,086	Minot-Minneapolis (HRS) (HRW)
Minot-Lincoln (HRS) (D)	59.4	44.5	+3,910	Minot-Minneapolis (D) (D)
Minot-Minneapolis (HRS) (D)	44.5	44.5	+2,086	Minot-Minneapolis (HRS) (HRW)
Minot-West Coast Export (HRS) (D)	70.0	44.5	+719	Minot-Great Lakes Export (D) (D)
Minot-East Coast Export (HRS) (D)	95.5	84.3	+3,076	Lincoln-East Coast Export (HRW) (D)
Minot-Gulf Export (HRS) (D)	66.6	66.6	+1,817	Huron-Gulf Export (HRS) (D)
Billings-Minneapolis (D) (D)	87.5	44.5	+2,086	Minot-Minneapolis (HRS) (HRW)
Billings-West Coast Export (D) (D)	65.0	44.5	+719	Minot-Great Lakes Export (D) (D)
Billings Great Lakes Export (D) (D)	80.0	44.5	+2,750	Minot-Great Lakes Export (HRS) (D)
Huron-West Coast Export (D) (D)	70.0	10.9	+719	Minot-Great Lakes Export (D) (D)
Idaho Falls-Baltimore (HRS) (HRS)	170.5	101.6	+65	Minot-Baltimore (HRS) (HRS)
Idaho Falls-Baltimore (HRS) (HRW)	180.5	101.6	+27	Minot-Baltimore (HRS) (HRW)
Utah-Baltimore (HRS) (HRS)	138.0	92.5	+65	Minot-Baltimore (HRS) (HRS)
Billings-Baltimore (HRS) (HRS)	188.0	122.0	+65	Minot-Baltimore (HRS) (HRS)
Billings-Baltimore (HRS) (HRW)	188.0	122.0	+27	Minot-Baltimore (HRS) (HRW)
Huron-Minneapolis (HRS) (HRS)	28.6	28.6	+6,312	Minot-Minneapolis (HRS) (HRS)
Huron-Baltimore (HRS) (HRS)	112.0	106.1	+65	Minot-Baltimore (HRS) (HRS)
Huron-Great Lakes Export (HRS) (HRS)	40.0	28.6	+7,354	Minot-Great Lakes Export (HRS) (HRS)
Huron-East Coast Export (HRS) (HRS)	122.0	68.4	+3,910	Minot-Minneapolis (D) (D)

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TABLE 28. SUBSTITUTABILITY ANALYSIS RATE STABILITY INDICATORS OF DURUM, HARD RED SPRING, AND HARD RED WINTER WHEAT INACTIVE MARKETS, 1970, MODEL I, PHASE I, RATE SYSTEM I - continued

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Huron-Baltimore (HRS) (HRW)	112.0	106.1	+27	Minot-Baltimore (HRS) (HRW)
Huron-Lincoln (HRS) (D)	40.0	28.6	+3,910	Minot-Minneapolis (D) (D)
Huron-West Coast Export (HRS) (D)	70.0	28.6	+719	Minot-Great Lakes Export (D) (D)
Huron-Great Lakes Export (HRS) (D)	40.0	28.6	+2,750	Minot-Great Lakes Export (HRS) (D)
Idaho Falls-Baltimore (HRW) (HRW)	170.5	101.6	+27	Minot-Baltimore (HRS) (HRW)
Billings-Hutchinson (HRW) (HRS)	126.9	43.4	+2,086	Minot-Minneapolis (HRS) (HRW)
Billings-Minneapolis (HRW) (HRS)	87.5	44.5	+6,312	Minot-Minneapolis (HRS) (HRS)
Billings-Baltimore (HRW) (HRS)	188.0	122.0	+65	Minot-Baltimore (HRS) (HRS)
Billings-Great Lakes Export (HRW) (HRS)	80.0	44.5	+7,354	Minot-Great Lakes Export (HRS) (HRS)
Billings-East Coast Export (HRW) (HRS)	188.0	84.3	+310	Minot-Minneapolis (D) (D)
Billings-Gulf Export (HRW) (HRS)	122.0	66.6	+2,086	Minot-Minneapolis (HRS) (HRW)
Billings-Buffalo (HRW) (HRW)	99.0	69.5	+12,223	Minot-Buffalo (HRS) (HRW)
Billings-Baltimore (HRW) (HRW)	188.0	122.0	+27	Minot-Baltimore (HRS) (HRW)
Billings-Gulf Export (HRW) (HRW)	122.0	66.6	+2,086	Minot-Minneapolis (HRS) (HRW)
Billings-Idaho Falls (HRW) (D)	50.5	44.5	+310	Minot-Minneapolis (D) (D)
Billings-Minneapolis (HRW) (D)	87.5	44.5	+2,086	Minot-Minneapolis (HRS) (HRW)
Billings-West Coast Export (HRW) (D)	65.0	44.0	+719	Minot-Great Lakes Export (D) (D)
Billings-Great Lakes Export (HRW) (D)	80.0	44.5	+2,750	Minot-Great Lakes Export (HRS) (D)
Denver-Gulf Export (HRW) (HRS)	60.0	66.1	+286	Minot-Minneapolis (HRS) (HRW)
Denver-Buffalo (HRW) (HRW)	116.5	69.0	+12,223	Minot-Buffalo (HRS) (HRW)
Denver-Gulf Export (HRW) (HRW)	80.0	66.1	+2,086	Minot-Minneapolis (HRS) (HRW)
Denver-Lincoln (HRW) (D)	44.0	44.0	+3,910	Minot-Minneapolis (D) (D)
Denver-Minneapolis (HRW) (D)	70.0	44.0	+2,086	Minot-Minneapolis (HRS) (HRW)
Huron-Minneapolis (HRW) (HRS)	28.6	28.6	+6,312	Minot-Minneapolis (HRS) (HRS)
Huron-Great Lakes Export (HRW) (HRS)	40.0	28.6	+7,354	Minot-Great Lakes Export (HRS) (HRS)
Huron-East Coast Export (HRW) (HRS)	122.0	68.4	+3,910	Minot-Minneapolis (D) (D)
Huron-Lincoln (HRW) (D)	40.0	28.6	+3,910	Minot-Minneapolis (D) (D)
Hutchinson-Baltimore (HRW) (HRS)	110.0	79.6	+65	Minot-Baltimore (HRS) (HRS)
Hutchinson-East Coast Export (HRW) (HRS)	88.0	41.9	+3,910	Minot-Minneapolis (D) (D)

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TABLE 28. SUBSTITUTABILITY ANALYSIS RATE STABILITY INDICATORS OF DURUM, HARD RED SPRING, AND HARD RED WINTER WHEAT INACTIVE MARKETS, 1970, MODEL I, PHASE I, RATE SYSTEM I - continued

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Oklahoma City(HRW)- Baltimore(HRS)	114.5	84.4	+65	Minot-Baltimore (HRS) (HRS)
Oklahoma City(HRW)- East Coast Export(HRS)	103.0	46.7	+3,910	Minot-Minneapolis (D) (D)

D -- durum wheat

HRS -- hard red spring wheat

HRW -- hard red winter wheat

TABLE 29. SUBSTITUTABILITY ANALYSIS RATE STABILITY INDICATORS OF DURUM, HARD RED SPRING, AND HARD RED WINTER WHEAT INACTIVE MARKETS, 1975, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Los Angeles (HRS) (HRW)	145.5	79.5	+2,373	Idaho Falls-Los Angeles (HRS) (HRW)
Minot-Salt Lake City (HRS) (HRW)	98.1	30.0	+3,832	Denver-Salt Lake City (HRW) (HRW)
Minot-Minneapolis (HRS) (HRW)	44.5	32.6	+11,629	Denver-Great Lakes Export (HRW) (D)
Minot-Los Angeles (D) (D)	145.5	79.5	+128	Idaho Falls-Los Angeles (HRS) (D)
Minot-Lincoln (D) (D)	59.4	31.0	+4,737	Hutchinson-Lincoln (HRW) (D)
Minot-Minneapolis (D) (D)	44.5	31.0	+4,737	Hutchinson-Lincoln (HRW) (D)
Minot-West Coast Export (D) (D)	70.0	44.5	+719	Minot-Great Lakes Export (D) (D)
Minot-East Coast Export (D) (D)	95.5	70.8	+3,076	Lincoln-East Coast Export (HRW) (D)
Minot-Gulf Export (D) (D)	66.6	24.2	+1,817	Hutchinson-Gulf Export (HRW) (D)
Minot-Spokane (D) (D)	94.5	51.5	+610	Billings-Spokane (HRW) (D)
Minot-Los Angeles (HRS) (HRS)	145.5	66.5	+1,892	Huron-Los Angeles (HRW) (HRS)
Minot-Savannah (HRS) (HRS)	80.0	34.8	+431	Hutchinson-Savannah (HRW) (HRS)
Minot-West Coast Export (HRS) (HRS)	70.0	65.0	+32,475	Billings-West Coast Export (HRW) (HRS)
Minot-Great Lakes Export (HRS) (HRS)	44.5	44.0	+7,354	Denver-Great Lakes Export (HRW) (HRS)
Minot-East Coast Export (HRS) (HRS)	95.5	70.8	+4,737	Hutchinson-Lincoln (HRW) (D)
Minot-Gulf Export (HRS) (HRS)	66.6	24.2	+6,428	Hutchinson-Gulf Export (HRS) (D)
Minot-Spokane (HRS) (HRS)	94.5	51.5	+1,218	Billings-Spokane (HRS) (HRS)
Minot-Portland (HRS) (HRS)	129.0	59.8	+1,459	Idaho Falls-Portland (HRS) (HRS)

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TABLE 29. SUBSTITUTABILITY ANALYSIS RATE STABILITY INDICATORS OF DURUM, HARD RED SPRING, AND HARD RED WINTER WHEAT INACTIVE MARKETS, 1975, MODEL I, PHASE I, RATE SYSTEM I - continued

Origin-Destination	Current Rate	Required Rate (Less Than)	Market Gain or Loss	Distribution Affected
	cents	per cwt.	000 cwt.	
Minot-Savannah (HRS) (HRW)	80.0	34.8	+1,514	Hutchinson-Savannah (HRW) (HRW)
Minot-West Coast Export (HRS) (HRW)	70.0	65.0	+1,459	Idaho Falls-Portland (HRS) (HRS)
Minot-East Coast Export (HRS) (HRW)	95.5	70.8	+2,265	Lincoln-East Coast Export (HRW) (HRW)
Minot-Gulf Export (HRS) (HRW)	66.6	24.2	+52,099	Hutchinson-Gulf Export (HRW) (HRW)
Minot-Spokane (HRS) (D)	94.5	51.5	+609	Billings-Spokane (HRW) (D)
Minot-Portland (HRS) (D)	129.0	59.8	+258	Idaho Falls-Portland (HRS) (D)
Minot-Los Angeles (HRS) (D)	145.5	79.5	+128	Idaho Falls-Los Angeles (HRS) (D)
Minot-Lincoln (HRS) (D)	59.4	31.0	+4,737	Hutchinson-Lincoln (HRW) (D)
Minot-Minneapolis (HRS) (D)	44.5	32.6	+4,724	Huron-Minneapolis (HRS) (D)
Minot-West Coast Export (HRS) (D)	70.0	44.5	+719	Minot-Great Lakes Export (D) (D)
Minot-East Coast Export (HRS) (D)	95.5	70.8	+3,076	Lincoln-East Coast Export (HRW) (D)
Minot-Great Lakes Export (HRS) (D)	44.5	44.0	+11,629	Denver-Great Lakes Export (HRW) (D)
Minot-Gulf Export (HRS) (D)	66.6	24.2	+1,817	Hutchinson-Gulf Export (HRW) (D)
Billings-West Coast Export (D) (D)	65.0	44.5	+718	Minot-Great Lakes Export (D) (D)
Huron-West Coast Export (D) (D)	70.0	24.4	+718	Minot-Great Lakes Export (D) (D)
Huron-Lincoln (HRS) (D)	70.0	40.5	+719	Minot-Great Lakes Export (D) (D)
Billings-West Coast Export (HRW) (D)	65.0	44.5	+719	Minot-Great Lakes Export (D) (D)
Cheyenne-West Coast Export (HRW) (D)	70.0	44.5	+719	Minot-Great Lakes Export (D) (D)
Huron-West Coast Export (HRW) (D)	70.0	40.5	+719	Minot-Great Lakes Export (D) (D)
Lincoln-West Coast Export (HRW) (D)	70.0	14.5	+719	Minot-Great Lakes Export (D) (D)
Hutchinson-Buffalo (HRW) (HRS)	97.8	69.5	+12,386	Minot-Buffalo (HRS) (HRS)
Hutchinson-Buffalo (HRW) (HRW)	97.8	69.5	+12,111	Minot-Buffalo (HRS) (HRW)
Hutchinson-East Coast Export (HRW) (D)	88.0	70.8	+3,076	Lincoln-East Coast Export (HRW) (D)
Oklahoma City-Buffalo (HRW) (HRW)	101.5	69.5	+12,111	Minot-Buffalo (HRS) (HRW)
Houston-West Coast Export (HRW) (D)	82.0	41.8	+719	Minot-Great Lakes Export (D) (D)

D - durum wheat

HRS - hard red spring wheat

HRW - hard red winter wheat

SECTION B

Rate Stability Indicators  
Active Markets

Model I, Phase I  
Model I, Phase II  
Model II, Phase I  
Model III, Phase I  
Rate Systems I and IV

TABLE 30. RATE STABILITY INDICATORS OF HARD RED SPRING WHEAT ACTIVE MARKETS, 1965, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	7	Maximum	4	Market	Distribution Affected
	Current	Rate <sup>5</sup>	Required	Gain or	
	Rate	Limit	Rate	Loss	
	cents per cwt.			000 cwt.	
Minot-Oklahoma City	46.4	89.5	--	-79	Cheyenne-Oklahoma City
Minot-Cincinnati	92.0	98.4	--	-79	Cheyenne-Cincinnati
Minot-Buffalo	69.5	82.3	--	-349	Huron-Buffalo
Minot-Baltimore	122.0	127.9	--	-76	Huron-Baltimore
Minot-Savannah	80.0	80.5	--	-182	Huron-Savannah
Minot-Great Lakes Export	44.5	55.9	--	-348	Huron-Great Lakes Export
Minot-East Coast Export	95.5	137.9	--	-349	Huron-East Coast Export
Minot-Gulf Export	66.6	66.6	--	-6,303	Minot-Minneapolis

TABLE 31. RATE STABILITY INDICATORS OF HARD RED SPRING WHEAT ACTIVE MARKETS, 1970, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current	Maximum	Required	Market	Distribution Affected
	Rate	Rate	Rate	Gain or	
	Rate	Limit	Rate	Loss	
	cents per cwt.			000 cwt.	
Minot-Oklahoma City	46.4	76.7	--	-101	Cheyenne-Oklahoma City
Minot-Buffalo	69.5	70.9	--	-7,354	Minot-Great Lakes Export
Minot-Buffalo	69.5	--	66.9	+101	Cheyenne-Oklahoma City
Minot- West Coast Export	70.0	72.6	--	-101	Cheyenne- West Coast Export
Minot- West Coast Export	70.0	65.0	--	+15,042	Billings- West Coast Export
Minot-East Coast Export	95.5	125.1	--	+2,710	Huron-East Coast Export

TABLE 32. RATE STABILITY INDICATORS OF HARD RED SPRING WHEAT ACTIVE MARKETS, 1975, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current	Maximum	Required	Market	Distribution Affected
	Rate	Rate	Rate	Gain or	
	Rate	Limit	Rate	Loss	
	cents per cwt.			000 cwt.	
Minot-Oklahoma City	46.4	76.7	--	-116	Cheyenne-Oklahoma City
Minot-Buffalo	69.5	70.9	--	-7,354	Huron-Buffalo
Minot- West Coast Export	70.0	72.6	--	-116	Cheyenne- West Coast Export
Minot-East Coast Export	95.5	125.1	--	-4,361	Huron-East Coast Export

TABLE 33. RATE STABILITY INDICATORS OF DURUM WHEAT ACTIVE MARKETS, 1965, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current	Maximum	Required	Market	Distribution Affected
	Rate	Rate	Rate	Gain or	
	Rate	Limit	Rate	Loss	
	cents per cwt.			000 cwt.	
Minot-Lincoln	59.4	71.0	--	-445	Billings-Lincoln
Minot-Lincoln	59.4	--	55.9	+1,360	Huron-Minneapolis

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TABLE 33. RATE STABILITY INDICATORS OF DURUM WHEAT ACTIVE MARKETS, 1965, MODEL I, PHASE I, RATE SYSTEM I - continued

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market	Distribution Affected
				Gain or Loss	
cents per cwt.				000 cwt.	
Minot-Minneapolis	44.5	48.0	--	-1,360	Huron-Minneapolis
Minot-Great Lakes Export	44.5	59.4	--	-1,359	Huron-Great Lakes Export
Minot-Great Lakes Export	44.5	--	37.0	+444	Billings-Minneapolis
Minot-East Coast Export	55.0	141.4	--	-1,360	Huron-East Coast Export
Minot-Gulf Export	22.1	70.1	--	-1,360	Huron-Gulf Export

TABLE 34. RATE STABILITY INDICATORS OF DURUM WHEAT ACTIVE MARKETS, 1970, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market	Distribution Affected
				Gain or Loss	
cents per cwt.				000 cwt.	
Minot-Lincoln	59.4	106.5	--	-2,113	Billings-Lincoln
Minot-Lincoln	59.4	--	55.9	+1,836	Huron-Minneapolis
Minot-Minneapolis	44.5	48.0	--	-1,835	Huron-Minneapolis
Minot-Great Lakes Export	44.5	59.4	--	-1,836	Huron-Great Lakes Export
Minot-East Coast Export	55.0	141.4	--	-1,836	Huron-East Coast Export
Minot-Gulf Export	22.1	70.1	--	-1,817	Huron-Gulf Export

TABLE 35. RATE STABILITY INDICATORS OF DURUM WHEAT ACTIVE MARKETS, 1975, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market	Distribution Affected
				Gain or Loss	
cents per cwt.				000 cwt.	
Minot-Lincoln	59.4	106.5	--	-533	Billings-Lincoln
Minot-Lincoln	59.4	--	55.9	+1,836	Huron-Minneapolis
Minot-Minneapolis	44.5	48.0	--	-1,835	Huron-Minneapolis
Minot-Great Lakes Export	44.5	59.4	--	-1,835	Huron-Great Lakes Export
Minot-East Coast Export	55.0	141.4	--	-1,835	Huron-East Coast Export
Minot-Gulf Export	22.1	70.1	--	-1,817	Huron-Gulf Export

TABLE 36. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR ACTIVE MARKETS, 1965, MODEL I, PHASE II, RATE SYSTEM IV

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market	Distribution Affected
				Gain or Loss	
cents per cwt.				000 cwt.	
Minot-Los Angeles	145.5	145.5	--	-105	Minot-Winnemucca
Minot-Phoenix	145.5	146.0	--	-36	Huron-Phoenix
Minot-Cheyenne	68.5	103.5	--	-36	Minneapolis-Cheyenne
Minot-Denver	68.5	103.5	--	-36	Minot-Denver
Minot-Albuquerque	112.5	116.5	--	-143	Minot-Houston

TABLE 37. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR ACTIVE MARKETS, 1970, MODEL I, PHASE II, RATE SYSTEM IV

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Los Angeles	145.5	145.5	--	-127	Minot-Winnemucca
Minot-Cheyenne	68.5	77.3	--	-78	Minneapolis-Cheyenne
Minot-Denver	68.5	77.3	--	-125	Minneapolis-Denver

TABLE 38. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR ACTIVE MARKETS, 1975, MODEL I, PHASE II, RATE SYSTEM IV

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Los Angeles	145.5	145.5	--	-140	Billings-Los Angeles
Minot-Los Angeles	145.5	--	117.0	+128	Billings-Phoenix
Minot-Phoenix	145.5	161.5	--	-228	Minneapolis-Phoenix
Minot-Phoenix	145.5	--	135.3	+244	Minneapolis-Los Angeles
Minot-Cheyenne	68.5	87.5	--	-79	Minneapolis-Cheyenne
Minot-Denver	68.5	87.5	--	+244	Minneapolis-Denver

TABLE 39. RATE STABILITY INDICATORS OF DURUM FLOUR ACTIVE MARKETS, 1965, MODEL I, PHASE II, RATE SYSTEM IV

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Salt Lake City	67.1	120.1	--	-56	Lincoln-Salt Lake City

TABLE 40. RATE STABILITY INDICATORS OF DURUM FLOUR ACTIVE MARKETS, 1970, MODEL I, PHASE II, RATE SYSTEM IV

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Salt Lake City	67.1	120.1	--	-58	Lincoln-Salt Lake City

TABLE 41. RATE STABILITY INDICATORS OF DURUM FLOUR ACTIVE MARKETS, 1975, MODEL I, PHASE II, RATE SYSTEM IV

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
	cents per cwt.			000 cwt.	
Minot-Salt Lake City	67.1	120.1	--	-62	Lincoln-Salt Lake City

TABLE 42. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR ACTIVE MARKETS, 1965, MODEL II, PHASE I, RATE SYSTEM IV

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
	cents per cwt.			000 cwt.	
Minot-Denver	68.5	86.5	--	-459	Billings-Denver
Minot-Houston	113.0	115.2	--	-1,196	Huron-Houston
Minot-St. Louis	81.5	82.2	--	-1,196	Huron-St. Louis
Minot-New Orleans	132.5	133.7	--	-1,196	Huron-New Orleans
Minot-Cincinnati	103.0	109.2	--	-1,196	Huron-Cincinnati
Minot-Knoxville	134.5	146.2	--	-1,196	Huron-Knoxville
Minot-Boston	127.5	133.7	--	-1,196	Huron-Boston
Minot-Baltimore	115.5	128.7	--	-1,196	Huron-Baltimore
Minot-Savannah	158.5	160.7	--	-1,196	Huron-Savannah
Minot-Great Lakes Export	38.4	44.7	--	-873	Huron-Great Lakes Export
Minot-East Coast Export	82.4	84.5	--	(W-G) -598	Minot-Oklahoma City
				(W-G)	

W-G - wheat-grain

TABLE 43. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR ACTIVE MARKETS, 1970, MODEL II, PHASE I, RATE SYSTEM IV

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
	cents per cwt.			000 cwt.	
Minot-Denver	68.5	93.4	--	-476	Billings-Denver
Minot-Albuquerque	112.5	116.4	--	-3	Salt Lake City-Albuquerque
Minot-Albuquerque	112.5	--	92.8	+49	Cheyenne-Savannah
Minot-Houston	113.0	114.0	--	-1,750	Huron-Houston
Minot-New Orleans	132.5	133.0	--	-1,031	Minot-St. Louis
Minot-New Orleans	132.5	131.5	--	+1,751	Huron-Houston
Minot-Cincinnati	103.0	108.0	--	-1,751	Huron-Cincinnati
Minot-Knoxville	134.5	145.0	--	-1,751	Huron-Knoxville
Minot-Boston	127.5	132.5	--	-1,751	Huron-Boston
Minot-Baltimore	115.5	127.5	--	-1,751	Huron-Baltimore
Minot-Savannah	158.5	159.5	--	-1,750	Huron-Savannah
Minot-Savannah	158.5	154.6	--	+3	Salt Lake City-Albuquerque
Minot-West Coast Export	60.4	64.9	--	-2	Salt Lake City-Winnemucca
				(W-G)	

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TABLE 43. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR ACTIVE MARKETS, 1970, MODEL II, PHASE I, RATE SYSTEM IV - continued

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
	cents per cwt.			000 cwt.	
Minot-West Coast Export	60.4	56.8	--	+150 (W-G)	Idaho Falls-Albuquerque
Minot-Great Lakes Export	38.4	44.0	--	-1,278 (W-G)	Huron-Great Lakes Export

W-G - wheat-grain

TABLE 44. RATE STABILITY INDICATORS OF HARD RED SPRING FLOUR ACTIVE MARKETS, 1975, MODEL II, PHASE I, RATE SYSTEM IV

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
	cents per cwt.			000 cwt.	
Minot-Albuquerque	112.5	116.4	--	-12	Salt Lake City-Albuquerque
Minot-Denver	68.5	93.4	--	-501	Billings-Denver
Minot-Houston	113.0	114.0	--	-1,512	Huron-Houston
Minot-New Orleans	132.5	133.0	--	-1,335	Minot-St. Louis
Minot-Cincinnati	103.0	108.0	--	-1,512	Huron-Cincinnati
Minot-Knoxville	134.5	145.0	--	-1,512	Huron-Knoxville
Minot-Boston	127.5	132.5	--	-1,512	Huron-Boston
Minot-Baltimore	115.5	127.5	--	-1,512	Huron-Baltimore
Minot-Savannah	158.5	159.5	--	-1,512	Huron-Savannah
Minot-Savannah	158.5	--	154.6	+12	Salt Lake City-Albuquerque
Minot-West Coast Export	60.4	64.9	--	-8 (W-G)	Salt Lake City-Winnemucca

W-G - wheat-grain

TABLE 45. RATE STABILITY INDICATORS OF DURUM FLOUR ACTIVE MARKETS, 1965, MODEL II, PHASE I, RATE SYSTEM IV

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
	cents per cwt.			000 cwt.	
Minot-Cheyenne	68.5	78.5	--	-19	Billings-Cheyenne
Minot-Denver	68.5	86.5	--	-110	Billings-Denver
Minot-Albuquerque	112.5	145.5	--	-57	Billings-Albuquerque
Minot-Lincoln	80.5	82.0	--	-82	Huron-Lincoln
Minot-Hutchinson	112.5	114.0	--	-127	Huron-Hutchinson
Minot-Oklahoma City	111.0	131.5	--	-138	Huron-Oklahoma City
Minot-Houston	113.0	115.5	--	-139	Billings-Houston
Minot-St. Louis	81.5	106.0	--	-852	Huron-St. Louis
Minot-New Orleans	132.5	157.5	--	-636	Huron-New Orleans
Minot-Cincinnati	103.0	133.0	--	-1,087	Huron-Cincinnati
Minot-Knoxville	134.5	170.0	--	-495	Huron-Knoxville
Minot-Boston	127.5	157.5	--	-627	Huron-Boston

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TABLE 45. RATE STABILITY INDICATORS OF DURUM FLOUR ACTIVE MARKETS, 1965, MODEL II, PHASE I, RATE SYSTEM IV - continued

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Buffalo	144.5	149.6	—	-56	Billings-Buffalo
Minot-Baltimore	115.5	152.5	—	-578	Huron-Baltimore
Minot-Savannah	158.5	184.5	—	-717	Huron-Savannah
Minot- Great Lakes Export	38.4	58.2	—	-492 (W-G)	Minneapolis- Great Lakes Export
Minot- East Coast Export	82.4	93.8	—	-492 (W-G)	Minneapolis- East Coast Export
Minot-Gulf Export	57.5	65.3	—	-492 (W-G)	Minneapolis-Gulf Export

W-G - wheat-grain

TABLE 46. RATE STABILITY INDICATORS OF DURUM FLOUR ACTIVE MARKETS, 1970, MODEL II, PHASE I, RATE SYSTEM IV

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Cheyenne	68.5	85.4	—	-18	Billings-Cheyenne
Minot-Denver	68.5	93.4	—	-114	Billings-Denver
Minot-Albuquerque	112.5	152.4	—	-59	Billings-Albuquerque
Minot-Lincoln	80.5	80.5	—	-18	Huron-Lincoln
Minot-Hutchinson	112.5	114.0	—	-106	Huron-Hutchinson
Minot-Hutchinson	112.5	—	112.5	+18	Huron-Lincoln
Minot-Oklahoma City	111.0	130.0	—	-18	Huron-Oklahoma City
Minot-Houston	113.0	122.4	—	-382	Billings-Houston
Minot-St. Louis	81.5	104.5	—	-18	Huron-St. Louis
Minot-New Orleans	132.5	156.0	—	-18	Huron-New Orleans
Minot-Cincinnati	103.0	131.5	—	-18	Huron-Cincinnati
Minot-Knoxville	134.5	168.5	—	-18	Huron-Knoxville
Minot-Boston	127.5	156.0	—	-18	Huron-Boston
Minot-Baltimore	115.5	151.0	—	-18	Huron-Baltimore
Minot-Savannah	158.5	183.0	—	-18	Huron-Savannah
Minot- West Coast Export	60.4	65.2	—	-72 (W-G)	Billings- West Coast Export
Minot- Great Lakes Export	38.4	57.3	—	-14 (W-G)	Minneapolis- Great Lakes Export
Minot- East Coast Export	82.4	92.8	—	-13 (W-G)	Minneapolis- East Coast Export
Minot-Gulf Export	57.5	64.3	—	-13 (W-G)	Minneapolis-Gulf Export

W-G - wheat-grain

TABLE 47. RATE STABILITY INDICATORS OF DURUM FLOUR ACTIVE MARKETS, 1975, MODEL II, PHASE I, RATE SYSTEM IV

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Phoenix	145.5	171.0	—	-6	Billings-Phoenix
Minot-Phoenix	145.5	137.9	—	+103	Billings- West Coast Export
Minot-Cheyenne	68.5	93.0	—	-18	Billings-Cheyenne
Minot-Denver	68.5	101.0	—	-103	Billings-Denver
Minot-Albuquerque	112.5	158.5	—	-62	Huron-Albuquerque
Minot-Lincoln	80.5	82.0	—	-78	Huron-Lincoln
Minot-Hutchinson	112.5	114.0	—	-123	Huron-Hutchinson
Minot-Oklahoma City	111.0	131.5	—	-136	Huron-Oklahoma City
Minot-Houston	113.0	130.0	—	-103	Billings-Houston
Minot-Cincinnati	103.0	133.0	—	-1,145	Huron-Cincinnati
Minot-Knoxville	134.5	170.0	—	-510	Huron-Knoxville
Minot-Boston	127.5	157.5	—	-640	Huron-Boston
Minot-Buffalo	144.5	170.0	—	-10	Billings-Buffalo
Minot-Baltimore	115.5	152.5	—	-614	Huron-Baltimore
Minot-Savannah	158.5	184.5	—	-807	Huron-Savannah
Minot- West Coast Export	60.4	65.2	—	-75	Billings- West Coast Export
Minot- Great Lakes Export	38.4	58.2	—	-683	(W-G) Minneapolis- Great Lakes Export
Minot- East Coast Export	82.4	93.8	—	-683	(W-G) Minneapolis- East Coast Export
Minot-Gulf Export	57.5	65.3	—	-683	(W-G) Minneapolis-Gulf Export

W-G - wheat-grain

TABLE 48. RATE STABILITY INDICATORS OF HARD RED SPRING WHEAT ACTIVE MARKETS, 1965, MODEL III, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Albuquerque	112.5	113.6	—	-289	Billings-Albuquerque
Minot-Albuquerque	112.5	—	112.0	+48	Cheyenne-Denver
Minot-Oklahoma City	46.4	90.8	—	-815	Huron-Oklahoma City
Minot-New Orleans	66.6	89.9	—	-3,605	Minneapolis-New Orleans
Minot-Cincinnati	92.0	96.6	—	-877	Huron-St. Louis
Minot-Cincinnati	92.0	68.7	—	-3,605	Minneapolis-New Orleans
Minot-Boston	127.0	132.4	—	-877	Huron-Boston
Minot-Buffalo	69.5	81.8	—	-877	Huron-Buffalo
Minot-Baltimore	122.0	127.4	—	-877	Huron-Baltimore
Minot-Savannah	80.0	80.5	—	-48	Cheyenne-Denver
Minot-Great Lakes Export	44.5	55.4	—	-877	Huron-Great Lakes Export
Minot- East Coast Export	95.5	122.8	—	-3,605	Minneapolis- East Coast Export

TABLE 49. RATE STABILITY INDICATORS OF HARD RED SPRING WHEAT ACTIVE MARKETS, 1970, MODEL III, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Oklahoma City	46.4	85.4	—	-808	Huron-Oklahoma City
Minot-New Orleans	66.6	89.1	—	-2,007	Minneapolis-New Orleans
Minot-Boston	127.0	127.8	—	-559	Minot-Baltimore
Minot-Buffalo	69.5	76.4	—	-2,006	Huron-Buffalo
Minot-Baltimore	112.0	122.0	—	-2,006	Huron-Baltimore
Minot-West Coast Export	70.0	73.8	—	-270	Minot-Baltimore
Minot-Great Lakes Export	44.5	50.0	—	-2,006	Huron-Great Lakes Export
Minot-East Coast Export	95.5	122.0	—	-2,006	Minneapolis-East Coast Export

TABLE 50. RATE STABILITY INDICATORS OF HARD RED SPRING WHEAT ACTIVE MARKETS, 1975, MODEL III, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Oklahoma City	46.4	85.4	—	-806	Huron-Oklahoma City
Minot-New Orleans	66.6	89.1	—	-2,531	Minneapolis-New Orleans
Minot-Boston	127.0	127.0	—	-1,260	Minot-Baltimore
Minot-Buffalo	69.5	76.4	—	-2,531	Huron-Buffalo
Minot-West Coast Export	70.0	73.8	—	-300	Minot-Albuquerque
Minot-West Coast Export	70.0	—	67.9	+28	Cheyenne-Denver
Minot-Great Lakes Export	44.5	50.0	—	-531	Huron-Great Lakes Export
Minot-East Coast Export	95.5	122.0	—	-2,531	Minneapolis-East Coast Export

TABLE 51. RATE STABILITY INDICATORS OF DURUM WHEAT ACTIVE MARKETS, 1965, MODEL III, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Cheyenne	59.6	61.0	—	-25	Huron-Cheyenne
Minot-Albuquerque	112.5	113.6	—	-78	Billings-Albuquerque
Minot-Oklahoma City	46.4	91.3	—	-71	Huron-Oklahoma City
Minot-New Orleans	66.6	95.0	—	-71	Minneapolis-New Orleans
Minot-Cincinnati	92.0	97.1	—	-71	Minneapolis-Cincinnati
Minot-Knoxville	74.7	74.8	—	-244	Huron-Knoxville
Minot-Knoxville	74.7	—	74.7	+71	Huron-Knoxville
Minot-Boston	127.0	132.9	—	-71	Huron-Boston
Minot-Buffalo	69.5	82.3	—	-71	Huron-Buffalo
Minot-Baltimore	122.0	127.9	—	-71	Huron-Baltimore
Minot-Savannah	80.0	80.5	—	-71	Huron-Savannah
Minot-Great Lakes Export	44.5	55.9	—	-71	Huron-Great Lakes Export
Minot-East Coast Export	95.5	127.9	—	-71	Huron-East Coast Export
Minot-Gulf Export	66.6	66.6	—	-71	Huron-Gulf Export

TABLE 52. RATE STABILITY INDICATORS OF DURUM WHEAT ACTIVE MARKETS, 1970, MODEL III, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Cheyenne	59.6	61.0	—	-25	Huron-Cheyenne
Minot-Albuquerque	112.5	118.6	—	-80	Billings-Albuquerque
Minot-Oklahoma City	46.4	91.3	—	-187	Huron-Oklahoma City
Minot-New Orleans	66.6	89.9	—	-881	Minneapolis-New Orleans
Minot-Cincinnati	92.0	97.1	—	-290	Minneapolis-Cincinnati
Minot-Knoxville	74.7	74.9	—	-396	Huron-Knoxville
Minot-Boston	127.0	132.9	—	-290	Huron-Boston
Minot-Buffalo	69.5	82.3	—	-290	Huron-Buffalo
Minot-Baltimore	122.0	127.9	—	-290	Huron-Baltimore
Minot-Savannah	80.0	80.5	—	-290	Huron-Savannah
Minot-West Coast Export	70.0	85.9	—	-290	Huron-West Coast Export
Minot-Great Lakes Export	44.5	55.9	—	-290	Huron-Great Lakes Export
Minot-East Coast Export	95.5	122.8	—	-122	Minneapolis-East Coast Export
Minot-Gulf Export	66.6	66.6	—	-290	Huron-Gulf Export

TABLE 53. RATE STABILITY INDICATORS OF DURUM WHEAT ACTIVE MARKETS, 1975, MODEL III, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Phoenix	145.5	153.0	—	-99	Huron-Phoenix
Minot-Cheyenne	59.6	61.0	—	-25	Huron-Cheyenne
Minot-Albuquerque	112.5	120.2	—	-85	Huron-Albuquerque
Minot-Oklahoma City	46.4	91.3	—	-186	Huron-Oklahoma City
Minot-New Orleans	66.6	89.9	—	-107	Minneapolis-New Orleans
Minot-Cincinnati	92.0	97.1	—	-1,174	Minneapolis-Cincinnati
Minot-Cincinnati	92.0	—	68.7	+107	Minneapolis-Houston
Minot-Knoxville	74.7	74.9	—	-428	Huron-Knoxville
Minot-Knoxville	74.7	—	74.7	+252	Huron-Gulf Export
Minot-Boston	127.0	132.9	—	-252	Huron-Boston
Minot-Buffalo	69.5	82.3	—	-252	Huron-Buffalo
Minot-Baltimore	122.0	127.9	—	-252	Huron-Baltimore
Minot-Savannah	80.0	80.5	—	-252	Huron-Savannah
Minot-West Coast Export	70.0	85.9	—	-252	Huron-West Coast Export
Minot-Great Lakes Export	44.5	55.9	—	-252	Huron-Great Lakes Export
Minot-East Coast Export	95.5	122.8	—	-107	Minneapolis-East Coast Export
Minot-Gulf Export	66.6	66.6	—	-252	Huron-Gulf Export



TABLE 54. SUBSTITUTABILITY ANALYSIS RATE STABILITY INDICATORS OF DURUM, HARD RED SPRING, AND HARD RED WINTER WHEAT ACTIVE MARKETS, 1965, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Minneapolis (HRS) (HRW)	44.5	44.5	—	-1,369	Huron-Minneapolis (HRS) (HRW)
Minot-Minneapolis (D) (D)	44.5	59.4	—	-5,216	Minot-Lincoln (D) (D)
Minot(D)-Great Lakes Export(D)	44.5	65.0	—	-95	Idaho Falls(HRS)-West Coast Export(D)
Minot-East Coast Export (D) (D)	95.5	96.1	—	-309	Huron-Gulf Export (D) (D)
Minot-Gulf Export (D) (D)	66.6	96.1	—	-158	Cheyenne-Gulf Export (HRS) (D)
Minot-Buffalo (HRS) (HRS)	69.5	69.5	—	-11,970	Billings-Buffalo (HRW) (HRS)
Minot-Baltimore (HRS) (HRS)	122.0	123.3	—	-76	Knoxville-Baltimore (HRW) (HRS)
Minot-Great Lakes Export (HRS) (HRS)	44.5	44.5	—	-5,925	Denver-Great Lakes Export (HRW) (HRS)
Minot-Buffalo (HRS) (HRW)	69.5	70.1	—	-309	Huron-Gulf Export (D) (D)
Minot-Buffalo (HRS) (HRW)	69.5	—	69.5	+11,970	Billings-Buffalo (HRW) (HRS)
Minot-Gulf Export (HRS) (HRW)	66.6	66.6	—	-5,284	Minot-Minneapolis (HRS) (HRS)
Minot-Gulf Export (HRS) (HRW)	66.6	66.6	—	+1,369	Huron-Minneapolis (HRS) (HRW)
Minot(HRS)-Gulf Export(D)	44.5	47.9	—	-156	Cheyenne(HRS) Great Lakes Export(D)
Minot-Gulf Export (HRS) (D)	44.5	44.5	—	+5,925	Denver-Great Lakes Export (HRW) (HRS)
Minot(HRS)-Great Lakes Export(D)	44.5	47.9	—	-156	Cheyenne(HRS)-Great Lakes Export(D)

D - durum wheat  
HRS - hard red spring wheat  
HRW - hard red winter wheat

TABLE 55. SUBSTITUTABILITY ANALYSIS RATE STABILITY INDICATORS OF DURUM, HARD RED SPRING, AND HARD RED WINTER WHEAT ACTIVE MARKETS, 1970, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot-Minneapolis (HRS) (HRW)	44.5	44.5	—	-1,817	Minot-Gulf Export (D) (D)
Minot-Minneapolis (HRS) (HRW)	44.5	44.5	—	+6,312	Huron-Minneapolis (HRS) (HRS)
Minot-Minneapolis (D) (D)	44.5	44.5	—	-3,910	Denver-Lincoln (HRW) (D)
Minot-Minneapolis (D) (D)	44.5	44.5	—	+175	Cheyenne-Minneapolis (HRS) (HRS)

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TABLE 55. SUBSTITUTABILITY ANALYSIS RATE STABILITY INDICATORS OF DURUM, HARD RED SPRING, AND HARD RED WINTER WHEAT ACTIVE MARKETS, 1970, MODEL I, PHASE I, RATE SYSTEM I - continued

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot(D)- Great Lakes Export(D)	44.5	65.0	--	-330	Idaho Falls(HRS)- West Coast Export(D)
Minot- Buffalo (HRS) (HRS)	69.5	82.3	--	-7,699	Huron- Buffalo (HRS) (HRS)
Minot- Baltimore (HRS) (HRS)	122.0	123.3	--	-1	Knoxville- Baltimore (HRW) (HRS)
Minot- Great Lakes Export (HRS) (HRS)	44.5	44.5	--	-7,354	Denver- Great Lakes Export (HRW) (HRS)
Minot- Buffalo (HRS) (HRW)	69.5	82.3	--	-7,699	Huron- Buffalo (HRS) (HRW)
Minot- Baltimore (HRS) (HRW)	122.0	123.3	--	-1	Knoxville- Baltimore (HRW) (HRW)
Minot(HRS)- Great Lakes Export(D)	44.5	50.8	--	-178	Cheyenne(HRS)- Great Lakes Export(D)
Minot- Great Lakes Export (HRS) (D)	44.5	44.5	--	+3,676	Denver- Great Lakes Export (HRW) (HRS)

D - durum wheat

HRS - hard red spring wheat

HRW - hard red winter wheat

TABLE 56. SUBSTITUTABILITY ANALYSIS RATE STABILITY INDICATORS OF DURUM, HARD RED SPRING, AND HARD RED WINTER WHEAT ACTIVE MARKETS, 1975, MODEL I, PHASE I, RATE SYSTEM I

Origin-Destination	Current Rate	Maximum Rate Limit	Required Rate	Market Gain or Loss	Distribution Affected
Minot(D)- Great Lakes Export(D)	44.5	65.0	--	-676	Idaho Falls(HRS)- West Coast Export(D)
Minot- Buffalo (HRS) (HRS)	69.5	70.4	--	-2,623	Huron- Buffalo (HRS) (HRS)
Minot- Buffalo (HRS) (HRW)	69.5	70.4	--	-2,623	Huron- Buffalo (HRS) (HRW)
Minot- Great Lakes Export (HRS) (D)	34.6	35.7	--	-1,461	Huron- Minneapolis (HRW) (HRS)

D - durum wheat

HRS - hard red spring wheat

HRW - hard red winter wheat