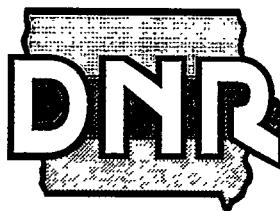


Iowa Department of Natural Resources

DOE/EI/29059-TJ



State of Iowa Heating Oil and Propane Program 1997-1998 Winter Heating Season

**Final Report
April 1998**

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A handwritten signature, appearing to be a stylized 'J' or 'L', is positioned above the word 'MASTER'.

MASTER

Prepared by the Iowa Department of Natural Resources
Energy and Geological Resources Division

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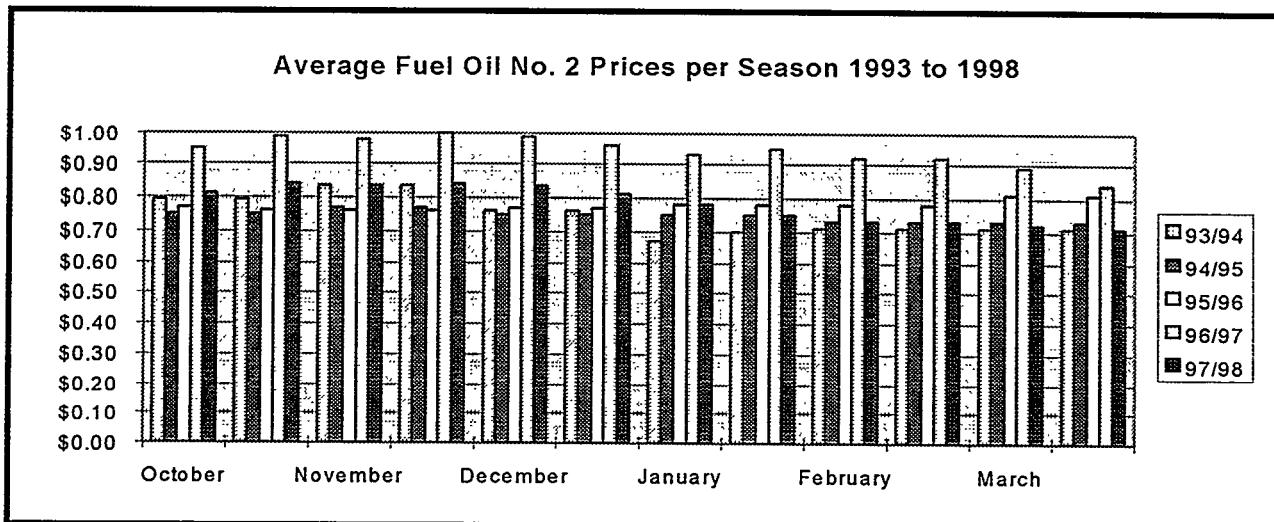
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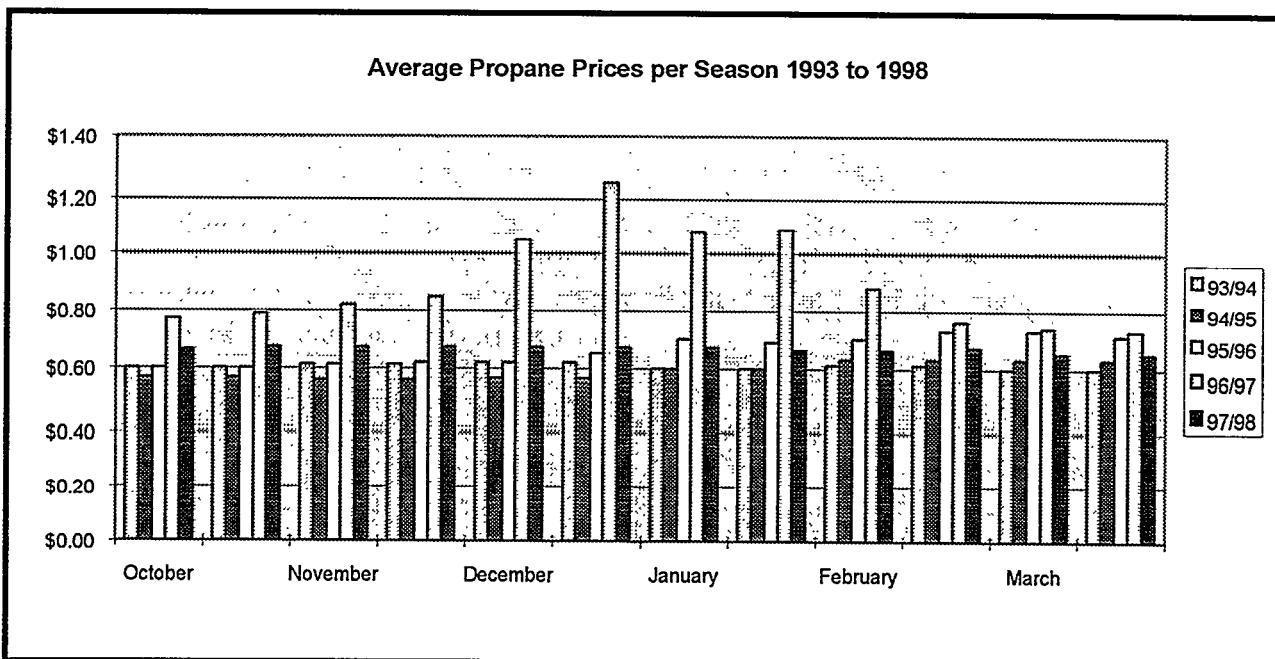
1997-98 Iowa Heating Oil And Propane Program Final Report

Executive Summary

Iowa heating oil prices began the most recent heating season higher than average. However, lower than normal demand due to the mild winter pushed heating oil well below average prices by the end of the year. The chart below shows the range of heating oil prices over the past five years.



Like heating oil, propane prices began the year higher than normal but slowly dropped almost to the five year lows found in early 1994. This drop in price was also due to the lower demand which occurred because of the milder than normal winter heating season. The graph below shows average monthly propane prices for the past five years.



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Iowa Residential No. 2 Heating Oil and Propane Price Survey 1997-1998 Heating Season

Introduction

This report summarizes the results of the residential No. 2 distillate fuel (home heating oil) and liquefied petroleum gas (propane) price survey over the 1997-1998 winter heating season in Iowa. The Iowa Department of Natural Resources (Department) conducted the survey under a cooperative financial assistance grant with the U.S. Department of Energy's (DOE) Energy Information Administration (EIA).

Program Objectives

1. The first objective of the Iowa Heating Oil and Propane Program is to develop a state-wide, company-specific data collection program. The data collected by Department staff is retail charge price information on home heating fuel oil and propane during the winter heating season.
2. The second objective is to electronically transmit the retail charge price information to EIA on a semi-monthly basis using the PC Electronic Data Reporting Option system (PEDRO).

Program Performance

The responsibilities of the Department included:

- Collection of semi-monthly price information on No. 2 home heating oil and propane from various Iowa based companies selected by DOE. Price information was collected the first and third Monday of each month from October 6, 1997 through March 16, 1998.
- Collection of the percentage of retail customers that elect to contract a specific amount of heating oil or propane for a specific price before the winter heating season begins. This information is collected from all of the Iowa based companies involved with the survey.
- Transmission of the collected data, within two working days, to the Energy Information Administration of the Department of Energy using the Petroleum Electronic Data Reporting Option (PEDRO)

Iowa has participated in the program since 1987.

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Retail No. 2 Home Heating Fuel Oil Prices

The average retail charge price of No. 2 home heating fuel oil in Iowa on October 6, 1997, was \$0.81 per gallon, excluding state sales tax. This price was \$0.01 lower than the average four year price (1994, 1995, 1996, and 1997) of \$0.82 per gallon. The October 6, 1997, price was substantially closer to the 4 year average price of \$0.82 per gallon.

The highest early October price for No. 2 home heating fuel oil was in 1990/91 during the Desert Shield/Desert Storm military operations. The price per gallon in early October of 1990 was over \$1.00 per gallon.

The average retail charge price for No. 2 home heating fuel oil for the last four years is listed in the following table.

Heating Season	Average Price
1997-98	\$0.81
1996-97	\$0.95
1995-96	\$0.77
1994-95 (base year)	\$0.75
Average 4 Year Price	\$0.82

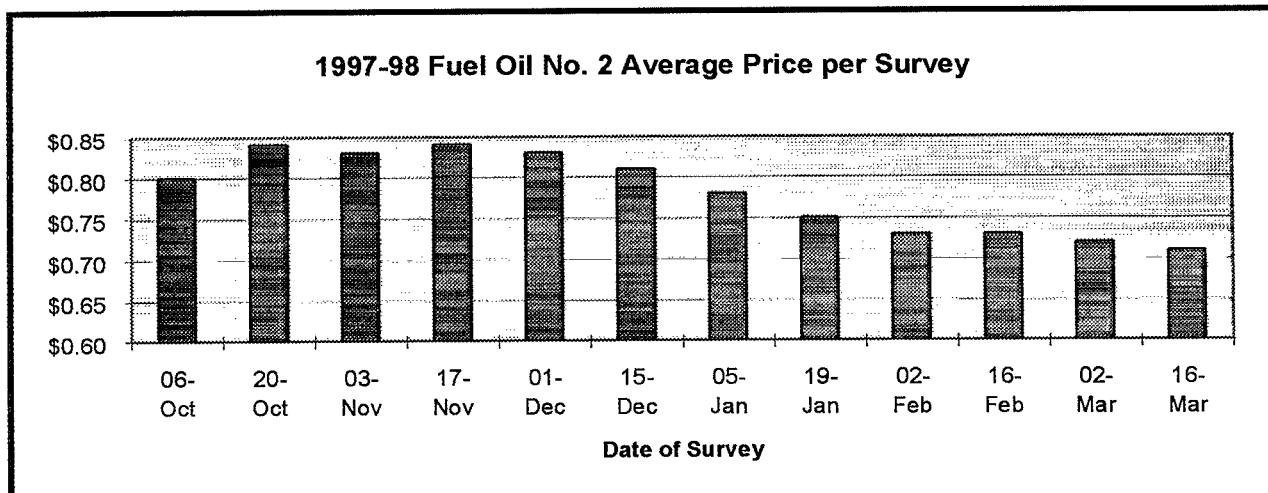
The average price for October heating oil has increased an average of about \$0.02 per year from the base year of 1994-95. The table below lists the October price for each heating season and the difference in price from the previous year.

Heating Season	Average October Price	Difference in Price from the Previous Year
1997-98	\$0.81	- \$0.14
1996-97	\$0.95	+ \$0.18
1995-96	\$0.77	+ \$0.02
1994-95	\$0.75	base year

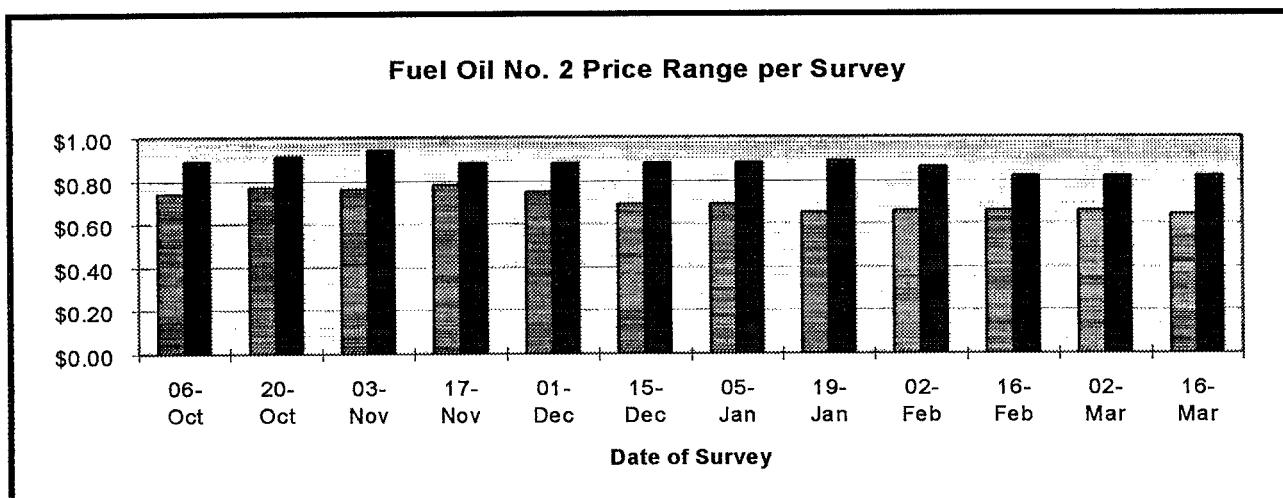
The increase in average price from the base year can generally be attributed to world wide market forces affecting wholesale prices, increasing worldwide crude oil demands, recent changes in historical weather patterns, instability in the OPEC countries and an industry wide move to just in time inventory.

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The chart below shows the 1997-98 winter heating season had a season high average price per gallon of \$0.84 on the October 20th and November 17th surveys. After the November 17th survey the average price per gallon started a downward trend and closed-out the heating season at \$0.71 per gallon.

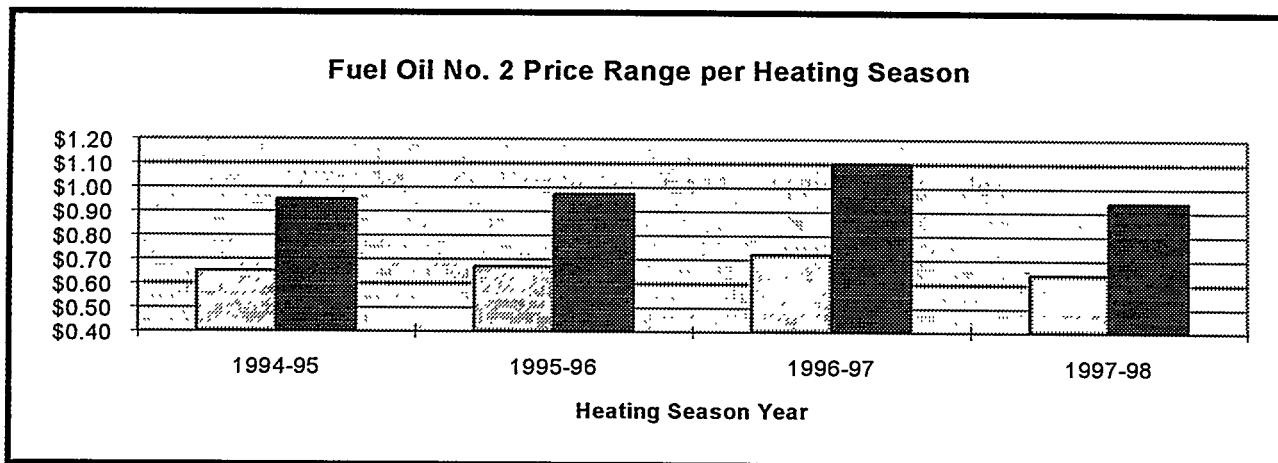


The chart below shows the price range per gallon of home heating fuel oil per survey. During the 1997-98 heating season the high price per survey ranged from \$0.82 to \$0.94 and the low price per survey ranged from \$0.64 to \$0.78.



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The chart below shows the price range per gallon of home heating fuel oil per heating season year.



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Retail Propane Prices

The average retail charge price of propane in Iowa on October 6, 1997, was \$0.66 per gallon, excluding state sales tax. This price was \$0.11 lower than the previous October and was \$0.01 less than the average four year price (1994, 1995, 1996, and 1997) of \$0.67 per gallon.

The average propane price increase for the period of October 6, 1997, to January 5, 1998, was \$0.01 per gallon. By the January 19, 1998, survey the price had dropped to \$0.01 less than the October 6, 1997, price of \$0.66 per gallon. The 1997-98 average peak price of \$0.67 was lower than 1996-97 average peak price of \$0.94 per gallon. At the end of the 1997-98 heating season survey, the average price had dropped to a survey low of \$0.65 per gallon.

The average retail charge price for propane for the last four years is listed in the following table.

Heating Season	Average Price
1997-98	\$0.66
1996-97	\$0.74
1995-96	\$0.67
1994-95 (base year)	\$0.59
Average 4 Year Price	\$0.67

The average price for October propane has increased an average of a little over \$0.02 per gallon from the base year of 1994-95. The table below lists the October price for each heating season and the difference in price from the previous year.

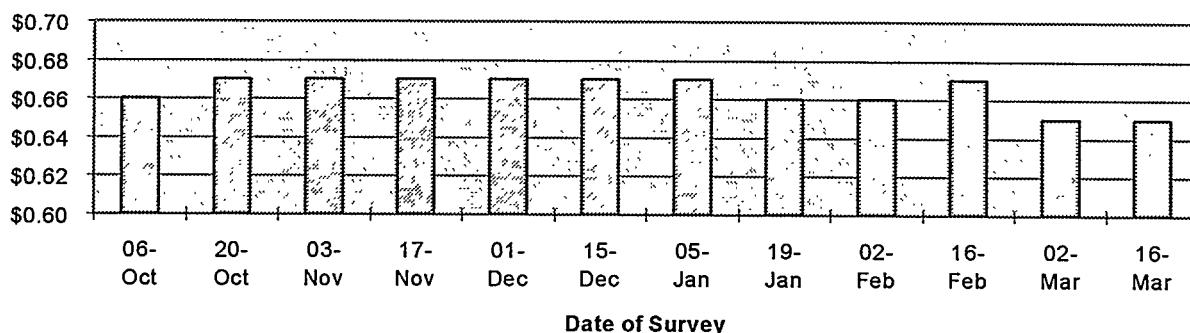
Heating Season	Average October Price	Difference in Price from the Previous Year
1997-98	\$0.66	- \$0.11
1996-97	\$0.77	+ \$0.17
1995-96	\$0.60	+ \$0.03
1994-95	\$0.57	base year

The increase in average price from the base year can generally be attributed to world wide market forces affecting wholesale prices, increasing worldwide crude oil demands, recent changes in historical weather patterns (early and colder winters, 1996-97), higher grain moisture content and later than normal 1997 grain harvest, instability in OPEC countries, and an industry wide move to just in time inventory.

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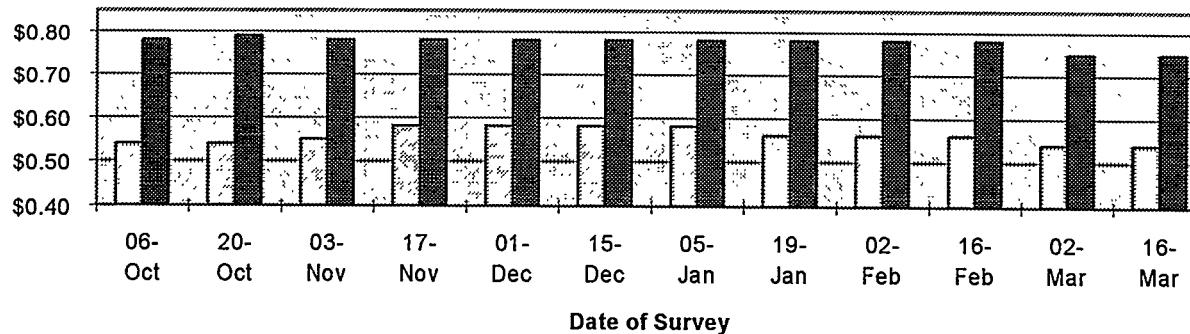
The chart below shows the 1997-98 winter heating season had a season high average price of \$0.67 per gallon from surveys conducted between October 20th and January 5th, 1998, and again on the February 16, 1998 survey. After the January 5th survey the average price per gallon dropped to \$0.66 for the next two surveys. The price per gallon was up to \$0.67 again on the February 16, 1998, survey and dropped to a heating season low of \$0.65 per gallon for the last two survey periods of the heating season.

1997-98 Average Propane Price per Survey



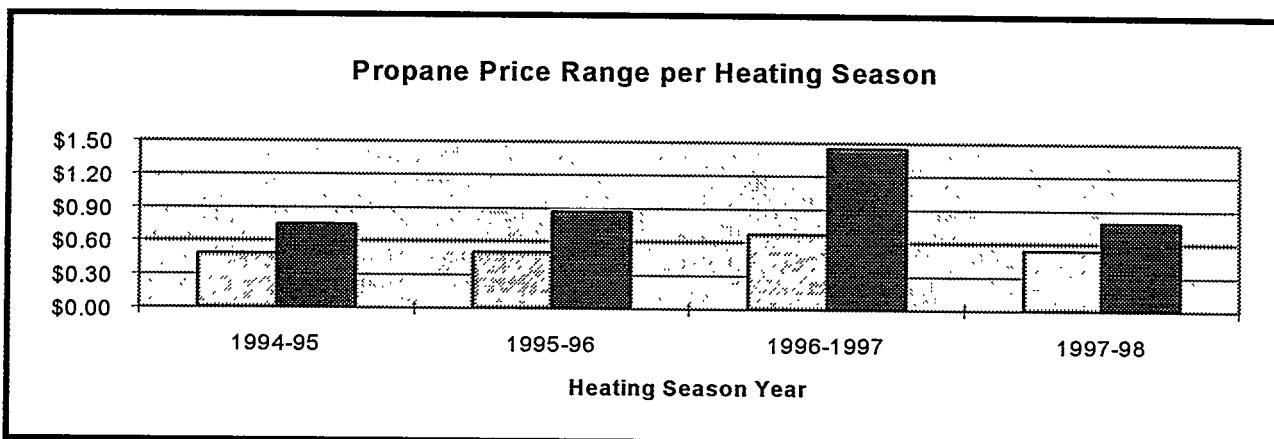
The chart below shows the price range per gallon of propane per survey. During the 1997-98 heating season the high price per survey ranged from \$0.75 to \$0.79 and the low price ranged from \$0.54 to \$0.58

1997-98 Propane Price Range per Survey



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The chart below shows the price range per gallon of propane per heating season year.



Methodology

The EIA determined the methods to be used in the State Heating Oil and Propane Program price survey. The Iowa Department of Natural Resources is provided a list of firms identified as residential distributors to be contacted regarding their participation in the price survey.

The residential price survey began on October 6, 1997, and was completed on March 16, 1998. Data from the survey is transmitted to EIA using DOE's Petroleum Electronic Data Reporting Option (PEDRO). The EIA compiled, processed and aggregated each state's reported data, weighting and stratifying against other data streams, to estimate a state's average price.

EIA lists the data on its Electronic Publication (EPUB) system. The EIA also published the results in the EIA Winter Fuels Report biweekly to the States, Congress and other governmental agencies. The data is posted on DOE's home page on the World Wide Web at "<http://www.eia.doe.gov>" or the Department's home page at "<http://www.state.ia.us>". More information is obtainable by calling the National Energy Information Center at 202/586-8800.