



Independent Statistics & Analysis

U.S. Energy Information
Administration

Supporting Statement for Petroleum Marketing Program

Part A: Justification

Form EIA-14, Refiners' Monthly Cost Report

Form EIA-182, Domestic Crude Oil First Purchase Report

Form EIA-782A, Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report

Form EIA-782C, Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption

Form EIA-821, Annual Fuel Oil and Kerosene Sales Report

Form EIA-856, Monthly Foreign Crude Oil Acquisition Report

Form EIA-863, Petroleum Product Sales Identification Survey

Form EIA-877, Winter Heating Fuels Telephone Survey

Form EIA-878, Motor Gasoline Price Survey

Form EIA-888, On-Highway Diesel Fuel Price Survey

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Introduction

The U.S. Energy Information Administration (EIA) is the statistical and analytical agency within the Department of Energy (DOE). It collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding regarding energy and its interaction with the economy and the environment. EIA is required to publish, and otherwise make independent, high-quality statistical data available to federal government agencies, state and local governments, the petroleum marketing industry, and the general public.

To meet this obligation, EIA's Office of Petroleum and Biofuels Statistics (PBS) Petroleum Marketing Statistics Team conducts surveys that collect information about petroleum marketing industry activities from entities marketing crude oil and petroleum products. EIA is requesting a 3-year approval for ten surveys designed to collect this information. Upon approval, EIA will continue to use the existing forms to collect data on its monthly surveys using the present version of the forms to collect data covering sales activity for the September 2017 reference month during the October 2017 calendar month. The existing monthly forms are Forms EIA-14, EIA-182, EIA-782A, EIA-782C, and EIA-856. The weekly forms are Forms EIA-877, EIA-878, and EIA-888. See section A.2.2.2 for detailed changes.

Table A1: Petroleum Marketing Program (PMP) Data Collection Forms

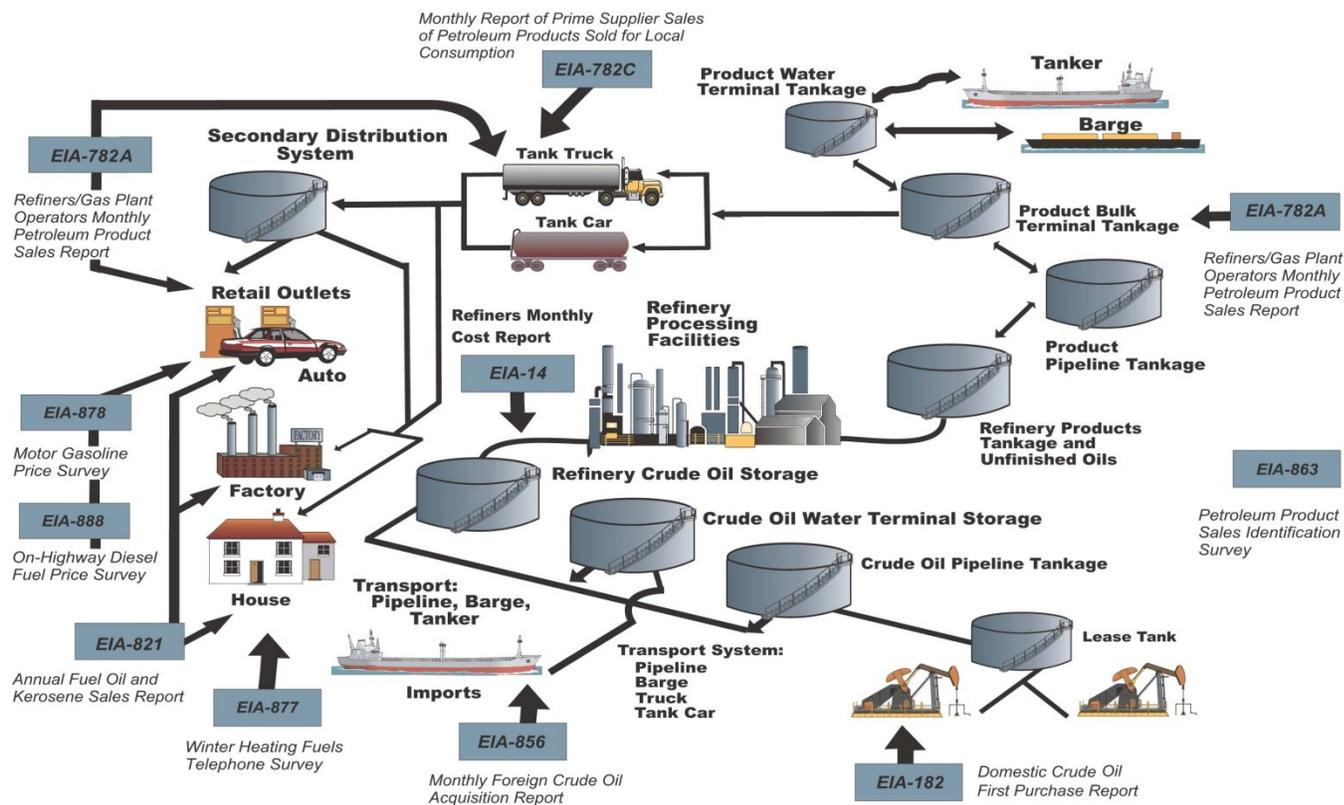
Form EIA-14	Refiners' Monthly Cost Report
Form EIA-182	Domestic Crude Oil First Purchase Report
Form EIA-782A	Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report
Form EIA-782C	Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption
Form EIA-821	Annual Fuel Oil and Kerosene Sales Report
Form EIA-856	Monthly Foreign Crude Oil Acquisition Report
Form EIA-863	Petroleum Product Sales Identification Survey
Form EIA-877	Winter Heating Fuels Telephone Survey
Form EIA-878	Motor Gasoline Price Survey
Form EIA-888	On-Highway Diesel Fuel Price Survey

The information collection proposed in this supporting statement has been reviewed in light of applicable Information Quality Guidelines. It has been determined that the information will be collected, maintained, and used in a manner consistent with the Office of Management and Budget (OMB) and DOE's Information Quality Guidelines.

Background on Petroleum Marketing Program (PMP)

The Petroleum Marketing Program (PMP) collects and publishes data on the nature, structure, and efficiency of petroleum markets at the national, regional, and state levels. The following diagram displays the points of data collection in the petroleum distribution chain for the surveys in the PMP. Through integration of ten surveys, EIA monitors petroleum volumes and prices as the commodity moves through the various stages from importation of the raw material to refining to create the finished products to transfer/distribution from the refiner to the retail outlets to sales to ultimate consumers. The program conducts three sub-groups of surveys. Each of these groups of surveys has its own sampling frame.

PETROLEUM MARKETING DATA COLLECTION



- The first sub-group of surveys includes Forms EIA-182, EIA-856, and EIA-14. These surveys collect data on crude oil acquisition costs and crude oil volumes from first purchasers, importers and refiners.
- The second sub-group of surveys includes Forms EIA-782A, EIA-782C, and EIA-821. These surveys collect data on refined petroleum product sales volumes and/or prices from refiners, importers, and petroleum product distributors. Forms EIA-782A and EIA-821 collect at the end-use sector level for which reference guides are included.
- The third sub-group of surveys includes Forms EIA-877, EIA-878, and EIA-888. These surveys collect price data for end-users of refined petroleum products where the reporting unit is a retail outlet. The published prices are average prices. Price data are weighted using volume measures which are derived from a related survey. The data reported on the three weekly surveys are point-in-time estimates. More information is available about these point-in-time estimates in Supporting Statement Part B.
- Form EIA-863, which collects size, type, and location data on companies engaged in sales of petroleum products. This survey is the sampling frame for several surveys in the Petroleum Marketing Program including Forms EIA-821 and EIA-877. It also supports the sample designs for Forms EIA-878 and EIA-888 by providing a measure of size and distribution of firms that have retail sales of gasoline and diesel fuel.

Crude Oil Acquisition Costs and Volumes Acquired

Form EIA-182, the Domestic Crude Oil First Purchase Report, is a mandatory monthly census of firms that take or retain ownership (equity not custody) of domestic crude oil leaving the lease on which it was produced for sale within the United States including the Outer Continental Shelf. Firms report, by stream, the volume in barrels and the weighted average cost per barrel for purchases they made in the reference month.

Form EIA-856, the Monthly Foreign Crude Oil Acquisition Report, is a mandatory monthly census of two populations. The first population is comprised of firms that reported data as of June 1982 on the Transfer Pricing Report (ERA-51). The second population is comprised of firms acquiring more than 500,000 barrels of foreign crude oil for importation to the United States and its territories/possessions

during the reporting month. Firms report country of origin, volume acquired in barrels, and cost for each acquisition made in the reference month.

The Refiners' Monthly Cost Report (EIA-14) is a mandatory monthly census of firms who own or control refining operations in the United States and its territories/possessions. Firms report for the total volume of crude oil acquired in thousands of barrels during the month and all costs associated with its acquisition and transport to the refinery in thousands of dollars. This data is reported by [Petroleum Administration for Defense Districts](#) (PADD). It is reported for all domestic and imported crude oil purchases.

Petroleum Product Prices and Sales Volumes

Form EIA-782A, the Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report, is a mandatory monthly census of firms who either directly, or indirectly - e.g. through a subsidiary company - control a refinery or a gas plant located in the United States. Firms submit their sales volumes, measured in thousands of gallons, and the average selling price per gallon, excluding taxes, for each of the selected finished petroleum products by state, sales type, and user category. The petroleum products are motor gasoline (by formulation and grade), No. 2 diesel fuel (by sulfur content), No. 2 fuel oil, propane, No. 1 distillate, kerosene, aviation gasoline, kerosene-type jet fuel, No. 4 fuel oil, and residual fuel oil (by sulfur content).

Retail sales of gasoline are partitioned into sales through company-operated retail outlets and direct sales to other end-users, while wholesales, or sales for resale, are partitioned into dealer tank wagon (DTW) sales, rack sales, and bulk sales. DTW sales are defined as sales priced on a delivered basis to a retail outlet. Rack sales are defined as truckload sales or smaller where the title transfers at a terminal rack loading facility. Bulk sales are individual sales transactions that exceed the size of a truckload (for example, barge, railcar, or pipeline loads).

Retail sales of No. 2 distillates and propane are partitioned by customer type. The categories include: residential sales, commercial/institutional sales, industrial sales, sales through company-operated retail outlets, petrochemical sales (propane only), and sales to other end-users. In contrast to the differentiation of gasoline wholesales, No. 2 distillates and propane wholesales are reported as a group.

Form EIA-782C, the Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption, is a mandatory monthly census of petroleum product suppliers who make the first sale of specified petroleum products and then deliver that product into a state for consumption in that state. Firms report by state on their monthly sales in thousands of gallons for finished motor gasoline (by formulation and grade), No. 2 diesel fuel (by sulfur content), No. 2 fuel oil, propane, No. 1 distillate, kerosene, aviation gasoline, kerosene-type jet fuel, No. 4 fuel oil, and residual fuel oil (by sulfur content).

Form EIA-821, the Annual Fuel Oil and Kerosene Sales Report, is a mandatory annual sample survey of companies that deliver or sell distillate, residual fuel oils, and kerosene. Firms report annual sales volume in gallons by state of destination by product type and by energy end use - residential, commercial, industrial, oil company, railroad, vessel bunkering, farm, military, on-highway, off-highway, electric power, and other uses. Annual sales are reported for kerosene, distillates by type of distillate - No. 1 fuel oil, No. 2 fuel oil, No. 2 ultra-low sulfur diesel, No. 2 low sulfur diesel, No. 2 high sulfur diesel, No. 4 fuel oil - and residual fuel oil.

End-User Prices for Petroleum Products

Form EIA-877, the Winter Heating Fuels Telephone Survey, is a mandatory sample survey by telephone of No. 2 heating oil and propane dealers in 38 Eastern, Midwestern, Gulf Coast, and Rocky Mountain states. During the heating season from October to March, sample dealers report each week on their residential prices for No. 2 heating oil and propane as of the reference day for each of the states for which they were sampled. During the first telephone call at the beginning of the heating season, sampled dealers report their annual sales volume in thousands of gallons for each of the states for which they were sampled for the 12-month period from September 1 to August 31.

Form EIA-878, the Motor Gasoline Price Survey is a mandatory sample survey of retail outlets selling motor gasoline that collects information mainly by telephone but also by email. Each week, sampled outlets report the retail pump price of regular, midgrade, and premium grades of cash only, self-service unleaded gasoline - including taxes.

Form EIA-888, the On-Highway Diesel Fuel Price Survey, is a mandatory sample survey of retail outlets selling on-highway motor vehicle diesel fuel that collections information mainly by telephone but also by

email and web retrievals. Each week, sampled outlets report the retail pump price of cash only, self-service, on-highway motor vehicle diesel fuel - including taxes.

Companies Engaged in Petroleum Product Sales

Form EIA-863, the Petroleum Product Sales Identification Survey, is a mandatory census of (1) resellers and retailers of No. 2 distillate, motor gasoline, propane, and residual fuel oil and (2) companies that sell kerosene, No. 1 distillate, crude oil, other Liquefied Petroleum Gas (LPG), No. 4 fuel oil, aviation gasoline, jet fuel, or other petroleum products. The census occurs every four years and is used as the frame for drawing the samples for Forms EIA-821, EIA-877, EIA-878, EIA-888, and EIA-886 propane only. Since annual sales data are collected on Form EIA-821, the EIA-821 respondents are not required to report on Form EIA-863.

Uses of Data in Recurring EIA Publications

EIA publishes the following petroleum publications which contain data from the surveys in the PMP:

Annual	Petroleum Supply Annual (PSA), Volume 1
	Petroleum Supply Annual (PSA), Volume 2
	Fuel Oil and Kerosene Sales (FOKS)
Monthly	Petroleum Marketing Monthly (PMM)
	Petroleum Supply Monthly (PSM)
	Prime Supplier Report
Weekly	Gasoline and Diesel Fuel Update (GDFU)
	Heating Oil and Propane Update (HOPU)
	This Week in Petroleum (TWIP)
	Weekly Petroleum Status Report (WPSR)

The following EIA publications integrate data from the PMP with other data sources:

Annual	Annual Energy Review (AER)
	Annual Energy Outlook (AEO)
	International Energy Outlook (IEO)
	State Energy Data System (SEDS)
	U.S Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Report

Monthly	Monthly Energy Review (MER) Short-Term Energy Outlook (STEO)
Other	Today in Energy

The following table identifies recurring EIA publications which use data from each of the surveys in the Petroleum Marketing Program. The data are critical (C), Very Important (V), or Somewhat Important (S) to the AEO, AER, MER, and STEO. Critical means that the publication could not occur without this information. Important means the publication can occur without it using other exogenous data or modeled estimates that are less accurate.

Table A2: Relationship between PMP Surveys and EIA Publications

Survey No.	MER	AER	STEO	AEO	Other recurring EIA Publications
EIA-14 Crude Oil Acquisition Costs	V	V	-	C	Petroleum Marketing Monthly , State Energy Data System (SEDS)
EIA-182 Crude Oil First Purchases and Costs	V	C	-	C	Petroleum Marketing Monthly , Petroleum Supply Monthly , Petroleum Supply Annual, Volume 1 , Petroleum Supply Annual, Volume 2
EIA-782A Refiners'/ Gas Plant Operators' Petroleum Sales	C	C	C	C	Petroleum Marketing Monthly , State Energy Data System (SEDS)
EIA-782C Suppliers, Local Sales	C	C	S	V	Petroleum Marketing Monthly , State Energy Data System (SEDS) , Prime Supplier Report
EIA-821 Fuel Oil and Kerosene Sales	C	C	-	V	Fuel Oil and Kerosene Sales , State Energy Data System (SEDS)
EIA-856 Foreign Crude Acquisition	V	V	-	V	Petroleum Marketing Monthly
EIA-877 Winter Heating Oil Prices	-	-	C	-	Heating Oil and Propane Update , This Week In Petroleum , Winter Heating Fuels , State Energy Data System (SEDS)
EIA-878	-	C	C	-	Gasoline and Diesel Fuel Update , This Week In Petroleum , Weekly Petroleum Status Report , State Energy Data

Gasoline Prices					System (SEDS)
EIA-888 Diesel Prices	-	C	C	-	Gasoline and Diesel Fuel Update , This Week In Petroleum , Weekly Petroleum Status Report

A.1. Legal Justification

The authority for this mandatory data collection is provided by the following provisions:

- a. **15 U.S.C. 772(b)** states:
 - a. "All persons owning or operating facilities or business premises who are engaged in any phase of energy supply or major energy consumption shall make available to the Administrator such information and periodic reports, records, documents, and other data, relating to the purposes of this Act, including full identification of all data and projections as to source, time and methodology of development; as the Administrator may prescribe by regulation or order as necessary or appropriate for the proper exercise of functions under this chapter."
- b. **15 U.S.C. 764(b)** states that to the extent authorized by subsection (a), the Administrator shall:
 - a. (1) advise the President and the Congress with respect to the establishment of a comprehensive national energy policy in relation to the energy matters for which the Administration has responsibility, and, in coordination with the Secretary of State, the integration of domestic and foreign policies relating to energy resource management;
 - b. (2) assess the adequacy of energy resources to meet demands in the immediate and longer range future for all sectors of the economy and for the general public;
 - c. (3) develop effective arrangements for the participation of State and local governments in the resolution of energy problems;
 - d. (4) develop plans and programs for dealing with energy production shortages; ...
 - e. (5) promote stability in energy prices to the consumer, promote free and open competition in all aspects of the energy field, prevent unreasonable profits within the various segments of the energy industry, and promote free enterprise;
 - f. (6) assure that energy programs are designed and implemented in a fair and efficient manner so as to minimize hardship and inequity while assuring that the priority needs of the Nation are met;
 - g. (9) collect, evaluate, assemble, and analyze energy information on reserves, production, demand, and related economic data;
 - h. (12) perform such other functions as may be prescribed by law."
- c. As the authority for invoking subsection (b), above, **15 U.S.C. 764(a)** states:
 - a. "Subject to the provisions and procedures set forth in this Act, the [Secretary] shall be responsible for such actions as are taken to assure that adequate provision is made to meet the energy needs of the Nation. To that end, he shall make such plans and direct and conduct such programs related to the production, conservation, use, control,

distribution, rationing, and allocation of all forms of energy as are appropriate in connection with only those authorities or functions-

- i. (1) specifically transferred to or vested in him by or pursuant to this chapter;
 - ii. (3) otherwise specifically vested in the Administrator by the Congress."
- d. Additional authority for this information collection is provided by **15 U.S.C. 790(a)** which states;
- a. "It shall be the duty of the Director to establish a National Energy Information System... [which] shall contain such information as is required to provide a description of and facilitate analysis of energy supply and consumption within and affecting the United States on the basis of such geographic areas and economic sectors as may be appropriate... to meet adequately the needs of..."
 - i. (1) the Department of Energy in carrying out its lawful functions;
 - ii. (2) the Congress;
 - iii. (3) other officers and employees of the United States in whom have been vested, or to whom have been delegated energy-related policy decision-making responsibilities;
 - iv. (4) the States to the extent required by the Natural Gas Act [15 U.S.C. 717 et seq.] and the Federal Power Act [16 U.S.C. 791a et seq.].
 - b. "At a minimum, the System shall contain such energy information as is necessary to carry out the Administration's statistical and forecasting activities, and shall include... such energy information as is required to define and permit analysis of;
 - i. (1) the institutional structure of the energy supply system including patterns of ownership and control of mineral fuel and non-mineral energy resources and the production, distribution, and marketing of mineral fuels and electricity;
 - ii. (2) the consumption of mineral fuels, non-mineral energy resources, and electricity by such classes, sectors, and regions as may be appropriate for the purposes of this chapter;
 - iii. (5) industrial, labor, and regional impacts of changes in patterns of energy supply and consumption;
 - iv. (6) international aspects, economic and otherwise, of the evolving energy situation; and
 - v. (7) long-term relationships between energy supply and consumption in the United States and world communities."

In addition, these surveys partially satisfy the requirements of Section 507 of Part A of Title V of the Energy Policy and Conservation Act of 1975 (42 U.S.C. § 6385) as amended by the Energy Emergency Preparedness Act of 1982, P.L. 97-229, which states:

"The President or his delegate shall, pursuant to authority otherwise available to the President or his delegate under any other provision of law, collect information on the pricing, supply, and distribution of petroleum products by product category at the wholesale and retail levels, on a

State-by-State basis, which was collected as of September 1, 1981, by the Energy Information Administration.”

Sections 252 through 254 of the Energy Policy and Conservation Act of 1975 (P.L. 94-163) (EPCA) provide for the U.S. participation in the IEA (International Energy Agency) through its Emergency Allocation System and its special information systems. The EPCA provides additional authority for collection of Form EIA-856 data as provided in 42 U.S.C. § 6274 (a)(1) which states:

“Except as provided in subsections (b) and (c), the Secretary, after consultation with the Attorney General, may provide to the Secretary of State, and the Secretary of State may transmit to the International Energy Agency established by the international energy program, the information and data related to the energy industry certified by the Secretary of State as required to be submitted under the international energy program.”

In addition, Section 407(a)(3) of the Energy Policy Act of 1992 (P.L. 102-486) (EPACT) (42 U.S.C. § 13233) requires the Energy Information Administration to establish a data collection program which collects cost data on alternative fuels. EPACT provides additional authority for collection of EIA-782A data on propane sales as provided by Section 407(a)(3) which states:

- (a) “Not later than one year after the date of enactment of this Act, the Secretary, through the Energy Information Administration, and in cooperation with appropriate State, regional, and local authorities, shall establish a data collection program to be conducted in at least 5 geographically and climatically diverse regions of the United States for the purposes of collecting data which would be useful to persons seeking to manufacture, convert, sell, own, or operate alternative fueled vehicles or alternative fueling facilities. Such data shall include-...
 - (3) cost, performance, environmental, energy, and safety data on alternative fuels and alternative fueled vehicles.”

Public Law 113-269 was enacted on December 18, 2014 and requires that the Secretary of Commerce use "the refiner price to end users of consumer grade propane, as published by the Energy Information Administration" in propane price analysis to be shared with the public.

A 2014 testimony by Melanie Kenderdine, Director of the Office of Energy Policy and Systems Analysis and Energy Counselor, U.S. Department of Energy to the Senate Committee on Energy and Natural Resources entitled “*Short On Gas: A Look Into The Propane Shortages This Winter*” highlighted the current issues faced in analyzing the propane market. This prompted EIA to expand the number of state-level propane prices for the 2014/15 heating season, which strongly improved the robustness of the data collected for analysis of propane markets.

A.2. Needs and Uses of Data

A.2.1. Overview of Data Uses

The purpose of the agency's petroleum product price, supply, and market distribution data program is to provide a set of basic data pertaining to the nature, structure, and operating efficiency of petroleum markets. Adequate evaluation of market behavior requires price, demand (or sales), product supply, and market distribution data. Specifically, these data collection efforts support the following points:

- a. The program meets DOE legislative mandates and user community data needs. These responsibilities are delineated in the Federal Energy Administration Act of 1974, as amended by FEAA, Public Law 93-275, and the Energy Policy and Conservation Act of 1975 as amended by the Energy Emergency Preparedness Act of 1982, P.L. 97-229. General energy data collection responsibilities involve the requirements to collect information on the institutional structure of the energy supply system; the production, distribution, marketing and consumption of energy commodities; and the international aspects of the energy situation. EIA is also explicitly directed to collect energy price data and to collect such data - i.e., both supply and price data - with particular reference to the distribution area of states.
- b. The data EIA collects are used to address significant energy industry issues. For example in line with its mandated responsibility to collect data that adequately describe the petroleum marketplace, EIA evaluates the significance of a number of important issues related to the energy industry and in particular the petroleum industry. This includes issues such as divestiture, mergers, withdraw from a geographic or product market, predatory practices, and product margins that require the Department of Energy's involvement. According to the significant users within the Congress, the Executive Branch, and among the states, the data collected by the surveys in the Petroleum Marketing Program are essential to address these issues.
- c. EIA must collect some data at the state level. Congressional and state users have emphasized their need for such data. EIA's collection of these data is consistent with its mandated responsibilities to collect specific product information for appropriate geographic areas and economic sectors, to act as a central clearing house, and to disseminate relevant information to the states. In addition, EIA has a continuing mission to minimize the industry burden that might be caused by the institution of a large number of individual and disparate state data collection systems.

- d. Alternative data sources do not adequately satisfy the needs of EIA and its user communities. Accurate, meaningful, and independent price, supply, and demand statistics are essential to describe and measure phenomena in the marketplace. It is necessary that this information be collected by an unbiased, independent source if the data are to be credible.

EIA maintains that the data collected on these forms are unique. While somewhat similar or related data may be available from private and/or industry sources, as well as from other federal agencies, such data are not reasonable alternatives for the data provided by the surveys in the PMP.

The information to be collected will provide weekly, monthly, and annual time series data on volumes and sales of crude oil (both imports and domestic) and petroleum products for the petroleum marketing industry.

A.2.2. Overview of Data Collections

A.2.2.1. Individual Form Data Uses and Modifications

EIA is the only independent source of price and distribution data covering all energy sources and key products, markets, and end-use sectors at the state level. The most frequent users of the Petroleum Marketing Program data include Congress, government agencies, industry analysts, and trade publications. EIA data are often reprinted and/or cited in various publications and journals, including recurring EIA publications.

Federal and state government agencies are frequent and regular users of petroleum product supply, marketing, and distribution data. For example, Form EIA-782 data are utilized by many states in developing and managing their energy programs. Petroleum data offers government and industry analysts a base to analyze and develop an understanding of energy production, flow, use, and markets. Because a wide variety of energy production and consumption patterns exist among governments and industries, the needs for and uses of petroleum data vary and include:

- Prices - petroleum prices, including crude oil, motor gasoline, residual fuel oil, distillate fuel oil, kerosene, propane, and aviation fuels.
- Supplies - the availability of petroleum supplies, including crude oil and finished products.
- Consumption - petroleum consumption by end-use sectors, including residential and

commercial, industrial, transportation, and utilities.

- Imports - petroleum imports, including crude oil and refined products.
- Production - field production of crude oil, stock withdrawals of crude oil and petroleum products, and ending stocks.

Federal and state officials consider EIA data important to their energy emergency planning and analysis. According to these officials, an important aspect of EIA data is their uniformity and comparability from state to state. This allows comparison of similar data from one state to another and provides a common base from which to assess the effects of an oil supply disruption. A partial list of Federal and State data users, including many agencies which are mentioned below.

Federal agencies which use data from PMP include:

[U.S. Customs and Border Patrol \(CBP\)](#)

U.S. Department of Commerce's [Bureau of Economic Analysis \(BEA\)](#)

[U.S. Department of Energy \(DOE\)](#)'s [Office of Energy Efficiency and Renewable Energy \(EERE\)](#), [Energy Information Administration](#), [Office of Fossil Energy](#), Federal Weatherization Program (WAP), and other offices

U.S. Department of Interior (DOI)'s [Congressional Joint Committee on Taxation](#) and the [Bureau of Ocean Energy Management](#)

U.S. Department of Labor (DOL)'s [Bureau of Labor Statistics \(BLS\)](#)

U.S. Department of Treasury's [Internal Revenue Service](#)

U.S. Department of Transportation's [Federal Highway Administration's \(FHWA\)](#)

- [U.S. Environmental Protection Agency \(EPA\)](#)
- [U.S. General Services Administration \(GSA\)](#)
- [U.S. Postal Service](#)

State agencies which use data from PMP include:

[California's Energy Commission \(CEC\)](#)

[Connecticut's Department of Energy & Environmental Protection](#)

Delaware Energy Office in the State's [Division of Clean Energy and Climate](#)

[Illinois' Energy Office](#) in the Department of Commerce and Economic Opportunity

[Indiana's Office of Energy Development](#)

[Louisiana's Department of Natural Resources](#)

[Maryland's Energy Administration](#)

Massachusetts' [Department of Energy Resources](#)

New Hampshire's [Office of Energy and Planning](#)

New Jersey's [Office of Clean Energy](#)

[New York State Energy Research and Development Authority](#)

[Pennsylvania Department of Environmental Protection](#)

[Virginia's Department of Mines, Minerals and Energy](#)

[Washington State Energy Office](#)

A.2.2.2. Summary of Modifications to Surveys in the PMP

EIA is building a new respondent frame and reselecting the respondent sample for the weekly EIA-878 survey. The redesign would require EIA to ask the sampled stations for their annual sales volume of gasoline by grade at the time of sample initiation and on a triennial basis. EIA will also ask for the number of motor gasoline pumps at the station at sample initiation when contact name and information are being established. In addition, due to the increase of crude oil activity in the North Dakota region, EIA is proposing to replace North Dakota Sweet Crude Stream with the predominant North Dakota Bakken Crude Stream to provide an accurate price estimate for an important high volume crude stream regularly traded in domestic crude oil markets.

- [Form EIA-14, "Refiners' Monthly Cost Report"](#) - No change.
- [Form EIA-182, "Domestic Crude Oil First Purchase Report"](#) - Replace North Dakota Sweet Crude Stream with North Dakota Bakken Crude Stream.
- [Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report"](#) - No change. Form EIA-782A Exclusionary List is updated quarterly, if needed, due to industry changes.
- [Form EIA-782C, "Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption"](#) - No change. Form EIA-782C Exclusionary List is updated quarterly, if needed, due to industry changes.
- [Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report"](#) - No change.
- [Form EIA-856, "Monthly Foreign Crude Oil Acquisition Report"](#) - Companies reporting data in June 1982 on the Transfer Pricing Report (Form ERA-51) regardless of the total volumes of crude

oil that were imported will no longer need to file a monthly report. The list of Crude Stream Codes in Appendix A and U.S. Port Codes in Appendix B will be updated as needed.

- [Form EIA-863, “Petroleum Product Sales Identification Survey”](#) – The confidentiality pledge was changed.
- [Form EIA-877, “Winter Heating Fuels Telephone Survey”](#) – Add annual heating oil sales volumes.
- [Form EIA-878, “Motor Gasoline Price Survey”](#) – Add collection of annual sales volume for regular, midgrade, and premium and reselect the sample from a newly constructed frame. The confidentiality pledge was changed.
- [Form EIA-888, “On-Highway Diesel Fuel Price Survey”](#) – The confidentiality pledge was changed.

A.2.2.3. Details on the Use and Purpose for Each Form

A.2.2.3.1 Monthly Crude Oil Surveys (EIA-14, EIA-182, and EIA-856)

❖ **EIA-14, “Refiners’ Monthly Cost Report”**

Form EIA-14 is a mandatory survey of refiners and collects data used to measure the acquisition cost of crude oil. These data are widely used for the following purposes:

- Projecting crude oil and petroleum product prices
- As an input component for calculation of the Gross Domestic Product (GDP)
- Monitoring current national price levels
- Performing market analyses

The data serve as the most reliable and accurate indicators of price paid by U.S. refiners for crude oil. These price indicators are used to compare a company’s average purchasing price to the U.S. and [Petroleum Administration for Defense Districts](#) (PADD) average price, and as a key variable in models used to forecast future price trends.

Congress and government agencies - federal, state and local - use aggregate statistics based on EIA-14 data, in conjunction with EIA’s other petroleum price data, to monitor current national price levels and to benchmark their state data. The data are also used to meet state and congressional requirements for price projections and to determine the impact on national or state crude oil demand. Examples include:

- BEA uses Form EIA-14 data to determine the costs of crude oil to refiners for calculating the U.S. GDP. These data are used as an index to adjust the cost of crude oil in BEA’s model.

- DOE and select State Energy Offices (SEO) use aggregate statistics based from Form EIA-14, in conjunction with EIA's other petroleum price data, to monitor national price levels and to benchmark state data.
- The data are also used to meet state and congressional requirements for price projections and to determine the impact on national or state demand.
- The planning/purchasing offices of a number of oil corporations also use Form EIA-14 crude oil prices.

These statistics serve as the most reliable and accurate indicator of crude oil acquisition price paid by U.S. refiners. These price indicators are used to compare a company's average purchasing price to the U.S. and PADD average price, and as a key variable in models used to forecast future price trends. EIA-14 statistics are also used throughout the industry as a basis for adjusting prices in escalator clauses in contracts.

The importance and usefulness of EIA-14 data to the industry are demonstrated by the frequent appearance of these data in industry newsletters, trade journals and the general press. Form EIA-14 data are republished or quote in articles in journals and publications, including:

- [WTRG Economics Oil Price and History Analysis](#) use both Refiner Acquisition Cost of Crude Oil and Domestic First Purchase in its analysis.
- The [Oil and Gas Journal](#) references the Refiner Acquisition Cost of Crude Oil.
- The Refiner Acquisition Cost used in analysis in *EIA Today* article, April 6, 2012, on "[Regional differences for cost of crude oil to refiners widen in 2011](#)"
- Bloomberg references the Imported Refiners' Acquisition Cost of Crude Oil.

❖ **Form EIA-182, "Domestic Crude Oil First Purchase Report"**

Form EIA-182, Domestic Crude Oil First Purchase Report, is a mandatory survey conducted monthly to collect detailed information on the wellhead price of domestic crude oil. This survey collects the average cost per barrel of crude oil and the total volume purchased of requested crude streams in a state. A weighted average first purchase price is then calculated from the cost and volume data. EIA-182 data have a variety of users, including federal and state government agencies, private industry firms and universities. The data are used for the following purposes:

- A. Revenue and tax credits – e.g., calculating income tax credits and verifying futures, spot and posted prices, and revenues.

- B. Industry and market analysis – e.g., measuring the level of industry concentration and the distribution of ownership of domestic crude oil and monitoring the petroleum refining industry.
- C. Policy analysis and forecasting – e.g., emergency preparedness planning; evaluating legislative, administrative, and regulatory issues pertaining to domestic crude oil markets; forecasting prices downstream for refined products at the refinery gate and subsequent wholesale and retail sales; and for forecasting tax revenues, state-level production volumes and prices in the MER and the STEO.
- D. Crude oil data from Form EIA-182 are used frequently by Congress and federal agencies, including: the Office of Petroleum, Natural Gas and Biofuels Analysis and the Office of Energy Markets and Financial Analysis at EIA; the IRS at the Treasury Department; Bureau of Economic Analysis (BEA), the U.S. Census Bureau; and the Congressional Joint Committee on Taxation at the Department of Interior; and the Commodities Futures Trading Commission.

EIA uses the data primarily for forecasting revenues and production of crude oil, monitoring key energy markets, and conducting economic analyses and projections. The Office of Oil, Gas, and Coal Supply Statistics of EIA inputs state level EIA-182 data to a forecasting model to project U.S. production levels and associated prices for domestic crude. EIA publishes the crude oil first purchase price data in the MER, PMM, PSM, PSA, and AER.

For example, EIA publishes monthly and annual U.S. crude oil production estimates in the [Petroleum Supply Monthly](#), [Petroleum Supply Annual](#), and [Petroleum Navigator](#). In order to make these monthly estimates, EIA relies on Forms EIA-914, “Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report” on external data sources (from states) and EIA-182 first purchaser volume data to calculate estimates.

The initial estimates of [U.S. Petroleum Administration for Defense District](#) (PADD) and state crude oil production for the current reference month published in the *Petroleum Supply Monthly* (PSM) and *Petroleum Navigator* are based on: (a) Form EIA-914, “Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report,” (b) crude oil production data from State Government agencies and the Department of the Interior, Bureau of Safety and Environmental Enforcement (BSEE) and, (c) first purchase data (volume) reported on Form EIA-182, “Domestic Crude Oil First Purchase Report.”

EIA calculates an estimate for half of the producing states by using the lagged average ratio of the state reported data to EIA-182 data, applied to the current EIA-182 data. Thus, there are three parameters involved in making the estimates: the state data from State Government agencies, Form EIA-182 data, and the average ratio between these two over a lagged 6-month period. In this method the lagged average ratio has the biggest influence on the level of production, while the current EIA-182 data have the biggest influence on the trend.

Estimated Barrels of Crude Oil Production per day_i = FP_i * AvgRatio_{i-L}

Where FP_i = First Purchase in barrels of crude oil per day, from EIA-182 survey for month i

$$\text{AvgRatio}_{i-L} = 1/6 * \sum_{j=i-L}^{j=i-L-5} (\text{State}_j / \text{FP}_j)$$

State_j = Barrels of crude production per day from state agency for month j

L = lag in months for the state.

Data from Form EIA-182 are integrated into [Section 18: Forestry, Fishing and Minerals of the Statistical Abstract of the United States](#) and published by the U.S. Census Bureau.

The Joint Committee on Taxation and the IRS use the data to validate severance tax receipts, which are a major component of federal excise tax receipts. In addition, estimates based on EIA-182 data are used in fiscal projections and economic forecasts. The only available alternative is IRS data, which are not available for three to six months after EIA-182 data are published. Data reported on Form EIA-182 have also been used extensively by the Joint Committee on Taxation and the IRS in analyzing the economic effects of possible oil supply disruptions, as well as various tax proposals.

The IRS relies on data obtained from Form EIA-182 to publish notices required under the Internal Revenue Code in order to calculate the available amount of the non-conventional source fuel credit under Section 45K of the Code. The tax credit is subject to an annual adjustment and potential phase-out, calculated by the IRS's determination of the annual average wellhead price per barrel for all domestic crude oil. The domestic crude oil first purchase price is also used to determine the available percentage depletion under Section 613A and the enhanced oil recovery credit under Section 43. Form EIA-182 data are the only source of information available to the IRS for these purposes and are critical to the proper administration of these Code sections.

U.S. Commodity Futures Trading Commission uses EIA-182 data to estimate deliverable supplies in the cash and futures trading markets for crude oil futures contracts. Estimates are generated for separate categories of purchasers of domestic crude oil.

Some state agencies use data from Form EIA-182. Below are a few examples:

[Louisiana State Government](#)

[North Dakota State Government Labor Market Information Center](#)

[Virginia's Department of Mines, Minerals and Energy](#)

[Wyoming State Geological Survey](#)

EIA data from Form EIA-182 are initially published monthly in the PMM and often reprinted or cited in articles in numerous publications and journals, including articles in the five major newspapers – [Los Angeles Times](#), [New York Times](#), [USA Today](#), [Wall Street Journal](#), and [Washington Post](#).

❖ **EIA-856, “Monthly Foreign Crude Oil Acquisition Report”**

Foreign crude oil prices and volumes are key components of the U.S. balance of trade picture, and are necessary for evaluating the impacts of oil market trends on the U.S. economy and future product wholesale and retail prices. Form EIA-856 provides comprehensive information not available from other sources and it continues to be the only source of U.S. crude oil imports which gathers information on cargo-level prices and actual gravities associated with specific crude types. Form EIA-856 data are essential in evaluating any impacts to the petroleum industry as a result of changes in the quality of U.S. imports due to trade embargoes, supply shortages, or cut-offs such as those experienced during the Persian Gulf crisis.

Form EIA-856 data are used by BEA, BLS, EIA, other federal agencies for the purposes of analysis and forecasting. For example:

- Form EIA-856 data have been used in numerous studies. For example, the Balance of Payments Division at the BEA uses the total crude oil import prices and quantities from this survey for BEA's goods projections for the advance estimate of Gross Domestic Product (GDP).
- BLS uses Form EIA-856 data as a primary input for calculating the [price indices for foreign crude oil](#) as a component of the U.S. Import Price Index. BLS's Crude Oil Price Index is calculated from

data collected on Form EIA-856 and used by BEA's Balance of Payments.

- DOE uses Form EIA-856 data to support their legislatively mandated responsibilities, some of which reside in the areas of modeling and forecasting. For example, in an effort to alleviate confusion about the difference between imported refiners acquisition cost and the prices for premium crudes typically reported in the media, EIA's Office of Petroleum, Gas & Biofuels Analysis used crude oil prices collected on Form EIA-856 to forecast the world oil price path for imported light sweet crude.
- EIA integrates Form EIA-856 data in several recurring publications - the PMM, MER, and AER.
- DOE's Office of Strategic Petroleum Reserve has used Form EIA-856 data to assess the types of crude oil imported into the United States and to determine the appropriate crude streams to store in the Strategic Petroleum Reserve.
- Form EIA-856 data were used to assess the impact to the U.S. economy of the trade embargo on Iraq and cut-off of Kuwait oil as a result of Iraq's invasion of Kuwait. Form EIA Administrator, as well as the staff of the Secretary of Energy, analyzed EIA-856 data by the gravity/sulfur content of U.S. crude oil imports to evaluate the impacts of the loss of high gravity Iraqi crude on the petroleum industry.

Additional examples of international and industry uses of Form EIA-856 include:

- The data are also frequently used by petroleum analysts, consultants, and investment bankers to assess their company's crude oil purchasing performance relative to the industry average, and on forecasting the cost of various foreign crude oil streams.
- These data are used to perform the important function of providing the U.S. data submissions to the International Energy Agency (IEA). The IEA is an intergovernmental organization with binding commitments from 20 signatory nations. The Standing Group on the Oil Market within the IEA is responsible for tracking developments in the international oil market to ensure energy security. Two IEA requirements, which were established in June of 1979, are supported by data collected on Form EIA-856.

The first requirement is to maintain the Crude Oil Import Register of oil imported into the United States on a cargo-by-cargo basis. The second requirement is to produce a monthly price report of average prices and total volumes of imported oil for selected crude streams. The United States agreed at the November 10, 1981 meeting of the International Energy Agency Governing Board to extend the IEA agreement. The Crude Oil Import Register and the monthly price report allow the United States to fulfill this multinational obligation.

The statistically reliable information is originally published in the PMM and republished in other EIA publications, journals and other publications.

A.2.2.3.2 Monthly Petroleum Product Survey (EIA-782A and EIA-782C)

❖ **EIA-782A, “Refiners’/Gas Plant Operators’ Monthly Petroleum Product Sales Report” and EIA-782C, “Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption”**

Data gathered by Form EIA-782 are used to track, review, and analyze petroleum product supply, marketing, and distribution; and to anticipate and respond to potential supply disruptions or market structure changes.

More specifically, Form EIA-782A is a mandatory survey conducted on a monthly basis to collect state level price and volume information from refiners and gas plant operators on 14 selected petroleum products’ price, supply, and market distribution on an end-use-sector basis. Form EIA-782C is a mandatory survey administered on a monthly basis to collect data on the sales of selected petroleum products by prime suppliers delivered into states for local consumption. A prime supplier is defined as a firm that produces, imports, or transports any of the 14 selected petroleum products across state boundaries and local marketing areas and sells the product to local distributors, local retailers, or end users.

The refiner sales volumes collected on Form EIA-782A are related to the prime supplier sales volumes collected on Form EIA-782C, but conceptual differences exist that cause variations between these data. In general, EIA-782A volumes reflect refiners’ sales of petroleum products into all secondary and tertiary markets to non-refiners, while EIA-782C volumes are designed to measure prime suppliers’ sales into the local market for final consumption.

The 1982 passage of the Energy Emergency Preparedness Act, and numerous subsequent requests for analyses using EIA-782 data during energy emergencies, attests to the Congressional interest in having access to reliable and timely petroleum marketing data at the state level.

These data are used to allocate federal energy block grants to the states. An example of this process is the Federal Weatherization Program (WAP). DOE provides funding to states, U.S. overseas territories, and Indian tribal governments, which manage the day-to-day details of the program ([DOE WAP](#), [Oregon](#)).

[Low-Income Weatherization Assistance Program](#)). These governments fund a network of local community action agencies, nonprofit organizations, and local governments that provide these weatherization services in every state, the District of Columbia, U.S. territories, and among Native American tribes. During the process to determine the funding, EIA-782 data is used in the State Energy Data System (SEDS). SEDS is EIA's source for comprehensive state energy statistics. Included are estimates of energy production, consumption, prices, and expenditures broken down by energy source and sector.

Form EIA-782A and Form EIA-782C data are used to:

- Evaluate the effects and impacts of energy prices on state-level cost-of-living.
- Predict the consequences to state economies of future energy supply disruptions or market changes.
- Respond to Congressional inquiries regarding petroleum product seasonal price trends.

The value states place on these data is not confined to the formulation and implementation of energy policies. These data are also used in investigative hearings, statistical applications, analysis, forecasting, and responding to constituents. State Energy Offices use Form EIA-782 data to:

- Analyze and forecast demand for refined petroleum products and long term planning.
- Analyze and forecast petroleum product prices.
- Compare sales volumes and prices in their state compared with other state data. The data are used in emergency management to track major suppliers in case of fuel shortages.
- Compare consumption of refined petroleum products and national consumption on a monthly basis.
- Determine the amount of diesel and distillate produced by state.
- Establish state-level fuel tax rates.
- Investigate price increases of refined petroleum products during periods of supply instability.
- Obtain historical data for crisis intervention.
- Track the economy of the state versus the nation based on gasoline consumption.
- Track petroleum product demand for short-term forecasting. The data are also used to make projections of monthly supply for emergency management purposes.

Through conducting the above analyses, each state is able to establish a baseline showing the amounts

and patterns of energy supply, distribution, and use over time. Having formulated a baseline, each state is favorably positioned to analyze and develop emergency energy contingency plans and other policy alternatives. State officials concur that if an oil shortage occurred, Form EIA-782 derived database would serve as a reliable historical reference-point from which to measure and respond to the resulting changes that would occur in the supply and consumption of crude oil and petroleum products.

Petroleum industry analysts regularly use Form EIA-782 published data available on EIA's website to perform market trend analyses and planning. These data are frequently used to:

- Establish contract pricing formulas for fuel oil and military marketing contracts.
- Oversee sales to airlines and sales of jet-propulsion fuel to the military.
- Input into energy models, to project U.S. energy market futures, and to try and simulate interaction between markets.

Form EIA-782 data may also be shared with universities via formal data sharing agreements for data analysis.

Form EIA-782 data are initially published in the PMM and used in the STEO and AEO. These data are reprinted or cited in articles in numerous publications and journals, including articles in the five major newspapers – [Los Angeles Times](#), [New York Times](#), [USA Today](#), [Wall Street Journal](#), and [Washington Post](#).

A.2.2.3.3 Annual Petroleum Product Survey (EIA-821)

❖ **EIA-821, “Annual Fuel Oil and Kerosene Sales Report”**

Form EIA-821 survey collects annual sales volumes of distillate and residual fuel oils and kerosene of end-use categories at the state level. The widespread use of these data became apparent when EIA discontinued the predecessor survey, Form EIA-172, after collecting data for reference year 1982. Form EIA-821 was established to collect data beginning with reference year 1984 after receiving numerous letters from state governors, Congress, trade associations, oil companies, trade publications, and industry analysts citing their need for the data. A number of state agencies previously asserted that discontinuance of the data would have broad, adverse effects on their state energy or air quality programs.

Aggregated data collected on Form EIA-821 on the quantity of kerosene and fuel oil sold for end-use

category are used by all levels of government – federal, state and local government. Numerous government agencies use data collected on Form EIA-821 for energy policy, forecasting, and consumption analysis programs. State agencies, including energy offices and environmental agencies, also use Form EIA-821 data for energy planning, analysis, and information dissemination.

Form EIA-821 collects annual sales volumes of distillate and residual fuel oils and kerosene by a variety of end-use categories at the state level. These data are used by the Federal Government for energy policy activities, and for forecasting and consumption programs to determine current and projected fuel oil needs on a national, regional, and state basis. Aggregations of these data are also used by Congress, state government agencies and petroleum industry analysts for a variety of analytic studies.

Within EIA, the Office of Petroleum and Biofuels Statistics uses end-use data for a variety of statistical analyses. The Office of Survey Development and Statistical Integration enters the data into the State Energy Data System's (SEDS) end-use consumption data base for all fuels categorized by state. SEDS supplier regional historical data for EIA's demand-side forecasting models. Aggregate data are included in several DOE publications, including the [Fuel Oil and Kerosene Sales](#), the [State Energy Data Report](#), and the [Annual Energy Review](#). This published information is used by federal, state and petroleum industry analysts to determine marketing patterns to evaluate end-use consumption patterns, and to analyze how changes in fuel oil supplies affect economic conditions at the state, regional and national level.

Federal agencies have demonstrated practical applications for Form EIA-821 data. The Administration for Children and Families currently use Form EIA-821 data to calculate allocations of approximately 1.2 billion dollars annually to the Low Income Housing Energy Assistance Program. These data have been determined by Congress to be vital for the allocation of funds towards the Low Income Housing Energy Assistance Program. Additionally, the Internal Revenue Service currently uses the data to determine taxes on products such as diesel fuel and kerosene.

Data collected on Form EIA-821 on the quantity of kerosene and fuel oil sold by end-use category are used by the Department of Commerce's Bureau of Economic Analysis in estimating personal consumption expenditures (PCE) of these fuels by broad consuming categories in the annual I-O accounts.

In 1991, the National Oceanic and Atmospheric Administration used the data to determine whether to assess a fuel tax on ocean-going vessels. The U.S. Environmental Protection Agency (EPA) and the petroleum industry used Form EIA-821 data during the 1990's to analyze the impact on end-use consumption patterns of new EPA regulations to lower the sulfur content of diesel fuel oil.

Petroleum companies are frequent users of the volume information published annually from Form EIA-821. Along with the DOE publications, these data are also republished in the American Petroleum Institute publication *Basic Petroleum Data Book*, *Petroleum Industry Statistics*, widely used by industry analysts. The American Petroleum Institute uses Form EIA-821 data for analyzing total distribution sales of No. 2 distillate by end-use.

State energy offices also widely use Form EIA-821 data for energy planning, analysis, and information dissemination. Many states claim that discontinuance of the data would have broad, adverse effects on their state energy programs. The following are several examples of how states use EIA-821 data:

- The California Air Resources Board and South Coast Air Quality Management Commission use Form EIA-821 data to analyze No. 2 diesel fuel consumption patterns in California, to estimate the environmental effects of lowering sulfur and aromatic content of No. 2 diesel fuel.
- Connecticut uses Form EIA-821 data to evaluate energy use patterns, conservation and fuel switching among sources.
- Massachusetts uses the data on an annual basis to forecast energy demands and future prices.
- Michigan uses Form EIA-821 data extensively to estimate sulfur dioxide (SO₂) emissions from all end use sectors utilizing No. 1 distillate, No. 2 distillate and/or residual fuel. The Michigan Department of Natural Resources needs data on sales of No. 2 diesel fuel separated into two categories of less than or equal to .05% sulfur and greater than .05% sulfur. Michigan requires low sulfur fuels in certain geographic areas as an alternative to installing pollution control devices to reduce SO₂ emissions. In addition to SO₂ emissions estimates, Michigan also uses the data to evaluate the effectiveness of their state regulations on low sulfur fuels.
- Minnesota uses the data for energy analyses and information dissemination activities.
- New York develops, reviews, and updates a comprehensive, long-range State Energy Master Plan using Form EIA-821 data. New York also uses the data to develop state end-use energy accounts, for the New York Annual Energy Review, as well as a variety of energy analyses and assessments.

- Wisconsin uses Form EIA-821 data to inform the Governor and Legislature of energy usage within the state. They also prepare a detailed forecast of future state energy usage by economic sector.
- Other States, including Ohio, Arkansas, Vermont and Illinois have also forwarded correspondence to EIA stating strong support and genuine need for the data reported on Form EIA-821.

EIA initially publishes Form EIA-821 data in the annual [Fuel Oil and Kerosene Sales \(FOKS\) Report](#). These data are reprinted or cited in various publications and journals, including articles from the five major newspapers – [Los Angeles Times](#), [New York Times](#), [USA Today](#), [Wall Street Journal](#), and [Washington Post](#).

A.2.2.3.4 Weekly Petroleum Product Survey (EIA-877, EIA-878, and EIA-888)

❖ **EIA-877, “Winter Heating Fuels Telephone Survey”**

Form EIA-877, “Winter Heating Fuels Telephone Survey” is designed to collect data on retail prices of No. 2 heating oil and propane during the heating season (October 1 to March 31) for 38 states in the Eastern, Midwestern, Gulf Coast, Rocky Mountain States; and the District of Columbia through the State Heating Oil and Propane Program (SHOPP). SHOPP is a joint data collection effort between large heating oil and propane consuming states in the United States and EIA. The current survey is a continuation of a program initiated in the 1990-91 heating season in response to congressional requests for concise, timely price information on distillate fuel oil and propane. Prior to 1990, states collected heating oil data.

SHOPP provides state and federal governments, the press, policy makers, consumers, analysts, and others with up-to-date information on retail heating fuels prices during the heating season. Because of supply and price instability in heating fuel markets, there is a need for communication between heating fuel marketers and the government. The data has been used by congressional committees, federal and state governments, and industry analysts to assess the hardships experienced by heating oil and propane users during periods of critical short supplies. For example, data were used in the winters of 1989 and 1999 in the Northeast and Mid-Continent regions to evaluate supply shortages and price increases for both heating oil and propane due to severe weather. EIA responded to this need for timely information by implementing Form EIA-877 to collect state level, weekly information during the heating

season on the price of No. 2 heating oil and propane from a sample of suppliers. The need for this information was expressed previously in Congressional hearings and meetings with state energy office officials, petroleum industry leaders and trade associations.

These data are published in the [Heating Oil and Propane Update](#) (HOPU) and are reprinted or cited in articles in numerous publications and journals, including articles in the five major newspapers – [Los Angeles Times](#), [New York Times](#), [USA Today](#), [Wall Street Journal](#), and [Washington Post](#). Radio spots featuring weekly prices are also made available at www.eia.gov/radio/ for use by radio stations across the country such as Ozark Radio News, 94.1 The Lake WSNW, and Sky 96.3 WRBN-FM.

For the first time since 1994, EIA expanded SHOPP during the 2014-15 season to 14 additional states to collect propane prices in response to price increases in early 2014. EIA wrote several articles in response to the price increases: [January 15 This Week in Petroleum](#), [January 23 Today in Energy](#), and [March 12 Today in Energy](#). In consultation with the National Association of State Energy Offices (NASEO), EIA sent an invitation letter and held an informational [Webinar](#) to solicit interest in joining the program. Several states attended the Webinar and expressed interest in participating. Several of these states were impacted by the propane supply shortage during the 2013-14 winter and relied on EIA's information for emergency heating fuel programs. For the 2016-17 heating season, EIA expanded the number of states to 10 additional wholesale propane prices to complement the prior expansion to provide a comprehensive picture of the propane market.

❖ **EIA-878, "Motor Gasoline Price Survey"**

Form EIA-878 collects, on a weekly basis, the retail price by grade of unleaded gasoline, self-service, cash only, including all taxes. The data may be collected on a more frequent basis during emergency situations such as war, common disasters, severe price fluctuations, and other supply shortages. In such an emergency situation EIA will notify OMB prior to initiating efforts to collect the data more frequently. EIA will follow subsequent OMB guidance regarding accounting of the additional burden hours incurred.

Congress, government officials, and transportation industry leaders use EIA data in order to measure rapid price increases at both regional and national levels. For example, during the 1991 Iraq War, the data were used by Congress and federal officials to monitor the retail price of gasoline on a daily basis. In addition, Form EIA-878 data provide weekly information on retail market conditions and on the price

impacts of "clean fuel programs" mandated by the Clean Air Act Amendments of 1990 to government, industry, and the public. In 2005 these data were used to monitor the effect of Hurricane Katrina on the retail gasoline market. During Hurricane Sandy in 2012, these data were used to provide daily information to senior officials on the availability of gasoline in the affected New York metropolitan area.

Retail gasoline price estimates are released for nine states and ten cities, in addition to the five PADD and three sub-PADD areas, and the United States. EIA also uses Form EIA-878 price data each spring for STEO's *Summer Transportation Fuels Outlook*, e.g., the *2012 Summer Transportation Fuels Outlook* ([PDF](#)). These data are relied upon by the press, industry, the media, and government as a measure of retail prices of reformulated and conventional gasoline. Every major newspaper has cited and published retail gasoline price data from Form EIA-878 in stories concerning retail gasoline prices. The data are published in all the major wire services including [Reuters Ltd](#), [Bloomberg News](#), Dow Jones, and [Associated Press](#). U.S. price estimates for regular grade gasoline are regularly quoted on the CBS and NBC television news networks. Form EIA-878 data are published in the *Washington Daybook - Economic Reports*.

These data are initially published in the [Gasoline and Diesel Fuel Update](#) (GDFU) and are reprinted or cited in articles in numerous journals and publications, including articles in the five major newspapers – [Los Angeles Times](#), [New York Times](#), [USA Today](#), [Wall Street Journal](#), and [Washington Post](#). Price information are also available on a toll-free hotline number, via email, and via recorded audio files and scripts for radio republication.

❖ **EIA-888, "On-Highway Diesel Fuel Price Survey"**

Form EIA-888, On-Highway Diesel Fuel Price collects the retail price of on-highway diesel fuel, self-service, cash only, including all taxes each week. The data may be collected on a more frequent basis during emergency situations such as war, common disasters, severe price fluctuations, and other supply shortages. In such an emergency situation EIA will notify OMB prior to initiating efforts to collect the data more frequently. EIA will follow subsequent OMB guidance regarding accounting of the additional burden hours incurred.

These data are used by Congress, federal and state officials, and transportation industry leaders to monitor the retail price of on-highway diesel fuel, including the following two examples.

Shipping contracts with the federal government, both military and civilian, require the use of Form EIA-888 data as the price mechanism for calculating fuel surcharges. The General Services Administration (GSA) Federal Supply Service uses Form EIA-888 data as an indicator to determine when carriers should be allowed relief from sudden or unexpected increases in fuel prices. Pursuant to the National Rules Tender No. 100-D, the GSA Freight Program Management Office requires the use of Form EIA-888 data to calculate a 52 week moving average of the published Monday price as the baseline for the Neutral Range when issuing a Standard Tender of Service notice. The average annual price is updated on the Monday before the first Monday in February and the first Monday in August of each year. In addition to the standard tender of service notices, GSA has agreements with customers that supplement government fuel contracts. These agreements, or fuel policies, allow companies to raise their rates or get a discount depending on the cost of diesel as measured by Form EIA-888. Fuel policies for civilian government shipping contracts are revised every six months and are based on the previous 52 weeks of published Form EIA-888 data. Additionally, the [Military Surface Deployment and Distribution Command](#) requires its shippers, transportation officers and transportation service providers to use Form EIA-888 data for calculating fuel-related rate adjustments.

Form EIA-888 data are used to provide weekly information on retail market conditions to both government and industry. Form data are routinely relied upon by the press, industry, and government as a measure of change in the fuel costs for transportation and shipping contracts. Form EIA-888 data has generally been adopted by the majority of the private trucking firms and shippers as the price adjustment mechanism in fuel surcharge formulas.

The national, regional, and State of California retail diesel fuel price estimates from Form EIA-888 are accessed daily by motor carriers, both haulers and bus companies, shippers, and other members of the public via accessing EIA's website or subscribing to the diesel listserv for email and/or text messages of the data.

Form EIA-888 data are also published on a weekly and monthly basis in trucking industry newsletters, including the [American Trucking Association](#) and [The Journal of Commerce](#). The national and regional prices are broadcast twice per day on Interstate Radio Network, a radio network with 40 affiliates with coverage of 95 percent of the continental United States. Form EIA-888 data are also analyzed and used

by the [National Industrial Transportation League](#), [the National Association of Truck Stop Operators](#), and [the American Moving and Storage Association](#). Form EIA-888 data are routinely quoted on the wire services - [Reuters Ltd](#), [Bloomberg News](#), [Dow Jones](#), and the [Associated Press](#) - and in articles in the five major newspapers - [Los Angeles Times](#), [New York Times](#), [USA Today](#), [Wall Street Journal](#), and [Washington Post](#).

A.2.2.3.5 Petroleum Marketing Frame (EIA-863)

❖ **EIA-863, "Petroleum Product Sales Identification Survey"**

Form EIA-863 collects information on size, type and geographic location of fuel oil-related businesses to form an attribute sampling frame for use by EIA sample surveys. The list of companies, their operational status, volumetric data, and information on their corporate relationships together serve wholly or partially as the sampling frame for the following EIA surveys:

- Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report"
- Form EIA-877, "Winter Heating Fuels Telephone Survey"
- Form EIA-886, "Annual Survey of Alternative Fueled Vehicle Suppliers and Users" (propane only)
- Form EIA-888, "On-Highway Diesel Fuel Price Survey"

The data are used by EIA for the following purposes:

- To develop a comprehensive frame file for sampling. The information is also used to identify births (new companies including sales and mergers) and deaths (companies going out of business) in the universe, as well as updates to mailing addresses and contact information.
- To produce volumetric state-level data necessary for efficient use of stratified or probability proportional to size sampling. These sampling methods yield substantial reductions in respondent burden and reduce sampling error in the weekly, monthly, and annual sample surveys.
- To produce aggregate data to determine aggregate population estimates. These estimates are used to design efficient samples and estimators, and to measure previous sample deterioration and changes in the distribution of the population.
- To identify relationships between parent/subsidiary and thus avoid both under reporting and double counting, and to minimize sample sizes and respondent burden.
- To update company-level profiles and detail which allow for sample rotation to minimize

respondent burden.

- To review edit and imputation procedures and methodologies in the weekly, monthly, and annual sample surveys, and testing those methodologies. The data are also directly used for editing and imputation procedures as a benchmark for new sample members and for non-respondents.

The petroleum surveys require a respondent frame that is updated frequently because of the high turnover rate and ongoing changes in the petroleum industry. Previous EIA-863 data have shown a turnover rate of roughly 25 percent between survey cycles, without including ongoing updates made from an annual petroleum marketing survey to align the larger petroleum sellers. For any survey, it is necessary that the frame be both comprehensive and up-to-date for unbiased and efficient sampling. Lack of identification of out-of-scope and out-of-business firms greatly increases sample sizes, respondent burden, and data error, as well as government costs for nonresponse follow-up. The high birth and death rate of fuel oil dealers means that samples deteriorate rapidly over time and must be updated frequently to ensure accuracy. Additional information regarding the frame and sampling plan is available in Supporting Statement B.

A.3. Use of Technology

In an effort to reduce respondent burden and to provide for timelier processing of filings, EIA offers mixed-mode data collection. The weekly surveys use the following modes of data collection.

- Form EIA-877 collects data via telephone and other electronic modes. For example, several larger companies with multiple outlets in the sample can send data directly to EIA via internet using secure file transfer in an Excel spreadsheet or other table format. This saves time for the personnel at each of the individual outlets.
- Forms EIA-878 and EIA-888 utilize computer-assisted telephone interviewing (CATI), facsimile, email, web survey, and manual retrieval of data from company websites as modes of collecting data.

The remaining surveys in the PMP are conducted via paper and electronic modes. Respondents submit data via secure file transfer, facsimile, electronic modes, and U.S. mail. EIA accepts electronic records from respondents provided such reports are prepared and transmitted to EIA in the same format as the data collection form. As part of data collection enhancements, EIA is introducing Electronic Data Extraction System (EDES) on some of these surveys. This technology will allow electronic extraction of

the information submitted via Excel spreadsheets. EDES will reduce manual data entry and keying errors; therefore, reducing program costs, reporting burden, and non-sampling errors.

A.4. Efforts to Identify Duplication

EIA has conducted extensive reviews to ensure its petroleum marketing surveys do not duplicate data available from other sources. In addition, EIA petroleum data analysts with subject matter expertise review these survey forms. As changes are proposed to the petroleum marketing survey forms, EIA conducts extensive review processes to ensure the avoidance of the unnecessary collection of data. Numerous efforts have been made to identify, through discussions with trade associations, private companies, and other government offices, potential duplication of data, data that is no longer necessary, or data that can be collected more efficiently by another survey.

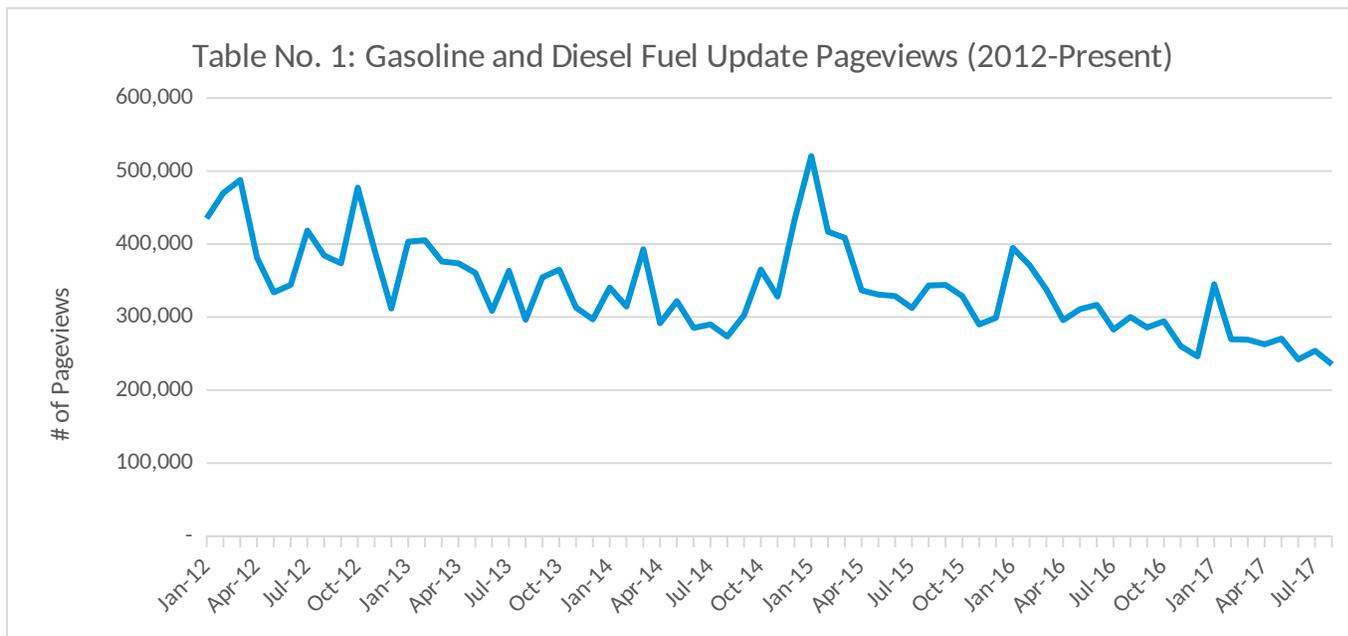
EIA reviewed known sources of data relating to petroleum marketing and found no other sources to be comprehensive or detailed enough to replace the data collections currently utilized by the federal government. EIA determined that other sources are not sufficient to replace or approximate the information collected because of differences in classification, or due to the lack of universe estimation procedures.

A.4.1. Analysis of Similar Existing Information

EIA evaluated all known sources of data relating to the petroleum marketing industry and has found no other source as comprehensive, timely, or detailed, to replace these proposed EIA data collection activities. EIA has determined that other sources cannot replace or even approximate the information proposed for collection here because of differences in classification, inconsistency, incompleteness, unavailability, or lack of universal coverage. Some of data collections complement, rather than duplicate, other federal agency data collections. These combined efforts capture the entire petroleum marketing industry and keep the burden on industry to a minimum.

The Petroleum Marketing Data Collection Diagram (on Page 2) illustrates the relationships among the surveys. There are three weekly surveys, five monthly surveys, one annual survey, and one quadrennial survey. The three weekly surveys collect different petroleum products – Form EIA-877 collects residential winter heating fuels prices; Form EIA-878 collects retail motor gasoline prices; and Form EIA-

888 collects retail on-highway diesel fuel prices. The [Gasoline and Diesel Fuel Update](#) webpage, available at <https://www.eia.gov/petroleum/gasdiesel/>, provides price data from both Forms EIA-878 and EIA-878. This information product consistently remains one of the top viewed items on EIA's website, receiving over 3.6 million visits in 2016, 4.2 million visits in 2015 and 3.9 million visits in 2014.



The following monthly surveys are used to monitor crude oil and refined products from the wellhead to ultimate consumption – Form EIA-182 collects wellhead data; Form EIA-856 collects crude oil imports data; Form EIA-14 collects data on crude oil as it enters the refinery stage; Form EIA-782A collects data on the sales of the finished products; and Form EIA-782C collects data on the volume of delivered finished products.

The following are explanations regarding the collection of similar data and the reasons why these similarities are not duplicative collections. This includes comparison across petroleum marketing surveys for the (a) monthly crude oil surveys; (b) monthly petroleum products surveys; (c) monthly petroleum product surveys with the annual fuel oil and kerosene survey; and (d) weekly surveys.

Several sources of administrative or third-party data are used for publication, data validation, frame maintenance, and analysis.

A.4.1.1 Monthly Crude Oil Surveys (EIA-14, EIA-182, and EIA-856)

Forms EIA-14, EIA-182 and EIA-856 all collect data on crude oil yet do not duplicate efforts. Form EIA-182 collects domestic wellhead prices, Form EIA-856 collects foreign crude oil prices, and Form EIA-14 collects the average price domestic and imported crude oil at the refinery gate.

Form EIA-182 is designed to collect data on the value and volume associated with the physical and financial transfer of domestic crude oil from the property on which it was produced. EIA-182 data are used to represent the initial market value of domestically produced crude oil. Similarly, the data from Form EIA-856, "Monthly Foreign Crude Oil Acquisition Report" are used to represent the initial value of imported oil. Form EIA-14, "Refiners' Monthly Cost Report," provides the only source of comprehensive, current period-weighted costs of crude oil as it is booked into the refinery. Forms EIA-182 and EIA-856 share a relationship with Form EIA-14 data which includes costs that accrue subsequent to the first purchase - e.g., transportation, storage, resale markups and markdowns, et cetera.

Below is a comparison of Form EIA-182 with other data sources:

- Similar statistics to those obtained from Form EIA-182 are published in [Platt's Oilgram](#) and [Petroleum Intelligence Weekly](#) both of which focus on what refiners and resellers are asking publicly for crude, e.g., posted prices and spot prices. By comparison, these publications do not provide data on sales of equity and non-equity crude oil, nor information as to what the actual price and amount of oil is involved; in fact, no actual transactions may occur as posted prices.
- Similar statistics are published by BLS in the [Producer Price Index \(PPI\)](#) as this calculates a price index for crude oil. Their primary source of data is posted prices for domestic crude oil at the wellhead. By comparison BLS publishes a monthly price index whereas EIA publishes average price. EIA also publishes more disaggregated prices at the regional and state level.
- Similar volume data is collected on the EIA-23L, "Annual Survey of Domestic Oil and Gas Reserves (Field Version)," which collects data on the reserves and production of crude oil, natural gas, and natural gas liquids from well operators. By comparison, only Form EIA-182 collects price data associated with these volumes. Annual collection of first purchase prices, similar to the monthly data produced by Form EIA-182, would not be adequate given the widely fluctuating prices of crude oil in the current environment.

Form EIA-856, "Monthly Foreign Crude Oil Acquisition Report," collects information on costs and quantities of imported crude oil. There are no alternative forms that collect and provide similar information. One data source that has been cited as a potential replacement for Form EIA-856 is the Department of Homeland Security, U.S. Customs and Border Protection (CBP) Form 7501, which collects landed volumes and customs valuations for crude oil by country of loading. The Form 7501 is the entry document filed for all imports into the United States.

CBP, as the collector of import/export data and duties, is required to process information for thousands of transactions each month. Given the range of goods crossing the U.S. border, CBP must collect a limited, general class of data sufficient to perform its primary duties. EIA has a memorandum of understanding (MOU) with CBP. Through the MOU, EIA receives daily CBP data to validate import and export volumes. CBP data does not contain the same level of detail as Form EIA-856 on the crude oil cargo shipments. Additional permission and assessment is needed in order to determine if the information can satisfy EIA's data needs and replace Form EIA-856. In addition, EIA requires more specific data elements which are not collected by CBP. In particular, the requirement to provide a monthly crude oil report to the IEA is an important application of Form EIA-856 data. To create the report, data must include detailed, cargo-level information not found in the CBP data. Specifically, the following data elements are required:

- API Gravity. CBP Form 7501 collects only two categories of crude oil: above and below 25 degrees API. Actual API gravity is collected by Form EIA-856 for each cargo.
- Crude Stream. In order to place crude oil in the precise categories required by IEA, the crude stream (e.g., Saudi Light) is necessary. CBP currently collects only country-of-origin information which does not specify the crude stream.

Due to the lack of important information such as API gravity and crude stream data, CBP 7501 data are not an adequate alternative to Form EIA-856 data. The need for API gravity and crude stream data was particularly important during the Persian Gulf crisis for comparisons of quality of Iraqi and Kuwaiti crude oils versus replacement crude oils.

EIA does not collect spot price data on domestic and foreign crude streams. EIA purchases subscription data from Thompson Reuters, and Oil Price Information Services (OPIS), and republishes spot price data for 9 selected domestic and foreign crude streams.

A.4.1.2 Monthly Petroleum Product Surveys (EIA-782A and EIA-782C)

The state level product price and volume data provided by Forms EIA-782A and EIA-782C are not provided either by other DOE surveys, or by other government and private sources.

Below is a comparison of Forms EIA-782A and EIA-782C with the Bureau of Labor Statistics (BLS) and other data sources. The BLS collects only voluntarily-provided wholesale and retail price-related information on refined petroleum products. Furthermore, the aggregate statistics provided by BLS not only fail to satisfy the needs of EIA-782 users, but are inadequate as a base upon which to respond to various U.S. Congressional inquiries.

Both the [Consumer Price Index \(CPI\)](#) and the [Producer Price Index \(PPI\)](#) measure price change. They do not use current volumes. However, EIA users require measures of both total volumes and actual average prices as calculated using a current month's weights for accuracy. User needs are not met because of the following deficiencies in BLS data or sampling frames:

- Many retail sales of major products are not represented.
- Disaggregation by sector is not provided for distillates.
- Wholesale prices at the national, regional, and state levels are not provided.
- Retail prices at the state level are not provided.
- Reseller activity is not reflected in the Producer Price Index.

BLS sampling frames may result in the exclusion of product sales by secondary businesses, because they depend on [North American Industrial Classification System \(NAICS\)](#) codes.

The 1985 adoption by the BLS of a new/revised methodology for pricing refined petroleum products at the wholesale level has also, albeit indirectly, resulted in users 'crossing-over' from BLS-provided-data to EIA-provided-data. For example, while the revised BLS methodology has improved the timeliness of their prices, regional prices and indexes for products on the PPI were eliminated. Currently, BLS refers users seeking regional data to the PMM. Furthermore, due to the elimination of these data by BLS, industry and state governments are now using EIA-782 data to determine contract prices for fuel sales.

A feature article in the PMM (December 2012), [Explaining EIA Crude Oil and Petroleum Product Price Data and Comparing with Other U.S. Government Data Sources, 2001 to 2010](#), describes and quantifies

retail price data for residential No. 2 distillate (e.g., home heating oil), on-highway diesel fuel, and regular grade motor gasoline. These are compared with the equivalent U-series (Urban area) prices given by the BLS CPI with no seasonal adjustments. Wholesale/Resale prices for No. 2 diesel fuel, No. 2 fuel oil, regular grade gasoline, and kerosene-type jet fuel differences between Forms EIA-782A/EIA-782B and BLS PPI price data, although comparison cannot be done directly since EIA uses prices directly and BLS only publicly reports price indices for the PPI. Retail and wholesale/resale price comparisons were made on annual data from 2001 through 2010. The article also compares volumes between EIA-782C sales data, EIA-821 data, Form EIA product supplied data from Petroleum Supply Annual (PSA) and Federal Highway Administration data for finished motor gasoline (all grades combined), distillate fuel oil, kerosene-type jet fuel, and residual fuel oil.

BLS utilizes a fixed-volume weighted scheme to produce several levels of statistics of which the CPI and PPI indexes were used for comparison purposes in the article. Previously the BLS prices were based on 1982-1984 expenditures weights.

Regarding motor gasoline, the biggest difference between Form EIA-782A and BLS surveys is the weighting. Major shifts in marketing strategies, such as cash discounts, self-serve, geographic movements in gasoline markets, or the introduction of reformulated gasoline into the market, would be identified immediately by Form EIA surveys through the current volume weighting they employ. The BLS fixed weights, in comparison, lag behind in reflecting these changes in the average prices.

The FHWA's Monthly Motor Fuel Reported by State report tabulates gross gasoline gallons reported by wholesale distributors to state motor fuel tax agencies. These data are used to determine the disbursement of federal highway trust funds to the states. Some users of gasoline sales data have suggested the FHWA report as an alternative to Form EIA-782C although it is an inadequate alternative source because of the considerable time elapsing between gasoline sales data being collected and published in FHWA's "*Monthly Motor Gasoline Reported by States*" report.

Previous analysis of FHWA data showed that not only did more than 90 days elapse between the capture and publication of data, but state coverage was low. FHWA data is a poor alternative to EIA-782C data for other reasons, including:

1. Only cover gasoline and special fuels (diesel fuel and alternate fuels)

2. Are not published as timely as EIA-782C data
3. Are reported using a methodology based on sales and gross receipts taxes which is not uniform across the states
4. Do not break out the data by grade or formulation of gasoline
5. Do not break out the data by grade or sulfur content of distillate fuel
6. Does not include prices

EIA-782 data are more accurate, timelier, cover more products, and reflect a higher response rate by state than does FHWA data.

Other private and public sources providing petroleum product data purportedly equivalent to Form EIA-782 survey series were also studied and were found to be inadequate in fulfilling the mandated requirements of Form EIA-782 series surveys. Each of the alternate sources differed from Form EIA-782 in one or more of the following areas: data collection methodology, periodicity, survey frame, sales category disaggregation, product slate, geographic breakdown, and purpose. Furthermore, only Form EIA-782 series surveys provide detailed state level breakdowns of information by end-use sector. EIA purchases daily wholesale rack gasoline and distillate prices from OPIS for 30 selected cities. The OPIS reported price is the closing price at the end of the trading day and is an unweighted average of available rack prices. Many times this city average can be based on one or two reporting terminals. EIA rack price data from Form EIA-782A are volume weighted averages and reflect all transactions during the course of the month.

[A.4.1.3 Annual Fuel Oil and Kerosene Sales Report \(EIA-821\)](#)

There is no similar information available for sales of distillate, residual fuel oil, and kerosene by end-use at the state level. Form EIA-782A collects monthly sales data for distillate and residual fuel oil; however, the product breakouts and end-use categories on Form EIA-782A are more limited than the disaggregation provided by the annual EIA-821 survey.

Notwithstanding the limitations imposed by the differences in reporting categories, it would be impossible to obtain the same accuracy of annual volume statistics by summing the 12 reported monthly numbers. Respondents to Form EIA-782A do not always provide prior-period adjustments for their

monthly estimated data. Revisions to prior estimates are figured into the reported EIA-821 annual volume totals.

A.4.1.4 Weekly Petroleum Product Surveys (EIA-877, EIA-878, and EIA-888)

A review of Form EIA-877, "Winter Heating Fuels Telephone Survey," data comparison with other data sources found no other sources that provided the required frequency, timeliness, and geographic coverage needed to monitor fuel oil and propane prices and inventories.

Monthly, state level residential home heating oil and propane prices are collected by EIA on Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report." However, since these prices are weighted by the volume of residential sales, the data are not available until approximately 60 days after the end of the month. Thus, Form EIA-782 data do not provide timely enough or frequent enough information for monitoring a potential emergency situation.

BLS publishes monthly residential heating oil prices for metropolitan areas as part of the [Consumer Price Index](#), however the BLS geographic coverage of selected metropolitan areas does not meet the need for state level prices for each heating oil state in the SHOPP Program.

EIA purchases state level wholesale propane prices and city level heating oil prices from Oil Price Information Services (OPIS). These spot price data are republished for Mount Belvieu, Texas (propane) and New York Harbor No. 2 fuel oil in the Winter Heating Fuels Report.

Below is a comparison of Form EIA-878 with other data sources:

- Form EIA-878 collects, on a weekly basis, the retail price by grade of unleaded gasoline, self-service, cash only, including all taxes. The survey data enable EIA to publish weekly retail prices by grade and formulation of gasoline at the national, regional, and select state and city levels. There are no comparable data series available for different formulations of gasoline in ozone non-attainment and attainment areas as designated by the EPA that satisfy EIA's and EIA's customers' requirements for unbiased, representative, current price data. The [Lundberg Survey](#) is considered inadequate since it only collects prices every other Friday which isn't timely enough to monitor fast developing market shifts.
- The [American Automobile Association](#) releases daily retail price information from its website

based on data provided by the [Oil Price Information Service \(OPIS\)](#). These prices are credit card transaction based and do not represent a specific point in time. In addition, it is not known how representative the set of transactions are of all retail outlets. In addition, they also do not provide separate prices by formulation of gasoline, such as reformulated or conventional gasoline. Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report" survey only publishes a retail gasoline price once a month, 60 days after the reference period, but it only represents refiner prices and not prices from the retailers. BLS's [Consumer Price Index](#) is available for select cities, but state averages and averages by PADDs are unavailable. Thus, due to timeliness, frequency, and reliability problems, other data sources do not meet Form EIA's need for timely, independent source prices.

- Other data sources did not provide the required frequency, timeliness, free historical time series, and coverage needed to monitor regional retail motor gasoline prices. GasBuddy.com is a crowdsourcing website that relies on users to volunteer and submit real-time regular, midgrade, premium, and diesel prices. Users earn points for completing certain activities, such as posting or updating a gas price or participating in a user forum. Points can be redeemed in price raffles. Based on EIA's analysis, the site collects prices from approximately 144,000 outlets in the U.S. Users can submit both cash and credit prices to GasBuddy. More price data exists for regular grade than midgrade or premium grades. Retail gasoline prices submitted to the website within the last 24 hours include additional information on the exact time of the submission. In contrast, prices reported outside of 24 hours are categorized merely as "1 day old" without additional information about exact time of submission.

Assessment of Data Quality in Third-Party Data

EIA wrote a report, *Evaluation of Alternative Sources of Motor Gasoline Prices and Volumes*, after evaluating OPIS and GasBuddy retail price data in terms of geographic and product coverage, data collection methodology, data editing and processing, cash vs credit pricing and the treatment of price discounts, product definitions, timeliness, internal consistency, and missing data elements. Both OPIS and GasBuddy exhibited high levels of coverage similar to the current EIA-878 sample. Using GIS-based techniques, EIA identified 98% of current EIA-878 stations in the OPIS database and 99% on the GasBuddy website. Although the stations reporting in the EIA-878 sample were identified in the OPIS and GasBuddy databases, many of these stations did not show any price data for the applicable Monday time period. Missing data rates for OPIS over the 12 week study period were lowest for regular gasoline as shown in the table below.

Missing Price Data from OPIS by Gasoline Grade over 12 week period (May 15, 2017 to July 31, 2017)

Week	1	2	3	4	5	6	7	8	9	10	11	12
Regular	8%	10%	14%	6%	7%	3%	4%	4%	4%	3%	4%	5%
Midgrade	35%	37%	39%	32%	33%	30%	26%	28%	27%	24%	27%	28%
Premium	33%	38%	37%	31%	32%	28%	27%	27%	27%	25%	26%	27%

The percentages of missing data for station-level GasBuddy price data (only available for a single Monday during the study period) were much higher (22% price data missing for regular grade, 43% for midgrade, and 44% for premium grade gasoline). Neither OPIS nor GasBuddy provided information to explain item or unit nonresponse, such as availability of midgrade/premium gasoline or temporary or permanent station closures. GasBuddy is able to collect information on power outages or lack of supply, but only does this in extreme circumstances.¹ OPIS and GasBuddy also did not provide transparent information on data collection, processing, and validation. OPIS provided no information on processing or data validation, while GasBuddy only states they use “automated algorithms” to detect “obviously wrong information.” GasBuddy also allows users to report other users who submit incorrect information.²

Comparability of Estimates

Station-level research results

OPIS, GasBuddy, and EIA-878 data differed on a number of key issues that affected measurement, including price definition, data collection mode, and reference period for the prices.

Point-in-Time analysis comparing EIA-878, OPIS, and GasBuddy

Station-level GasBuddy data was only available for one Monday during the study period. For this date, EIA compared station-level price reports using scatterplots to identify reporting differences across the three data sources. Correlations between EIA-878 vs. OPIS and EIA-878 vs. GasBuddy were strong, particularly for regular gasoline prices. However, very large price differences (15 cents or greater) were identified and the same station shows different retail prices between GasBuddy and EIA-878.

Another important difference is the reference period and product definition for the retail prices. The EIA-878 survey collects the cash price for a gallon of finished motor gasoline as of 8:00 AM every Monday in every region of the U.S. Maintaining consistency in the collection time enables EIA to provide point in time estimates that are comparable for both estimating price levels and monitoring

¹ <http://tracker.gasbuddy.com>

² <https://help.gasbuddy.com/hc/en-us/articles/206722608-False-Prices>

price trends. GasBuddy collects both cash and credit prices and the prices are reported at all times of the day throughout the week. Credit prices are sometimes higher than cash prices and aggregating both cash and credit prices would generate higher estimates than those generated by the EIA-878 data which restricts the product definition to “cash price” only. There were several data gaps in the OPIS and GasBuddy data series where retail prices for regular, midgrade, and premium grades were not available for a station in the EIA-878 sample, or there was a price for regular grade, but missing price data for the other grades. Other data quality issues (geographic coverage, urban/rural mix, and high/low volume retail outlets) and definitional differences also impact the aggregate price estimates generated from these third party data sources. The EIA-878 survey data is used as a clearing mechanism in gasoline futures contracts, as well as in fuel surcharge formulas in private shipping contracts. The use of EIA’s weekly retail motor gasoline price data require high accuracy in the aggregate point-in-time estimates and transparency on the methodology. There is no other comparable source for the EIA-878 weekly price data that can serve these data needs.

A review of Form EIA-888 data comparison with other data sources found no known surveys that use statistical sampling and estimation methods to publish the most representative and current on-highway diesel fuel prices on a weekly basis.

- The [Oil Price Information Service \(OPIS\)](#) and Electric Funds Source ([EFS](#)) collect daily prices for on-highway retail diesel fuel from an unspecified sample of outlets and sell the data for a fee. Their samples lack adequate refiner coverage in some regions, have an insufficient rural/urban mix, and also draw heavily from outlets that have a data link with credit companies and are not probability based.
- The [Lundberg Survey](#) publishes retail diesel fuel prices by PADD and nationally. The Lundberg survey is inadequate to use to monitor changes in retail motor vehicle diesel fuel prices because it only publishes prices twice-monthly. In addition, its methodology is not made publicly available.
- BLS [Consumer Price Index](#) is available for select cities, but state averages and averages by PADDs are not available.

An evaluation of similar diesel fuel data found no other sources that provided the required frequency, timeliness, historical time series, and coverage needed to monitor regional retail on-highway diesel fuel prices.

A.4.2. Inadequacies of Similar Data

There are three different methods for calculating crude oil and petroleum product price data: (1) posted or spot prices, (2) base period weighted average prices, and (3) current period weighted average prices.

- 1) Posted or spot prices are collections of bid/post prices from a supplier or suppliers at a given location for a given size shipment. These prices are primarily useful to purchasers and sellers who are involved in evaluating marginal prices in a volatile market on a daily basis. The primary disadvantage of posted or spot prices is that they represent a small percentage of the market. Therefore, these prices cannot effectively be used to represent state, regional, or national average prices. Also, posted or spot prices do not reflect the extensive contribution of contract transactions in determining the prices of crude oil or products; nor do they indicate how much volume is purchased or sold at that price. Among the daily/weekly journals publishing posted/spot prices are: [Petroleum Intelligence Weekly](#), *Oil Daily*, [Journal of Commerce](#), [Mid-East Journal](#), [Arab Oil and Gas](#), [Oil Express](#), and [Platts Oilgram](#).
- 2) Base period weighted average prices employ fixed weights. By using a fixed weight methodology, only the current prices are collected each month, promoting rapid turnaround for publication. Base period weighted average prices tend not to reflect the contributions of structural and institutional changes, thus misrepresenting the market when weights do not reflect current activity. For example, a shift in sales from conventional gasoline to reformulated gasoline is a market shift that may not be reflected using a fixed weight methodology. Among the best known sources using this method are the Department of Agriculture, the Bureau of Labor Statistics, and the [Lundberg Survey](#).
- 3) The current period weighted average price method employed by EIA takes the reference month's sales volumes and revenue to calculate a weighted average price for that month. This is the only method that takes into account all transactions, including contracts, discounts, and distress sales weighted by their actual volumes of sales, and aggregates them into a representative average price. No comparable sources of weekly No. 2 heating oil and propane prices, regional retail motor gasoline prices, and regional retail on-highway diesel fuel prices publish prices using this methodology.

In addition, EIA provides the only available source of state prices for a selection of petroleum products by various types of sales. For reasons of content, methodology, industry geography, customer coverage,

and the purposes for which the data are collected, EIA data are necessary to allow for the reliable macro/micro analysis of current conditions and trends.

None of these other data sources provided the required frequency, timeliness, and geographic coverage needed to monitor No. 2 heating oil and propane prices and inventories, regional retail motor gasoline prices, and regional retail on-highway diesel fuel prices, respectively. EIA also provides a free continuous historical time series of these products for analysts.

A.5. Provisions for Reducing Burden on Small Businesses

Minimizing burden to small businesses is a primary concern to EIA. Alternative modes of data collection seek to reduce respondent burden. For example, some respondents provide data which can be uploaded, and thus reducing the need for data entry.

The crude oil surveys – Forms EIA-14, EIA-182, and EIA-856 – do not include small businesses in their respondent populations.

The quadrennial Form EIA-863, by the nature of its purpose (to develop a sampling frame), is sent ~~mailed~~ to all potential respondents to petroleum marketing surveys except those firms already reporting on Form EIA-821. This includes both large and small businesses. Form EIA-863 sampling frame, however, assists in maintaining low respondent burden by allowing for the use of sophisticated sampling techniques, and by providing up-to-date information that alleviates the need for over-sampling to correct for sample frame limitations. EIA will email pdf-fillable format or Excel formatted files to companies that are currently reporting electronically on EIA surveys. EIA will mail the form to the potential new respondents (births to the frame) that are currently not reporting to EIA, or current EIA survey respondents where EIA does not have a valid email address for a contact person.

On the annual and weekly sample surveys – Forms EIA-821, EIA-877, EIA-878, and EIA-888 - it is important that all sizes of firms, large and small, participate in order to obtain a proper representation of the petroleum industry. The inclusion of smaller firms is necessary to accurately portray state volumes and prices. EIA minimizes the burden for small businesses reporting on these surveys through sampling techniques.

- Form EIA-821 is required to collect data from both large and small businesses. In Form EIA-821 sample design, refiners, multi-state dealers, and large companies greater than five percent of the total sales for a particular category and state are selected with certainty. The remainder of the respondent universe is cross-stratified by type of sale and volume for each state. In general, this allocation yields smaller sampling fractions for smaller companies and thereby reduces total small business burden.
- All sizes of firms, large and small, report on Form EIA-877 in order to accurately estimate state level residential prices. However, to minimize the burden on small dealers of No. 2 heating oil, a stratified sample design is used for Form EIA-877. In this design, dealers are stratified for each state by size of sales volumes, according to the volumes reported in Form EIA-863 frame. This results in smaller sampling fractions overall and smaller sampling fractions for smaller dealers than for larger dealers. To minimize the burden of propane dealers on Form EIA-877, certain companies are selected in those states where the company represents five percent or more of the state volume. Outlets within the company are then selected to represent the company. In this design, outlets are stratified by size for each state to further reduce burden of small businesses.
- To reduce burden on Form EIA-878 an area sample of 802 outlets was selected from a sampling frame of over 115,000 gasoline outlets.
- To reduce burden on Form EIA-888 survey a stratified sample of 403 outlets was selected from a sampling frame of about 62,000 service stations and 4,000 truck stops which sell on-highway diesel fuel in the contiguous United States.
- The gasoline and diesel surveys have separate survey frames, different sampling methodologies, different sample target variables and different geographic coverage. For gasoline, the frame is gas stations; for diesel, the frame is truck stops (where the majority of the outlet sales is No. 2 diesel fuel). There are less than five outlets that are on both surveys. In addition, gasoline prices are published for more regions, i.e., nine states and 10 cities, so the sample design is such that those areas have adequate coverage; whereas, diesel prices are published for only one state, California, and the regional and national level estimates.

See Supporting Statement B for further details regarding the sampling procedures for these surveys.

A.6. Consequences of Less-Frequent Reporting

The Petroleum Marketing surveys vary in periodicity depending on the requirements and uses of the survey data. Forms filed on a monthly basis include Forms EIA-182, EIA-856, EIA-14, EIA-782A, and EIA-782C. All of the monthly crude oil forms collect product price and or volume data. The price statistics estimate the price level where supply equals demand and the markets clear. Form EIA-782A collects price/volume and Form EIA-782C collects volumes of petroleum products. The annual survey, EIA-821, and the quadrennial universe frame survey, EIA-863, collect only product volume data.

The forms collecting product price data must be current in order to be meaningful, which necessitates monthly collection. The one monthly form that collects only volumetric data, Form EIA-782C, is widely used by state governments on a monthly basis. When Form EIA-782 was initially proposed in April 1982, a quarterly form, Form EIA-783, was included in the series. However, during the extensive public hearings and consultations with data providers and users, state governments in particular objected strongly to the quarterly data collection. State governments are frequent, regular, monthly users of petroleum products supply, marketing, and distribution data. The monthly, Form EIA-782, data collection and publication enables these governments and other data users to receive accurate and timely data for use in trend analysis, demand modeling and forecasting, policy evaluation and analysis, contingency planning, and budgetary planning. The data providers were also concerned that since the state governments needed the data monthly, the states would conduct 50 separate surveys. The data providers preferred to provide the data once to EIA rather than separately to each state government.

Forms EIA-856, EIA-14, and EIA-182 are required on a monthly basis because of the integral role these surveys play in the analysis of the nationally critical crude oil market. Form EIA-856 must fulfill the requirements of the International Energy Agency (IEA) agreement, provide critical information to the Strategic Petroleum Reserve Office for evaluating market conditions in connection with its purchases of crude oil, and meet the analytic requirements of EIA and other data users. Data gathered by Forms EIA-182 and EIA-14 are also used on a regular monthly basis by Congress, DOE, and other users for monitoring, forecasting, and market analysis. The price data collected by these survey forms would not be adequate for accurate industry analysis if collected less than monthly.

Form EIA-821 is an annual survey. EIA uses Form EIA-821 data to report to Congress on fuel oil supplies by economic sector in the AER. Data collected at greater intervals than annually would severely

handicap modeling performed by DOE for use in energy policy development, and in its energy forecasting and consumption programs.

Form EIA-863 is a quadrennial survey used to maintain the petroleum marketing sampling frame of petroleum product sellers. The four-year schedule is necessary to correct for the frame deterioration that occurs throughout the life of a survey. Specifically, the sampling frame deteriorates rapidly over time because of the high birth and death rate in the retail sector of fuel oil dealers and other small businesses. The industry also has a high rate of mergers and consolidations. If the identification survey is not performed on a quadrennial cycle, then sample deteriorations would occur resulting in over sampling, increased burden, and decreased statistical quality.

Form EIA-877 is a weekly survey conducted over a six month period every year. Weekly data collection first began in response to congressional inquiries on heating oil price increases in January 2000 after the U.S. residential heating oil price increased over 35% from one week to the next, and over 45% in the New England region. Since the switch to permanent weekly data collection in 2000, these timely data have been able to inform federal and state government on sharp price increases from week to week at the national, regional, and state levels. This has enabled the federal government to respond appropriately to emergency situations, such as Hurricane Katrina in 2005 and Hurricane Sandy in 2012, as well as state governments which often have a more immediate need for data in order to make decisions on granting hours of service waivers for fuel delivery or to assist their low-income residents. In conclusion, supply shortages or disruptions and severe weather could impact heating fuel prices instantly which would be reflected in a weekly data collection and not in a bi-weekly data collection.

Forms EIA-878 and EIA-888 are weekly surveys. Less frequent reporting would not permit EIA to meet its obligation of providing timely, reliable information in order to monitor these critical transportation fuels which are more volatile during market disruptions due to short term supply disruptions, price fluctuations, natural disasters, or other catastrophic events. These data are collected and published on the same day.

A.7. Compliance with 5 CFR 1320.5

The justification requiring respondents to report information more frequently than every quarter has been described above. Form EIA-782C is requested only 20 days after the end of the reporting period because the state energy offices need information on supply conditions by the earliest review of the

[Prime Supplier Reports](#) which are generated by Form EIA-782C. In the event of fuel shortages, the prime supplier reports are used by a governor to request that three percent (3%) of the total volume expected to be sold in a state be set aside as a special product reserve for that state.

A.8. Summary of Consultations Outside of the Agency

The Office of Petroleum and Biofuels Statistics (PBS) has conducted meetings to obtain feedback from internal and external stakeholders and data users. This involved qualitative and quantitative techniques to evaluate energy programs and survey processes. These evaluations use several techniques, including cognitive interviews, customer surveys, workshops, and facilitated group discussion to evaluate needs of stakeholders and data users. These outreach activities involved internal and external customers and involved both formal and informal processes. Each of these activities solicited feedback regarding the Petroleum Marketing Program. EIA did not receive any comments from these outreach activities.

During May-October 2016 EIA conducted a series of cognitive interviews on Forms EIA-182, EIA-856, EIA-782A, EIA-782C, EIA-821, EIA-877, and EIA-878. This research focused on areas where respondents appeared to have problems reporting correctly or where EIA was considering modifications to the form.

In May 2016 and March 2017, EIA received OMB approval to conduct a customer survey on the Gasoline and Diesel Fuel Update web products. The goal of these surveys was to identify data users, what information they access and for what purpose, and whether they could use alternative sources if EIA eliminated the gasoline prices. The results revealed the majority of users are from the business/industry communities; they access all levels of data to calculate fuel surcharges, plan transportation budgets, and analyze retail price trends; and rely on the easy and free access, accuracy, and timeliness of EIA data.

On [October 8, 2014](#) and [July 13, 2016](#), PBS hosted workshops in Washington, DC where EIA, State Energy Office, and industry staff presented information on heating fuel markets, data collection methodology, and agricultural use of propane to State Energy Offices participating in the State Heating Oil and Propane Program (SHOPP). The workshops served as a collaborative effort between EIA and State Energy Offices to strengthen relationships to share information and foster communication.

PBS hosted an informational [webinar](#) inviting all State Energy Offices across the country to join the SHOPP propane data collection expansion after the propane price spikes resulting from the propane

shortage in 2013/2014 heating season. At this webinar EIA discussed the benefits of states participation in the SHOPP program to include sharing costs between the federal government and states, sharing timely information on market conditions concerning heating oil and propane in individual states, and facilitating direct retailer contact by states to provide early insight into market issues.

PBS conducted a customer survey of the Gasoline and Diesel Fuel Update users to assess what data elements customers currently use and their future needs. Also analyzed were the results of EIA's annual customer surveys, DOE's telephone hotline for gasoline and diesel prices, and email requests sent to EIA's Office of Communications. The results revealed that there are several data users from varying organizations utilizing the information at differing times and modes of access.

On April 3, 2017, EIA published a 60-day Federal Register Notice in [Volume 82, Number 62](#) regarding the renewal of the Petroleum Marketing Program, including expansion and or elimination of the weekly retail gasoline price survey (EIA-878), change in first purchase crude oil stream (EIA-182), addition of residential heating oil sales volumes (EIA-877), and change in confidentiality pledge for three CIPSEA surveys (EIA-863, EIA-878, EIA-888).

A.9. Payments or Gifts to Respondents

There are no plans to pay respondents to respond to these surveys.

A.10. Provisions for Protection of Information

The information reported on the petroleum marketing survey Forms EIA-863 (Part 1, items 9-18, Part II, and Part III), EIA-878, and EIA-888 is considered confidential in accordance with the Confidential Information Protection and Statistical Efficiency Act of 2002 (P.L. 107-347) (CIPSEA) and the information will be used solely for statistical purposes. EIA revised its confidentiality pledge to Forms EIA-863, EIA-878 and EIA-888 survey respondents under CIPSEA in a 30 day emergency Federal Register notice published January 12, 2017 in 82 FR 3764. These revisions were required by the provisions of the Federal Cybersecurity Enhancement Act of 2015 (Pub. L. 114-11, Division N, Title II, Subtitle B, Sec. 223). This law permits and requires the Secretary of the Department of Homeland Security (DHS) to provide Federal civilian agencies' information technology systems with cybersecurity protection for their Internet traffic. Federal statistics provide key information that the Nation uses to measure its performance and make informed choices about budgets, energy, employment, health, investments,

taxes, and a host of other significant topics. EIA made this change permanent in a separate Federal Register notice published March 1, 2017 in 82 FR 12217 for all EIA surveys protected under CIPSEA, and submitted a separate information collection request (ICR) under OMB Control Number 1905-0211. The ICR was approved on June 29, 2017 making the change to the CIPSEA confidentiality pledge permanent for Forms EIA-863, EIA-878 and EIA-888. Form EIA-863 instructions include the following statement:

The information reported in items 1-8 of Part I, Respondent Identification Data, of Form EIA-863 will be protected and not disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. §552, the Department of Energy (DOE) regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905.

With regard to the information reported in items 1-8 of Part I, the Federal Energy Administration Act requires Form EIA to provide company-specific data to other Federal agencies when requested for official use. That information reported in Part I may also be made available, upon request, to another component of the DOE; to any Committee of Congress, the Government Accountability Office, or other Federal agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order. That Part I information may be used for any non-statistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

The information reported in Part I item 9-18, Parts II, Preparer Information, and III, Total Sales Volumes by State, of Form EIA-863 will be used for statistical purposes only and is confidential by law. In accordance with the Confidential Information Protection and Statistical Efficiency Act of 2002 and other applicable Federal laws, your responses will not be disclosed in identifiable form without your consent. Per the Federal Cybersecurity Enhancement Act of 2015, Federal information systems are protected from malicious activities through cybersecurity screening of transmitted data. Every EIA employee, as well as every agent, is subject to a jail term, a fine, or both if he or she makes public ANY identifiable information you reported.

OMB Control Number 1905-0211 made the change in the confidentiality pledge for Forms EIA-878 and EIA-888 permanent. Both forms are telephone surveys and have a shorter version of the revised CIPSEA pledge that is read to the respondent over the telephone.

The information you provide will be used for statistical purposes only. Your responses will be kept confidential and will not be disclosed in identifiable form. Per the Federal Cybersecurity Enhancement Act of 2015, Federal information systems are protected from malicious activities through cybersecurity screening of transmitted data. By law, everyone working on this EIA survey is subject to a jail term, a fine, or both if he or she discloses ANY information that could identify any confidential survey response.

The instructions to Forms EIA-878 and EIA-888, that are available on EIA's web site, include the revised CIPSEA pledge:

The information you provide will be used for statistical purposes only and is confidential by law. In accordance with the Confidential Information Protection and Statistical Efficiency Act of 2002 and other applicable Federal laws, your responses will not be disclosed in identifiable form without your consent. Per the Federal Cybersecurity Enhancement Act of 2015, Federal information systems are protected from malicious activities through cybersecurity screening of transmitted data. Every EIA employee, as well as every agent, is subject to a jail term, a fine, or both if he or she makes public ANY identifiable information you reported.

The instructions to the petroleum marketing survey Forms EIA-14, EIA-182, EIA-782A, EIA-782C, EIA-821, EIA-856, EIA-863 (Part 1, Items 1-8), and EIA-877 state:

The information reported on this form will be protected and not disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. §552, the Department of Energy (DOE) regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905.

The Federal Energy Administration Act requires EIA to provide company-specific data to other Federal agencies when requested for official use. The information reported on this form may also be made available, upon request, to another component of the Department of Energy (DOE); to any Committee of Congress, the Government Accountability Office, or other Federal agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order. The information may be used for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

Disclosure limitation methods are not used on tabular information for statistics based on information reported on Form EIA-821. For Form EIA-821, the following will also be included in the form's instructions:

Disclosure limitation procedures are not applied to the statistical data published from this survey's information. There may be some statistics that are based on data from fewer than three respondents, or that are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable person to closely estimate the information reported by a specific respondent.

Respondents to Form EIA-782C are informed that State Energy Offices are interested in receiving a copy of Form EIA-782C and the respondent may choose to provide a duplicate of each monthly report directly to the appropriate State Energy Office where the respondent made sales. For Form EIA-782C, the following will also be included in the form's instructions.

Information provided to State Energy Offices are not subject to federal regulations governing disclosure of company level data. Contact your State Energy Office for details on their data confidentiality policies and regulations.

A.11. Justification for Sensitive Questions

There are no questions of a sensitive nature asked on the ten surveys in the Petroleum Marketing Program.

A.12. Estimate of Respondent Burden Hours and Cost

The overall annual burden for this package is estimated to be \$3,586,506. Based on the reporting burden, the cost to the respondents is estimated to be: 48,690 hours x \$73.66 per hour. An average cost per hour of \$73.66 is used because that is the average salary plus benefits for an equivalent EIA employee in 2017. This is an increase over the 2014 average hourly rate of \$69.33. EIA assumes that the survey respondent workforce completing surveys for EIA is comparable to the workforce.

EIA estimates that there are no additional costs to respondents associated with the surveys in the Petroleum Marketing Program other than the costs associated with the burden hours as set forth above.

Table A3. Estimated Respondent Burden

EIA Form Number/Title	Annual Reporting Frequency	Number of Respondents	Annual Number of Responses	Burden Hours Per Response	Annual Burden Hours
EIA-14 ^(M)	12	69	828	1.75	1,449
EIA-182 ^(M)	12	106	1,272	4.30	5,470
EIA-782A ^(M)	12	100	1,200	5.00	6,000
EIA-782C ^(M)	12	202	2,424	2.10	5,090
EIA-821 ^(A)	1	2,900	2,900	4.40	12,760
EIA-856 ^(M)	12	42	504	6.10	3,074
EIA-863 ^(Q)	1	4,250	4,250	1.00	4,250
EIA-877 ^(S)	26	1,506	39,156	0.10	3,916
EIA-878 ^(W)	52	1,000	52,000	0.11	5,633
EIA-888 ^(W)	52	403	20,956	0.05	1,048
TOTAL		10,578	125,490		48,690

Reporting Frequency

Q=Quadrennial A=Annually
M=Monthly S=Weekly (October-March) W=Weekly

A.13. Annual Cost to the Federal Government

The annual cost estimate which includes personnel, development/maintenance, collection, processing, analysis, and publication for the ten surveys in the Petroleum Marketing Program is \$3,775,000. This cost is calculated for 10 FTE federal staff and 16 FTE contractor staff. This cost includes an overhead cost

of 20 percent for the federal staff to cover indirect costs such as space, supplies, etc. and the total contractor staff cost which already included the overhead costs.

A.14. Changes in Burden

Table A4. Changes in Burden

EIA Form Number/Title	Annual Reporting Frequency	Number of Respondents (Previously Approved)	Number of Respondents (Requested)	Annual Number of Responses (Previously Approved)	Annual Number of Responses (Requested)	Burden Hours Per Response (Previously Approved)	Burden Hours Per Response (Requested)	Annual Burden Hours (Previously Approved)	Annual Burden Hours (Requested)	Annual Number of Responses			Annual Burden Hours		
										Change Due to Agency Discretion	Change Due to Adjustment in Agency Estimate	Adjustment	Change Due to Agency Discretion	Change Due to Adjustment in Agency Estimate	Adjustment
EIA-14	12	72	69	864	828	1.75	1.75	1,512	1,449	0	-36	-36	0	-63	-63
EIA-182	12	82	106	984	1,272	4.30	4.30	4,231	5,470	0	288	288	0	1,238	1,238
EIA-782A	12	95	100	1,140	1,200	15.00	5.00	17,100	6,000	0	60	60	0	-11,100	-11,100
EIA-782C	12	200	202	2,400	2,424	2.10	2.10	5,040	5,090	0	24	24	0	50	50
EIA-821	1	3,184	2,900	3,184	2,900	4.40	4.40	14,010	12,760	0	-284	-284	0	-1,250	-1,250
EIA-856	12	43	42	516	504	6.10	6.10	3,148	3,074	0	-12	-12	0	-73	-73
EIA-863	1	5,017	4,250	5,017	4,250	1.00	1.00	5,017	4,250	0	-767	-767	0	-767	-767
EIA-877*	26	1,620	1,506	40,500	39,156	0.10	0.10	4,050	3,916	0	-1,344	-1,344	0	-134	-134
EIA-878	52	800	1,000	41,600	52,000	0.05	0.11	2,080	5,633	10,400	0	10,400	3,553	0	3,553
EIA-888	52	403	403	20,956	20,956	0.05	0.05	1,048	1,048	0	0	0	0	0	0

*EIA-877 reporting frequency has changed from 25 weeks in 2014 to 26 weeks in 2017.

Table A5. ICR Summary of Burden

	Requested	Program Change Due to Agency Discretion	Change Due to Adjustment in Agency Estimate	Previously Approved
Annual Number of Responses	125,490	10,400	-2,071	117,161
Annual Time Burden (Hr)	48,690	3,553	-12,098	57,235

A.15. Reasons for Changes in Burden

The reduction of 8,545 hours in annual burden hours from 2014 is primarily due to the revised burden estimate of Form EIA-782A from 15 hours to 5 hours (adjustment) which was identified during cognitive testing on the form. When participants were asked how much time was spent gathering the data necessary to complete Forms EIA-782A and EIA-782C, the time ranged from as little as 30 minutes to as long as four hours as shown in Table No. 2.

Table No. 2: Burden to Read Instructions and Gather Sales Data (n=8)

Number of Respondents	Amount of Time
5	≤2hr
2	2-3 hours
1	4-5

The total burden reported by participants ranged from about 45 minutes to 4.5 hours for completing both Form EIA-782A and Form EIA-782C. Participants were not able to provide separate estimates for Forms EIA-782A and EIA-782C since they complete both forms at the same time. Two participants stated it takes them less than 2 hours. Two other participants stated that it takes them 2-3 hours to complete both reports. The last two participants stated that they spend between 4-4.5 hours to complete both reports. Of those last two participants, one participant reported that it initially took 8 days to re-program their data retrieval program to access the data from their system and compile according to the product codes shown on Form EIA-782A and EIA-782C. This was a one-time effort by this participant to modify their software program for aggregating sales transactions across the calendar month. The participant did not specify whether the 8 days referenced calendar days or work days. The programming change that this respondent reported occurred in December, 2006 when Forms EIA-782A and EIA-782C were modified to breakout low sulfur diesel fuel into two categories: low and ultra-low sulfur diesel fuel. This product code change was necessary to meet the data needs of the Environment Protection Agency (EPA) and the public because EPA issued ultra-low diesel fuel regulations that became effective in July, 2007. The 8 days (64 hours) was an initial cost that should be amortized over the number of reporting cycles since this re-programming effort was only done once in 2006. After the re-programming effort was completed in 2006, this participant reported that it takes 4.5 hours to gather and report information on both Forms EIA-782A and EIA-782C. The reporting burden per response for Form EIA-782C remains the same at 2.1 hours per

response. The 4.5 hours reported by this participant for both forms would allocate 2.1 hours for Form EIA-782C and 2.4 hours for Form EIA-782A which is well below the burden estimate of 5 hours for Form EIA-782A that EIA shows in Table A4.

The last time EIA modified Forms EIA-782A and EIA-782C was in December, 2006 when low sulfur No. 2 diesel fuel was broken out into two categories to account for the ultra-low sulfur regulations issued by the U.S. Environmental Protection Agency. There have been over 120 data collection cycles over a 10 year period since 2006. EIA is not proposing any changes to Forms EIA-782A and Form EIA-782C in this information collection request so an additional 36 months should be included to amortize the burden of modifying a software program in 2006. Dividing 64 hours (8 days) by 120 collection cycles (10 years) equals 0.5 hours of burden. Dividing 64 hours (8 days) by 156 collection cycles (13 years) equals 0.4 hours of burden. EIA decided to allocate 0.5 hours of burden for reprogramming or changes to software as a component of reporting burden so there is sufficient burden time allocated to reprogramming in the event EIA modifies Form EIA-782A in the future. When 0.5 hours is added to the 2.4 hours of burden per response for Form EIA-782A that was reported by this participant, this results in a total burden per response for this participant of 2.9 hours. EIA's burden estimate of 5.0 hours for Form EIA-782A shown in Table A4 is an accurate estimate based on cognitive research.

Table No. 3: Total Burden Gather Date, Complete Form and Report Sales Data (n=8)

Number of Respondents	Amount of Time
4	≤2hr
2	2-3 hours
2	4-5 hours

One respondent only reported on Form EIA-782C. The seven respondents that reported on both reports provided a single burden estimate as the burden for both surveys. When asked, respondents were not able to breakout their total reporting burden between Form EIA-782A and Form EIA-782C. The reason they provided for not being able to separate the reporting burden between these two reports was the data necessary for both reports are accessed from the same data system and they generate their Form EIA-782A and Form-EIA-782C reports at the same time.

The number of states that respondents report for did not affect reporting burden. In fact, the respondents that report sales in multiple states were on the lower end of the reporting burden spectrum. One respondent reports for 11-15 states and spends 1.5 hours completing the EIA-782A and EIA-782C reports. One respondent spends around 2.5 hours completing both reports for 13-15 states. Another respondent reports for 10-12 states and spends 45 minutes completing both reports. The last respondent reports for 3-5 states and it takes one hour to complete both reports.

Form EIA-782A currently has a reporting burden of 15 hours. This burden estimate for Forms EIA-782A, EIA-782B, and EIA-782C were established in 1983 based on in-person field interviewing with companies in the gulf coast region. This report is the first check on burden for these forms in 33 years. Based on the findings from this report, a value of 15 hours for Form EIA-782A overestimates the reporting burden. The results from this research support a finding to reduce the total reporting burden on Form EIA-782A to 5 hours for all respondents. 5 hours was the highest estimate for reporting burden for reporting on both Forms EIA-782A and EIA-782C. It is important to note that 5 hours was the combined highest burden per responses for reporting on both Forms EIA-782A and EIA-782C, or 2.5 hours per survey form. EIA is overstating the burden per response for Form EIA-782A by using the 5 hour estimate as the burden per response estimate for only Form EIA-782A instead showing this as the combined burden per response for filing both Forms EIA-782A and EIA-782C. The change in burden per response on Form EIA-782A from 15 hours to 5 hours is shown under the column "Change Due to Adjustment in Agency Estimate" in Table A4 and is the main component in the large decrease shown in Table A5.

The increase of 3,553 annual burden hours as shown under "Change Due to Agency Discretion" in Table A4 and again in Table A5 for Form EIA-878 is due to the addition of the question to collect the annual motor gasoline sales volume which will provide a better sampling methodology with an increase in sample size. In addition, the sample for Form EIA-878 is increasing from 800 respondents to 1,000 respondents. The burden change for the remaining surveys in the Changes in Burden table were due to adjustments in the survey population sizes due to changes in the petroleum industry. The industry is dynamic in that companies go out of business and/or merge as new ones are identified continuously. Since conducting the quadrennial Form EIA-863 is optional during this 3-year OMB clearance, EIA has annualized the respondent burden over four years since this is a quadrennial survey.

A.16. Collection, Tabulation, and Publication Plans

- A. [Gasoline and Diesel Fuel Update \(GDFU\)](#): Weekly data reported on Form EIA-878 and Form EIA-888 are collected on Monday. Prices are reported as of 8:00 a.m. local time. These data are published the same day around 5:00 p.m. Eastern Time (ET). Two days later at 10:30 a.m. ET these data are also released in the [Weekly Petroleum Status Report \(WPSR\)](#) and they are released again at 1:00 p.m. ET on Wednesday in the [This Week in Petroleum \(TWIP\)](#).
- B. [Heating Oil and Propane Update \(HOPU\)](#): Weekly data reported on Form EIA-877 are collected from October 1 through March 31. These data are published in the HOPU at 1:00 p.m. ET on Wednesday and at the same time in the *TWIP*, *Winter Heating Fuels*, and utilized in the STEO.
- C. [Petroleum Marketing Monthly \(PMM\)](#): Data collected from the monthly surveys (Forms EIA-14, EIA-182, EIA-782A, EIA-782C, and EIA-856) are collected and published in the PMM according to the following schedule:
- | | |
|--|---|
| (1) EIA-782C forms due | 20 calendar days after the end of reference month |
| (2) All other monthly forms due | 30 calendar days after the end of reference month |
| (3) Processing of data completed | 45 calendar days after the end of reference month |
| (4) EIA-782C data published electronically | |
| in the Prime Supplier Report | 50 calendar days after the end of reference month |
| (5) PPM published | 60 calendar days after the end of reference month |
- D. [Fuel Oil and Kerosene Sales \(FOKS\)](#): Data collected from the annual survey (EIA-821) are originally published in the FOKS Report according to the following schedule and republished in other publications, including the AER.
- | | |
|---|---------------|
| (1) Forms Mailed | Early January |
| (2) Responses due | Early March |
| (3) Second Mailing to non-respondents | Mid-April |
| (4) Close-out data collection | November |
| (5) Completion of analysis/validation | November |
| (6) Post in Tables on Petroleum Navigator and update FOKS webpage | November |

E. Petroleum Product Sales Information Survey: EIA is considering conducting Form EIA-863 once in the 2018 to 2020 time frame. Data collected for the quadrennial census (EIA-863) are used for sampling and statistical purposes.

(1) Forms Mailed	Mid-January
(2) Responses due	End March
(3) Second Mailing to non-respondents	Late April
(4) Load EIA-821 Data	Mid-August
(5) Completion of validation phone calls	End August
(6) File ready for sampling purposes	September

A.17. OMB Number and Expiration Date

The expiration date will be displayed on the petroleum marketing survey forms.

A.18. Certification Statement

There are no exceptions to the certification statement of OMB Form 83-I.