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November 2024

**Part A: Justification**

**OMB No. 1905-0174**

*Form EIA-14, Refiners’ Monthly Cost Report*

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

*Form EIA-856, Monthly Foreign Crude Oil Acquisition Report*

*Form EIA-877, Winter Heating Fuels Telephone Survey*

*Form EIA-878, Motor Gasoline Price Survey*

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

**Supporting Statement for Petroleum Marketing Program**

www.eia.gov

U.S. Department of Energy

Washington, DC 20585



The U.S. Energy Information Administration (EIA), the statistical and analytical agency within the
U.S. Department of Energy (DOE), prepared this report. By law, our data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. Government. The views in this report do not represent those of DOE or any other federal agencies.

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# Introduction

The U.S. Energy Information Administration (EIA) is the statistical and analytical agency within the U.S. Department of Energy (DOE). EIA’s mission is to collect, analyze, and disseminate independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment. EIA is the nation’s premier source of energy information and, by law, its data, analyses, and forecasts are independent of approval by any other officer or employee of the United States government. EIA conducts a relevant, reliable, and timely data collection program that covers the full spectrum of energy sources, end uses, and energy flows; generates short- and long-term domestic and international energy projections; and performs informative energy analyses. EIA communicates its statistical and analytical products primarily through its website and customer contact center.

To meet this obligation, EIA’s Office of Energy Statistics (OES) conducts surveys that collect information about petroleum marketing industry activities from entities marketing crude oil and petroleum products. EIA is requesting a three-year extension with changes to the Petroleum Marketing Program (PMP) Information Collection Request (ICR).

Table A1. Petroleum Marketing Program data collection forms

|  |  |
| --- | --- |
| Form number | Form name |
| Form EIA-14 | *Refiners’ Monthly Cost Report*  |
| Form EIA-182 | *Domestic Crude Oil First Purchase Report*  |
| Form EIA-856 | *Monthly Foreign Crude Oil Acquisition Report*  |
| Form EIA-877 | *Winter Heating Fuels Telephone Survey*  |
| Form EIA-878 | *Motor Gasoline Price Survey* |
| Form EIA-888 | *On-Highway Diesel Fuel Price Survey*  |

Recently, EIA suspended three PMP surveys because data quality and value were declining relative to operational costs. For example, consolidation in the market reduced the number of independent respondents and required increasingly frequent suppression of state-level data. EIA proposes to discontinue these three surveys in addition to one survey that has been suspended since 2011 (Form EIA-863) (Table A2).

Table A2. Suspended Petroleum Marketing Program (PMP) data collection forms proposed for discontinuance

|  |  |
| --- | --- |
| Form number | Survey name |
| Form EIA-782A |  *Refiners’/Gas Plant Operators’ Monthly Petroleum Product Sales Report (Suspended 2022)* |
| Form EIA-782C | *Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption (Suspended 2022)* |
| Form EIA-821 | *Annual Fuel Oil and Kerosene Sales Report (Suspended 2022)* |
| Form EIA-863 | *Petroleum Product Sales Identification Survey (Suspended 2011)* |

EIA has reviewed the information collection in this supporting statement considering applicable Information Quality Guidelines. We have 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 forms in the PMP. Through integration of six forms, EIA monitors petroleum volumes and prices as the commodity moves through the various stages beginning with acquisition or importation of the crude oil to refining to create the finished petroleum products that are sold through retail outlets directly to the consumers.

Figure 1. Diagram of Petroleum Marketing Program



These six forms represent two sub-groups:

* The first sub-group consists of Forms EIA-14, EIA-182, and EIA-856. These forms collect data on crude oil acquisition costs and crude oil volumes from first purchasers, importers, and refiners.
* The second sub-group consists of Forms EIA-877, EIA-878, and EIA-888. These three telephone weekly forms collect retail price data for No. 2 heating oil, propane, finished motor gasoline, and ultra-low sulfur on-highway No. 2 diesel fuels. The data reported on the three weekly forms are point-in-time estimates. More information is available about these point-in-time estimates in Supporting Statement Part B.

## Crude oil acquisition costs and volumes acquired

*The Refiners’ Monthly Cost Report* (Form 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 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. Data are reported by [Petroleum Administration for Defense Districts](http://www.eia.gov/glossary/index.cfm?id=Petroleum%20Administration%20for%20Defense%20District) (PADD) for all domestic and imported crude oil purchases.

Form EIA-182, *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 state or production area or by stream, the volume in barrels and the weighted average cost per barrel for purchases they made in the reference month. Cost data are reported by state or, at the U.S. level, by crude oil stream or API gravity.

Form EIA-856, *Monthly Foreign Crude Oil Acquisition Report*, is a mandatory monthly census of two populations. The first population is composed of firms that reported data as of June 1982 on the Transfer Pricing Report (ERA-51). The second population is composed of firms that import more than 500,000 barrels of foreign crude oil into 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.

## End-user prices for petroleum products

Form EIA-877, *Winter Heating Fuels Telephone Survey*, is a mandatory sample telephone survey of No. 2 heating oil and propane dealers in 38 Eastern, Midwestern, Gulf Coast, and Rocky Mountain states. From October to March, sampled 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 selected. During the first telephone call at the beginning of a new sample, surveyed 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 January 1 to December 31. As of April 2024, monthly residential price data is collected and published from April through September.

Form EIA-878, *Motor Gasoline Price Survey*, is a mandatory sample survey of retail outlets selling motor gasoline that collects information by computer-assisted telephone interviewing (CATI), facsimile, email, web survey, text/SMS messaging, and manual retrieval of data from company websites.

Each week, sampled outlets report the retail pump price of regular, mid-grade, and premium grades of cash-only, self-service unleaded gasoline, including taxes. The selected retail outlets also report a one-time annual sales volume during survey initiation.

Form EIA-888, *On-Highway Diesel Fuel Price Survey*, is a mandatory sampled survey of retail outlets selling on-highway motor vehicle diesel fuel. Data collection is mainly conducted by computer-assisted telephone interviewing (CATI), facsimile, email, web survey, and text/SMS messaging, but responses are also received by web retrievals.

Each week, sampled outlets report the retail pump price of cash-only, self-service, on-highway motor vehicle diesel fuel, including taxes. Retail outlets also report a one-time annual sales volume during survey initiation.

## Uses of data in recurring EIA publications

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

Monthly [*Petroleum Marketing Monthly* (PMM)](http://www.eia.gov/petroleum/marketing/monthly/)

Weekly [*Gasoline and Diesel Fuel Update* (GDFU)](http://www.eia.gov/petroleum/gasdiesel/)

[*Heating Oil and Propane Update* (HOPU)](https://www.eia.gov/petroleum/heatingoilpropane/)

[*This Week in Petroleum* (TWIP)](http://www.eia.gov/petroleum/weekly/)

[*Weekly Petroleum Status Report* (WPSR)](http://www.eia.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html)

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

Annual [*Annual Energy Review* (AER)](http://www.eia.gov/totalenergy/data/annual/)

*[Annual Energy Outlook](http://www.eia.gov/forecasts/aeo/er)* [(AEO)](http://www.eia.gov/forecasts/aeo/er)

*[International Energy Outlook](http://www.eia.gov/forecasts/ieo/)* [(IEO)](http://www.eia.gov/forecasts/ieo/)

[State Energy Data System (SEDS)](http://www.eia.gov/state/seds/seds-data-fuel.cfm)

[*U.S Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Report*](http://www.eia.gov/oil_gas/natural_gas/data_publications/crude_oil_natural_gas_reserves/cr.html)

Monthly [*Monthly Energy Review* (MER)](http://www.eia.gov/totalenergy/data/monthly/)

[*Short-Term Energy Outlook* (STEO)](http://www.eia.gov/forecasts/steo/)

Other [*Today in Energy*](http://www.eia.gov/todayinenergy/)

# A.1. Legal Justification

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

* Title 15 U.S. Code §772, which established the mandatory requirement of owners and operators of businesses in the United States to report energy supply and consumption data to the EIA Administrator.
* Title 15 U.S. Code §764, which established the EIA Administrator’s powers to plan, direct, and conduct mandatory and voluntary energy programs that are designed and implemented in a fair and efficient manner. These powers include duties to collect, evaluate, assemble, and analyze energy information on U.S. reserves, production, demand, and related economic data, while obtaining the cooperation of business, labor, consumer, and other interests.
* Title 15 U.S. Code §790a, which established the National Energy Information System (NEIS) that is the enclave containing the energy data collected by EIA, which allows EIA to describe and analyze energy supply and consumption in the United States.NEIS allows EIA to perform statistical and forecasting activities to meet the needs of the U.S. Department of Energy and Congress, as well as the needs of the states to the extent required by the Natural Gas Act [Title 15 U.S. Code §717 et seq.] and the Federal Power Act [Title 16 U.S. Code §791a et seq.].

Authority for this information collection is supported by the following additional provisions specific to this information collection (example below is for the petroleum marketing surveys):

* Title 42 U.S. Code §6385, which established the EIA Administrator’s powers to collect information on the pricing, supply, and distribution of petroleum products in the United States by product category at the wholesale and retail levels and on a state-by-state basis.
* Title 42 U.S. Code §6274, which established the joint powers of the Secretary of Energy and the Secretary of State to work together to transmit data collected on the U.S. energy industry to the International Energy Agency, subject to limitations on the disclosure of identifiable information.
* Title 42 U.S. Code §13233, which established EIA’s program that collects regional cost data for the United States on alternative fuels.

# A.2. Needs and Uses of Data

## A.2.1. Overview of data uses

The purpose of the PMP 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:

* 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 energy markets. EIA is also explicitly directed to collect energy price data and to collect such data, that is, both supply and price data, with particular reference for publishing at the state level.
* 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 assess supply conditions in regional downstream petroleum markets, EIA evaluates the significance of a number of important issues related to the energy industry and in particular the petroleum industry. EIA data is used by various departmental units within the Department of Energy to analyze issues such as divestitures, mergers, withdrawals from geographic or product markets, predatory practices, and refiner product margins depending on facts and circumstances in certain events. According to the significant users within Congress, the Executive Branch, and among the states, the data collected by the surveys in the PMP are essential to address these issues.
* 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. Although somewhat similar or related data may be available from private or industry sources, as well as from other federal and state agencies, such data are not reasonable alternatives for the data provided by the surveys in the PMP in frequency, scope, quality, and coverage.

The information to be collected will provide weekly, monthly, and annual time series data on volumes and sales of crude oil (both imported 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 petroleum price and distribution data covering all energy sources, key products, markets, and end-use sectors at the state level. The most frequent users of the PMP data include Congress, government agencies, industry analysts, and trade publications.

Federal and state government agencies are frequent and regular users of petroleum product supply, marketing, and distribution data. 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 product prices, including crude oil, motor gasoline, diesel fuel, and propane
* Supplies: the availability of petroleum supplies, including crude oil and finished products
* 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

### A.2.2.2. Federal agency data users

Federal agencies that use data from PMP include:

* U.S. Census Bureau
* U.S. Commodity Futures Trading Commission (CFTC)
* U.S. Department of Commerce’s [Bureau of Economic Analysis (BEA)](http://www.bea.gov/)
* U.S. Department of Defense
* [U.S. Department of Energy’s](http://www.energy.gov/) [Office of Energy Efficiency and Renewable Energy,](http://eere.energy.gov) Federal Weatherization Program
* U.S. Department of Labor’s [Bureau of Labor Statistics (BLS)](http://www.bls.gov/)
* U.S. Department of Treasury’s [Internal Revenue Service](http://www.irs.gov/)
* [U.S. Federal Trade Commission (FTC)](https://www.ftc.gov/)
* [U.S. General Services Administration (GSA)](http://www.gsa.gov/)
* [U.S. Postal Service](https://www.usps.com/)

These federal agencies use PMP forms in the following manner.

U.S. Census Bureau

Data from Form EIA-182 was integrated into [Section 18: Forestry, Fishing, and Mining of the Statistical Abstract of the United States](http://www2.census.gov/library/publications/2011/compendia/statab/131ed/tables/natresor.pdf) and published by the U.S. Census Bureau.

U.S. Commodity Futures Trading Commission (CFTC)

The U.S. Commodity Futures Trading Commission uses Form 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.

U.S. Department of Commerce’s Bureau of Economic Analysis (BEA)

The Balance of Payments Division at the BEA uses total crude oil import prices and quantities from Form EIA-856 for BEA’s goods projections for the advance estimate of Gross Domestic Product (GDP). 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.

U.S. Department of Defense

The Defense Logistics Agency (DLA) major subcommand DLA Energy uses EIA petroleum market price data for fuel purchase planning.

U.S. Department of Energy (DOE)’s Office of Energy Efficiency and Renewable Energy (EERE), Federal Weatherization Program (WAP)

These data are used to allocate federal energy block grants to the states. An example of this process is the Federal Weatherization Program (WAP) administered by EERE. 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](http://energy.gov/eere/wipo/weatherization-and-intergovernmental-programs-office), [Oregon Low-Income Weatherization Assistance Program](https://www.oregon.gov/ohcs/Pages/low_income_weatherization_assistance_oregon.aspx)). 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.

U.S. Department of Labor (DOL)’s Bureau of Labor Statistics (BLS)

BLS uses Form EIA‑856 data as a primary input for calculating the [price indexes for foreign crude oil](http://www.bls.gov/opub/mlr/2006/12/art5full.pdf) as a component of the U.S. Import Price Index.

U.S. Department of Treasury’s Internal Revenue Service (IRS)

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 Form 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 Form 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 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. Federal Trade Commission (FTC)

The Federal Trade Commission uses Form EIA-14 to evaluate the effects of proposed mergers and also to determine whether certain oil producers, refiners, transporters, marketers, physical or financial traders, or others (1) have engaged in or are engaging in practices that have lessened or may lessen competition; (2) have engaged in or are engaging in manipulation in the production, refining, transportation, distribution, or wholesale supply of crude oil; or (3) have provided false or misleading information related to the wholesale price of crude oil to a federal department or agency.

U.S. General Services Administration (GSA)

The General Services Administration’s (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. 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.

U.S. Postal Service (USPS)

The U.S. Postal Service used EIA’s diesel price projections in a [2018 fuel cost and consumption strategy report](https://www.oversight.gov/sites/default/files/oig-reports/NL-AR-18-003.pdf), and this projection used Form EIA-888 data.

Other federal agencies

A 2014 testimony by Melanie Kenderdine (Director of the Office of Energy Policy and Systems Analysis and Energy Counselor of the 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 issues faced in analyzing the propane market. This report prompted EIA to expand the number of state-level propane prices it publishes for the 2014–15 heating season, which substantially increased the robustness of the data collected for analysis of propane markets.

### A.2.2.3. State agency data users

According to officials from state agencies, an important aspect of the utility of EIA data is in developing and managing state energy programs.

State agencies that use data from PMP include:

* [California’s Energy Commission (CEC)](http://www.energy.ca.gov/index.html)
* [Connecticut’s Department of Energy & Environmental Protection](http://www.ct.gov/dep/)
* Delaware’s State Energy Office, [Division of Climate, Coastal and Energy](https://dnrec.delaware.gov/climate-coastal-energy/)
* [Illinois’s Energy Office](http://www.illinoisenergy.org/) in the Department of Commerce and Economic Opportunity
* [Indiana’s Office of Energy Development](http://www.energy.in.gov)
* [Louisiana’s Department of Natural Resources](http://dnr.louisiana.gov/tad)
* [Maryland’s Energy Administration](http://www.energy.state.md.us)
* Massachusetts’s [Department of Energy Resources](http://www.mass.gov/doer/)
* New Hampshire’s [Office of Energy and Planning](http://www.nh.gov/oep/)
* New Jersey’s [Office of Clean Energy](http://www.bpu.state.nj.us)
* [New York State Energy Research and Development Authority](http://nyserda.ny.gov)
* [North Dakota State Government’s Labor Market Information Center](https://www.ndlmi.com/admin/gsipub/htmlarea/uploads/lmi_ndoilandgaseconomy.pdf)
* [Pennsylvania’s Department of Environmental Protection](http://www.depweb.state.pa.us/energy)
* [Virginia's Department of Mines, Minerals & Energy](https://www.virginia.gov/services/environment/mines-minerals-energy/)
* [Washington State Energy Office](http://www.commerce.wa.gov/site/526/default.aspx)
* [Wyoming State Geological Survey](https://www.wsgs.wyo.gov/energy/oil-gas-facts.aspx)

### A.2.2.4. Details on the use and purpose for each form

#### A.2.2.4.1. Monthly Crude Oil Surveys (EIA-14, EIA-182, and EIA-856)

**EIA-14, *Refiners’ Monthly Cost Report***

Form EIA-14 is a mandatory monthly census 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 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. Volume-weighted monthly average price estimates at the U.S. and [PADD](http://www.eia.gov/glossary/index.cfm?id=Petroleum%20Administration%20for%20Defense%20District) levels are compared with a company’s monthly average crude oil cost and are 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 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. The data are also used by planning or purchasing offices of a number of oil corporations. These statistics serve as a 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 quoted in articles in journals and publications, including:

* [WTRG Economics Oil Price and History Analysis](http://www.wtrg.com/prices.htm) (Refiner Acquisition Cost of Crude Oil and Domestic First Purchase)
* EIA, *Today In Energy* article, February 25, 2020, “[U.S. crude oil production increases; imports remain strong to support refinery operations](https://www.eia.gov/todayinenergy/detail.php?id=42936)” (Monthly Foreign Crude Oil Acquisition API Gravity, Refiners’ Acquisition Cost of Crude Oil,Domestic First Purchase)
* Bloomberg (Imported Refiners’ Acquisition Cost of Crude Oil)
* [*A Review of the Evidence on the Relation Between Crude Oil Prices and Petroleum Product Prices*](https://ou.edu/content/dam/price/energy%20institute/news/PetroProdPrices-Part1-9-11-2018.pdf),University of Oklahoma, September 2018 (Refiners’ Acquisition Cost of Crude Oil, Motor Gasoline Price)

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

Form EIA-182, *Domestic Crude Oil First Purchase Report*, is a mandatory census 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 oil 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:

* Revenue and tax credits, calculating income tax credits and verifying futures, spot, and posted prices and revenues
* Industry and market analysis, measuring the level of industry concentration and the distribution of ownership of domestic crude oil and monitoring the petroleum refining industry
* Policy analysis and forecasting, supporting emergency preparedness planning; evaluating legislative, administrative, and regulatory issues in domestic crude oil markets; forecasting prices downstream for refined products at the refinery gate and subsequent wholesale and retail sales; and forecasting tax revenues, state-level production volumes and prices in the MER and the STEO
* Congressional and federal decisions and policies, supporting EIA’s Office of Energy Production & Markets Analysis and the Office of Energy Production, Conversion & Delivery; the IRS at the Treasury Department; the Bureau of Economic Analysis (BEA) and the U.S. Census Bureau at the U.S. Department of Commerce; the Congressional Joint Committee on Taxation at the U.S. Department of the 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. EIA’s Office of Energy Production, Conversion & Delivery inputs state-level EIA-182 data into a forecasting model to project U.S. production levels and associated prices for domestic crude oil. The crude oil first purchase price data are published in the MER*,* PMM, and AER*.*

EIA publishes monthly and annual U.S. crude oil production estimates in the [*Petroleum Supply Monthly*](http://www.eia.gov/petroleum/supply/monthly/)*,* [*Petroleum Supply Annual*](http://www.eia.gov/petroleum/supply/annual/volume1/), and [Petroleum Navigator](http://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbblpd_m.htm). In order to create these monthly estimates, EIA relies on Form EIA-914, *Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report*; on external data sources (from states); and on Form EIA-182 first purchaser volume data.

The initial estimates of [PADD](http://www.eia.gov/todayinenergy/detail.cfm?id=4890) and state crude oil production for the current reference month published in the 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.

EIA calculates an estimate for half of the producing states by using the lagged average ratio of the state reported data to Form EIA-182 data, applied to the current Form 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 six-month period. In this method, the lagged average ratio has the largest influence on the level of production, while the current EIA-182 data have the largest influence on the trend.

Estimated barrels of crude oil production per dayi = FPi \* AvgRatioi-L

where,

 FPi = first purchase in barrels of crude oil per day, from EIA-182 survey for month *i*;

AvgRatioi-L = 1∕6 \* $\sum\_{j=i-L}^{j=i-L-5}($Statej /FPj)

Statej = barrels of crude oil production per day from state agency for month *j*; and

L= lag in months for the state.

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

* [Louisiana State Government](https://www.dnr.louisiana.gov/assets/TAD/newsletters/2023/July_23.pdf)
* [North Dakota State Government Labor Market Information Center](https://www.ndlmi.com/admin/gsipub/htmlarea/uploads/lmi_ndoilandgaseconomy.pdf)
* [Virginia’s Department of Mines, Minerals & Energy](https://www.energy.virginia.gov/geology/Oil.shtml)
* [Wyoming State Geological Survey](https://www.wsgs.wyo.gov/energy/oil-gas-facts.aspx)

EIA data from Form EIA-182 are initially published monthly in the PMMand are oftenreprinted or cited in articles in numerous publications and journals, including articles in five major newspapers—[*Los Angeles Times*](http://www.latimes.com), [*New York Times*](http://www.nytimes.com/),[*USA Today*](http://www.usatoday.com),[*Wall Street Journal*](http://online.wsj.com/home-page), and[*Washington Post*](http://www.washingtonpost.com).

**EIA-856 *Monthly Foreign Crude Oil Acquisition Report***

Form EIA-856, *Monthly Foreign Crude Oil Acquisition Report*, is a mandatory monthly census of firms importing over 500,000 barrels of foreign crude oil into the United States and its territories and possessions. Data collected on the form include crude oil cost, volume, API gravity, sulfur level, and country for each cargo imported. 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 that gathers information on cargo-level prices and actual gravities associated with specific crude oil 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.

BEA, BLS, EIA, and other federal agencies use Form EIA-856 data for analysis and forecasting:

* 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 GDP.
* DOE uses Form EIA-856 data to support its legislatively mandated responsibilities, some of which reside in the areas of modeling and forecasting. For example, to alleviate confusion about the difference between imported refiners acquisition cost and the prices for premium crude oils typically reported in the media, EIA’s Office of Energy Production & Markets Analysis used crude oil prices collected on Form EIA-856 to forecast the world oil price path for imported light sweet crude oil.
* EIA integrates Form EIA-856 data in several recurring publications—the PMM, MER, and AER.
* DOE’s Office of Petroleum Reserves has used Form EIA-856 data to assess the types of crude oil imported into the United States and to determine the appropriate crude oil 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’s oil because of Iraq’s invasion of Kuwait. EIA’s Administrator, as well as the staff of the Secretary of Energy, analyzed EIA-856 data by the API gravity and sulfur content of U.S. crude oil imports to evaluate the impacts of the loss of high API gravity crude oil from Iraq on the petroleum industry.

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

* 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 to forecast 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). 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 oil 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 thePMMand republished in other EIA publications, journals, and other publications.

#### A.2.2.4.2. 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 weekly from October through March and monthly from April to September (beginning in April 2024) for 38 states in the Eastern, Midwestern, Gulf Coast, and 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 EIA and large heating oil and propane consuming states in the United States. Costs for these data collections are jointly shared between EIA and the states requesting funding. 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 have 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*](https://www.eia.gov/petroleum/heatingoilpropane/) (HOPU) and are reprinted or cited in articles in numerous publications and journals, including articles in five major newspapers—[*Los Angeles Times*](http://www.latimes.com), [*New York Times*](http://www.nytimes.com/),[*USA Today*](http://www.usatoday.com), [*Wall Street Journal*](http://online.wsj.com/home-page), and[*Washington Post*](http://www.washingtonpost.com).Radio spots featuring weekly prices are also made available at <http://www.eia.gov/pressroom/radio/> for use by radio stations across the country.

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

Form EIA-878 collects, on a weekly basis, the retail price by grade of self-service, cash-only unleaded gasoline, 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 the Office of Management and Budget (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 to measure rapid price increases at both regional and national levels. For example, during the 1991 Iraq War, Congress and federal officials used these data 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 on 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 10 cities, five PADD and three sub-PADD areas, and the United States in total. EIA also uses Form EIA-878 price data each spring for STEO’s [*Perspectives supplement*](https://www.eia.gov/outlooks/steo/report/perspectives/2023/04-gasolineprice/article.php) forecasting gasoline household expenditures. The press, industry, media, and government rely on these data to measure 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, [Bloomberg News](http://www.bloomberg.com), Dow Jones, and [Associated Press](http://www.ap.org). 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*](https://www.eia.gov/petroleum/gasdiesel/) (GDFU) and are reprinted or cited in articles in numerous journals and publications, including articles in five major newspapers—[*Los Angeles Times*](http://www.latimes.com),[*New York Times*](http://www.nytimes.com/),[*USA Today*](http://www.usatoday.com),[*Wall Street Journal*](http://online.wsj.com/home-page), and[*Washington Post*](http://www.washingtonpost.com)*.* Price information is 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 self-service, cash-only on-highway diesel fuel, 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 follows OMB guidance regarding notification of a material change that warrants an increase in the frequency of collection due to a natural disaster or major supply disruption to account for the additional burden hours incurred.

Congress, federal and state officials, and transportation industry leaders use these data to monitor the retail price of on-highway diesel fuel. 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’s 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. In addition, the [Military Surface Deployment and Distribution Command](https://www.sddc.army.mil/Pubs/TR-12%20FRA%20Policy.pdf) 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 provide weekly information on retail market conditions to both government and industry. The press, industry, and government routinely rely on Form EIA-888 data as a measure of change in the fuel costs for transportation and shipping contracts. Form EIA-888 data have generally been adopted by the majority of the private trucking firms and shippers as the price adjustment mechanism in fuel surcharge formulas.

Motor carriers (both haulers and bus companies), shippers, and other members of the public access Form EIA-888 data daily to retrieve national, regional, and California retail diesel fuel price estimates from EIA’s website, or they sign up to receive updates about diesel data via email or text message.

Form EIA-888 data are also published on a weekly and monthly basis in trucking industry newsletters, including the [American Trucking Associations’ Transport Topics.](http://www.ttnews.com/fuel/national.aspx) The national and regional prices are broadcast twice per day on Interstate Radio Network, a radio network with 40 affiliates with coverage of 95% of the continental United States. Form EIA-888 data are also analyzed and used by various transportation and logistics trade associations, such as the [[National Industrial Transportation League](https://www.nitl.org/fuel-prices/)](https://www.nitl.org/fuel-prices/). Form EIA-888 data are routinely quoted on the wire services—[Bloomberg](http://www.bloomberg.com), [Dow Jones](http://www.dowjones.com), and the [Associated Press](http://www.ap.org)—and in articles in five major newspapers—[*Los Angeles Times*](http://www.latimes.com),[*New York Times*](http://www.nytimes.com/),[*USA Today*](http://www.usatoday.com),[*Wall Street Journal*](http://online.wsj.com/home-page), and[*Washington Post*](http://www.washingtonpost.com).

### A.2.2.5. Proposed form modifications

EIA proposes one minor form modification during this clearance cycle. The proposed change is to Form EIA-888, *On-Highway Diesel Fuel Price Survey, Schedule B.* We propose adding a checkbox under Part 2 of the form for a respondent to indicate if they do not sell diesel fuel. The current options under this part of the form do not allow respondents to indicate that they are in operation but do not sell diesel fuel. This change will aid frame maintenance for both the EIA-878 and EIA-888 surveys.

# A.3. Use of Technology

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 electronic modes. For example, several larger companies with multiple outlets in the sample send data directly to EIA via secure file transfer in an Excel spreadsheet or other tabular format. This approach saves time and reduces burden for the personnel at each of the individual outlets.
* Forms EIA-878 and EIA-888 use computer-assisted telephone interviewing (CATI), facsimile, email, web survey, text/SMS messaging, and manual retrieval of data from company websites as modes of collecting data.

The remaining PMP surveys are conducted electronically. Respondents submit data via secure file transfer, facsimile, and electronic modes. EIA accepts electronic records from respondents if reports are prepared and transmitted to EIA in the same format as the data collection form. As part of data collection enhancements, EIA introduced an Electronic Data Extraction System (EDES) on some of these surveys. This technology allows electronic extraction of the information submitted via Excel spreadsheets. EDES reduces manual data entry and keying errors, reducing program costs, reporting burden, and non-sampling errors.

## A.4. Efforts to Identify Duplication

EIA conducted extensive reviews to ensure 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 used 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 found no other source as comprehensive, timely, or detailed to replace these proposed EIA data collection activities. EIA determined that other sources cannot replace or even approximate the information proposed for collection because of differences in classification, inconsistency, incompleteness, unavailability, or lack of universal coverage. Some of the data collections complement, rather than duplicate, other federal agency data collections. These combined efforts capture the petroleum marketing industry and minimize industry burden.

The three weekly surveys collect data on different petroleum products: Form EIA-877 collects residential winter heating fuel 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*](https://www.eia.gov/petroleum/gasdiesel/) web page provides price data from Form EIA-878 and Form EIA-888. This information product consistently remains one of the top viewed information products on EIA’s website. The [*Gasoline and Diesel Fuel Update*](https://www.eia.gov/petroleum/gasdiesel/) web page received over 3.9 million visits in 2021, 8.9 million visits in 2022, and 4.7 million visits in 2023, although results across years are not strictly comparable due to a change in the Google Analytics tracking program in mid-2022 (Figure 2).

Figure 2. *Gasoline and Diesel Fuel Update* pageviews

Note: Data for 2021 and 2022 vary from 2023 data due to a change in the Google Analytics tracking program used by EIA in mid-2022.

The following monthly surveys are used to monitor crude oil and refined products from the wellhead to the refinery: Form EIA-182 collects wellhead data, Form EIA-856 collects crude oil imports data, and Form EIA-14 collects data on crude oil as it enters the refinery stage. Several sources of administrative or third-party data are used for publication, data validation, frame maintenance, and analysis.

The following explains the collection of similar data and the reasons why these similarities are not duplicative collections, including comparison across petroleum marketing surveys for the monthly crude oil surveys and weekly surveys.

### 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 of 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 are used to represent the initial value of imported oil. Form EIA-14 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 are related to Form EIA-14 data, which include costs that accrue subsequent to the first purchase, for example, transportation, storage, resale markups and markdowns, etc.

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

* Similar statistics to those obtained from Form EIA-182 are published in *Platts Oilgram* and [*Petroleum Intelligence Weekly*](https://www.energyintel.com/petroleum-intelligence-weekly-data), both of which focus on what refiners and resellers are asking publicly for crude oil, for example, posted prices and spot prices. By comparison, these publications do not provide data on sales of equity and non-equity crude oil or what the sale transaction price and quantity of oil was. If no sale transaction occurs at the offered price, the posted price is reported as the spot price at the time the trading market closed.
* BLS publishes similar statistics in the [Producer Price Index (PPI)](http://www.bls.gov/ppi/home.htm) as this calculates a price index for crude oil. BLS’s primary source of data is posted prices for domestic crude oil at the wellhead. 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 are collected on Form [EIA-23L, *Annual Survey of Domestic Oil and Gas Reserves (Field Version),*](http://www.eia.gov/survey/#eia-23l) 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 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.

The CBP, as the collector of import and export data and duties for the U.S. Department of the Treasury, 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 do not contain the same level of detail as Form EIA-856 on the crude oil cargo shipments. Additional permission and assessment are needed to determine if the information can satisfy EIA’s data needs and replace Form EIA-856. In addition, EIA requires more specific data elements that 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 oil stream**. To place crude oil in the precise categories required by IEA, the crude oil stream (for example, Saudi Light) is necessary. CBP currently collects only country-of-origin information, which does not specify the crude oil stream.

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

EIA does not collect spot price data on domestic and foreign crude oil streams. EIA purchases subscription data from Refinitiv and Oil Price Information Services (OPIS).

### A.4.1.2. Weekly petroleum product surveys (EIA-877, EIA-878, and EIA-888)

A review of data from Form EIA-877, *Winter Heating Fuels Telephone Survey*, compared to 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.

BLS publishes monthly residential heating oil prices for metropolitan areas as part of the [Consumer Price Index;](http://www.bls.gov/cpi) however, the BLS geographic coverage of selected metropolitan areas does not meet the need for state-level prices for each state that uses heating oil in the SHOPP Program.

EIA purchases and publishes state-level wholesale propane prices and city-level heating oil prices from Oil Price Information Services (OPIS).

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](http://www.lundbergsurvey.com/) is considered inadequate because it only collects prices every other Friday, which isn't timely enough to monitor fast-developing market shifts.
* The [American Automobile Association](http://gasprices.aaa.com/) (AAA) releases daily retail price information from its website based on data provided by the [Oil Price Information Service (OPIS).](http://www.opisnet.com) These prices are taken from credit card transactions throughout the day and do not represent a specific point in time, unlike the EIA-878 and EIA-888 surveys. In addition, it is not known how representative the set of transactions are of all retail outlets. AAA also does not provide separate prices by formulation of gasoline, such as reformulated or conventional gasoline. BLS’s [Consumer Price Index](http://www.bls.gov/cpi) is available for select cities, but state averages and averages by PADDs are unavailable. So, due to timeliness, frequency, and reliability problems, other data sources do not meet EIA's need for timely, independent source prices.
* Other data sources do not provide the required frequency, timeliness, free historical time series, and coverage needed to monitor regional retail motor gasoline prices. [GasBuddy.com](https://www.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 gasoline 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 United States. 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.

#### A.4.1.2.1. Assessment of data quality in third-party data

EIA wrote a report in 2017, *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 versus 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 Form 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 the lowest for regular gasoline (Table A3).

Table A3. 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% |

Data source: U.S. Energy Information Administration

Note: OPIS=Oil Price Information Service

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 or premium gasoline or temporary or permanent station closures. GasBuddy can collect information on power outages or lack of supply but only does so in extreme circumstances.[[1]](#footnote-3) 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 it uses “automated algorithms” to detect “obviously wrong information.” GasBuddy also allows users to report where there is incorrect information.[[2]](#footnote-4)

##### A.4.1.2.2. **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 Form EIA-878 versus OPIS and Form EIA-878 versus GasBuddy were strong, particularly for regular gasoline prices. However, EIA identified very large price differences (15 cents or greater), and the same station showed different retail prices between GasBuddy and Form EIA-878.

Another important difference is the reference period and product definition for the retail prices. Form EIA-878 collects the cash price for a gallon of finished motor gasoline as of 8:00 a.m. every Monday in every region of the United States. Maintaining consistency in the collection time enables EIA to provide point-in-time estimates that are comparable for both estimating price levels and monitoring 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 Form EIA-878 data, which restricts the product definition to *cash price* only. Several data gaps were in the OPIS and GasBuddy data series, where retail prices for regular, midgrade, and premium grades were not available for a station in the Form EIA-878 sample or where a price for regular grade was listed but price data for the other grades were missing. Other data quality issues (geographic coverage, urban/rural mix, and high/low volume retail outlets) and definitional differences also affect the aggregate price estimates generated from these third-party data sources. Form EIA-878 survey data are 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 requires high accuracy in the aggregate point-in-time estimates and transparency on the methodology. No other comparable source for Form EIA-878 weekly price data exists 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)](http://www.opisnet.com) and Electric Funds Source ([EFS](https://www.fuelmgmt.com/)) 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 draw heavily from outlets that have a data link with credit companies and are not probability based.
* The [Lundberg Survey](http://www.lundbergsurvey.com/) 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's [Consumer Price Index](http://www.bls.gov/cpi) is available for select cities, but state averages and averages by PADD 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

Three different methods exist for calculating crude oil and petroleum product price data: posted or spot prices, base period weighted average prices, and current period weighted average prices:

* 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 petroleum products, nor do they indicate how much volume is purchased or sold at that price. The daily or weekly journals publishing posted or spot prices include [*Petroleum Intelligence Weekly*](http://www2.energyintel.com/l/19202/2014-11-18/gp3qp)*,* [*Oil Daily*](https://www.energyintel.com/oil-daily)*,* [*Journal of Commerce*](http://www.joc.com)*,* [*Mid-East Journal*](http://www.mei.edu/middle-east-journal)*,* and *Platts Oilgram*.
* 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 U.S. Department of Agriculture, BLS, and the [Lundberg Survey](http://www.lundbergsurvey.com/).
* The current period weighted average price method that we employ takes the reference month's sales volumes and revenue to calculate a weighted average price for that month. This method is the only method that considers all transactions, including contracts, discounts, and distress sales weighted by their actual volumes of sales, and it 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 that can be uploaded, which reduces the need for manual data entry.

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

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

All sizes of firms, large and small, report on Form EIA-877 to accurately estimate weekly state-level residential prices. However, a stratified design is used for the No. 2 heating oil and propane samples in which outlets on each sampling frame are stratified in each state based on the relative size of their parent companies’ sales volumes in the state, using historical sales volumes for these fuels as reported in Forms EIA-863, EIA-821, and EIA-877. The allocation of the sample size for a given state is then weighted so that more outlets owned by companies with the largest sales volumes in a state are selected in the sample. This methodology makes the sample design more efficient for estimating weekly prices and also reduces the burden on small businesses.

To reduce burden on the Form EIA-878 survey, EIA selected an area sample of 1,000 outlets from a sampling frame of over 130,000 gasoline outlets.

To reduce burden on the Form EIA-888 survey, EIA selected a stratified sample of 590 outlets from a sampling frame of about 73,000 service stations and 9,500 truck stops that 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 on-highway diesel fuel). Fewer than five outlets are on both surveys. In addition, gasoline prices are published for more regions, in other words, nine states and 10 cities, so the sample design is such that those areas have adequate coverage; however, diesel prices are published for only one state, California, and the regional- and national-level estimates, excluding Alaska and Hawaii.

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, and EIA-14. All 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.

The monthly forms collecting product price data must be current to be meaningful, which necessitates monthly collection. Forms EIA-856, EIA-14, and EIA-182 are required monthly 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-877 is conducted weekly over a six-month period, from October to March, and monthly from April to September (beginning April 2024). 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 switch 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 to make decisions on granting hours of service waivers for fuel delivery or to assist their low-income residents.

Over the last few years, EIA has received several requests for more frequent reporting of retail prices during the off-season to plan for the upcoming heating season. To that end, a monthly data collection in April to September fills those data gaps and provides a continuous data series for comprehensive market analysis and forecasting for these seasonal products. These data will give consumers the choice to prefill their tanks in the summer when prices are typically lower or make decisions on whether to enter supply contracts.

By collecting data on residential heating oil and propane prices over the summer, EIA will enable over 10 million households in the covered states using heating oil or propane as their primary source of space heating to make informed decisions on when to fill their tanks. EIA estimated cost savings for three large consuming propane retail markets where price setting mechanisms are well understood and where rack prices are available with sufficient-enough history to establish a general trend. Data on the number of households using propane from the [American Community Survey](https://www.census.gov/programs-surveys/acs/data.html) (ACS) and third-party wholesale rack prices (prices paid by retailers at regional distribution terminals) suggest a potential savings of close to $170 million for residential propane consumers for those three regions (see the specific analysis below). These savings are attributed to the wholesale markup alone, which can be very volatile, and do not include the currently unknown retailer markup, which can also vary significantly summer to winter and between regions. Summer collection on the EIA-877 provides information on the retailer markup.

Analysis leading to the estimated $170 million savings are based on summer-to-winter price spreads for propane delivered at regional terminal racks (locations where retailer trucks load propane for transport to their own storage facilities). The three rack locations for which sufficient price history is available (8 years or more) are:

* Rapid River, Michigan, serving Michigan
* Selkirk, New York, serving New York and the New England region
* Greeley, Colorado, serving Colorado and Wyoming

Figure 3. Rapid River, Michigan, propane rack price premium over Conway, Kansas



Source: Oil Price Information Service (OPIS)

Figure 4. Selkirk, New York, propane rack price premium over Belvieu, Texas



Source: Oil Price Information Service (OPIS)

Figure 5. Greeley, Colorado, propane rack price premium over Conway, Kansas



Source: Oil Price Information Service (OPIS)

EIA then combined data from the American Community Survey (ACS) for the number of households in regions served by the terminals with data reported by EIA’s State Energy Data System (SEDS) for total residential propane consumption in those states or regions to calculate the total volume of propane consumed and the volume per household. Data from the ACS and from SEDS are both for 2019, and the seasonal spreads to calculate the total value of savings was also based on the 2019 price spread.

Inter-seasonal price savings were calculated on the assumption that consumers could exercise savings if they shifted their filling from winter to summer. EIA’s data on product supplied of propane shows clear patterns of higher deliveries of propane into the end-use market in the winter than in the summer. The data does not discern end-use deliveries, only total propane leaving the wholesale market. Nonetheless, in regions where propane serves as a primary heating fuel, the volumes of propane delivered in the winter are on average three times higher than in the summer, suggesting the heating market is currently not filling in the low season.

Overall, the $170 million savings, in 2019 in this example, reflects only savings in the three regions listed above, on the assumption that residential consumers are currently only filling in the winter but would shift all their refills into the summer season when prices at the wholesale level are lower. This $170 million total is therefore neither a maximum nor a minimum. It is not the maximum because it does not include more than half of the households using propane for space heating or any of the households using heating oil. It might, however, also be an overstatement of potential savings because it assumes all consumers, with perfect knowledge, would alter their behavior and shift their purchasing behavior. And there are potential indirect effects that the analysis does not consider. For example, if enough consumers shift their buying to the summer months, then prices in the summer may rise and prices in the winter may fall, equalizing the summer-to-winter spread. Such an analysis would require more sophisticated modeling of market behavior, although again, if it were conducted and expanded to include other regions of the country, the potential savings to consumers from even a limited change of behavior would likely match or exceed the $170 million estimate outlined above.

Many state energy offices currently conduct off-season data collection for their state needs so they may not seek additional funding. It is estimated the additional annual costs to the government for summer data collection is expected to be less than $70,000, which is much smaller than the anticipated benefits described above. In addition, monthly collection of this data is necessary to allow for consumers to understand market impacts of severe weather on supply, and therefore realize savings. Quarterly data collection would be too infrequent for benefits, but weekly collection would be too costly for little additional benefit.

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 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 in [Section A.5](#_A.5._Provisions_for).

# A.8. Summary of Consultations Outside of the Agency

The Office of Energy Production, Conversion & Delivery (EPCD) conducted meetings to obtain feedback from internal and external stakeholders and data users. These meetings 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.

EPCD consulted with each State Energy Office (SEO) participating in the State Heating Oil and Propane Program (SHOPP) to solicit feedback on issues with the current sample and suggestions for improvements between July and August 2018. Following these meetings, a focus group was conducted on November 30, 2018, to discuss common areas of concern, which provided an opportunity for the statistical team developing the new survey sampling methodology to communicate directly with the SEO stakeholders. Several states indicated their need for year-round prices to determine market conditions in advance of the heating season. Nine states were collecting heating fuel prices on their own during April to September for their own energy planning needs. EPCD conducted additional outreach to the SEOs in April 2021 to solicit interest and cooperation in collecting heating fuel prices monthly during the April to September off-season. They expressed overwhelming support of the expansion, so EIA proposed to expand SHOPP to year-round.

On [June 6, 2018](https://www.eia.gov/petroleum/heatingoilpropane/workshop/), EPCD hosted a workshop in Washington, DC, where EIA, SEO, and industry staff presented information on heating fuel markets, data collection methodology, and industry perspectives to SEOs participating in SHOPP. The workshop was a collaborative effort between EIA and SEOs to strengthen relationships, share information, and foster communication.

During August 2018, cognitive interviews were conducted on Form EIA-877. The objective of this research focused on in-depth understanding of respondent’s pricing mechanisms and customer types for heating fuels.

EIA will conduct up to 100 evaluative methodology techniques each year for testing purposes. These methodologies will test or evaluate new terminology, unclear questions in surveys, unclear instructions, or questions that may be added to the Petroleum Marketing Program (PMP) surveys. This will help improve ongoing surveys and reduce errors due to respondent confusion.

On June 4, 2024, EIA published a 60-day [Federal Register Notice](https://www.eia.gov/survey/frn/petroleum/FRN-60-Day-Marketing-June-4-2024.pdf), FRN 2024-12198, outlining proposed changes to the PMP and inviting interested parties to comment. EIA responded to all comments received. EIA received seven comments, five of which expressed concern about the discontinuation of the EIA-782 survey series, one that expressed support of the PMP, and one that expressed concern over data collection methodology for the EIA-878 survey.

## A.8.1. 2019 diesel customer survey results

The purpose of this diesel customer satisfaction survey was to collect feedback from data users who access the on-highway diesel fuel price data on EIA’s [*Gasoline and Diesel Fuel Update*](https://www.eia.gov/petroleum/gasdiesel/) web page. This survey only targeted users who browse the *Gasoline and Diesel Fuel Update* web page during the time the survey was live, the first week of January 2019, and subscribers to our weekly on-highway diesel fuel email list. EIA analyzed and interpreted information gathered through this survey to assess the data utility of the retail diesel fuel price information that EIA releases on its website and to make improvements in service delivery based on the feedback. This survey had 4,394 valid respondents; 83% of them used diesel fuel price data calculating fuel surcharges. However, 88% of all respondents would like to use additional information of more state-level on-highway diesel fuel price data; 82% total respondents were from business/industry. Based on the high demand of using more state-level prices data, EIA will find a better way to release more state-level on-highway diesel prices data.

## A.8.2. Defining a truck stop cognitive study 2020

The Survey Development and Administration Team (SDAT) contacted 2,400 organizations for cognitive interviews. The invitations to participate in the cognitive interviews resulted in 18 interviews; 3 co-ops were included in the 18 interviews. The purpose for the cognitive research study was to understand and assess the perceptions of retailers on on-highway diesel fuel, understand their criteria for defining a truck stop, and identify attributes of a truck stop and the differences between a truck stop and a gas station. Another objective was to identify any unique marketing practices of retailers, farm cooperatives (co-op), or hyper-marketers that affect the retail price of the fuel.

The research findings show no consensus among retailers of on-highway diesel fuel for defining a truck stop. Some retailers based their perception on whether the outlet location provided services that met the special needs of truckers. The most common attributes and amenities that participants mentioned were large lot sizes and space for trucks to move, ability for trucks to enter and exit the outlet location with ease, a place for truckers to rest and relax, and other amenities or services such as showers, a restaurant, fast fill pumps, saddle pumps, a CAT scale, and large canopy areas for the trucks to drive under for filling their tanks. Some retailers had a different retail price depending on whether the customer paid by cash or credit.

More than half (67%) of participants have pricing arrangements with corporate cards or fuel management cards. Of these 12 participants, 11 reported a price discount associated with these corporate cards, which was approximately 10 cents per gallon less than the cash price. All participants stated that they can report annual retail sales volumes of on-highway diesel fuel.

The average burden to report annual sales volumes was approximately five hours. This addition would add approximately 5.75 minutes to the reporting burden for Form EIA-888. Nine participants reported that they have separate bay areas for large trucks to purchase fuel. The average burden to report annual sales from these separate bay areas was approximately three hours. This addition would add approximately 3.5 minutes to the reporting burden for Form EIA-888 to report the annual sales from these separate areas.

## A.8.3. EIA-878 Schedule B and EIA-888 Schedule B cognitive research study 2021

EIA implemented a cognitive research study to test both survey forms EIA-878 Schedule B and EIA-888 Schedule B to ensure that respondents would be able to accurately answer each form. SDAT contacted 318 organizations for cognitive interviews. The invitations to participate in the cognitive interviews resulted in 10 interviews, one email response to EIA-878 Schedule B questions, and two no-shows. The response rate was approximately 3.45%.

The EIA-878 cognitive results showed that the Instructions and Part 1: Identification Information sections had no comprehension problems by most respondents. A major recommendation that was brought up by several respondents during the Part 1 section was to develop a multi-station form. In Part 3, an obstacle for respondents was retrieving annual motor gasoline volumes. It is important to note that no one stated that it was impossible to retrieve this information, however, it appears to be time consuming for many of the current contacts reporting this information to EIA. Based on the responses, corporate-level employees may gather this type of information quicker and more efficiently than station-level employees. The results for the EIA-888 cognitive study showed that most respondents had comprehension issues regarding the purpose of the survey form. When asked to paraphrase and define in their own words the purpose in the Instructions Section, they were unable to accurately define the section. Overall, respondents did not have any issues with Part 1 of the survey form. There were no issues with the comprehension of diesel bays or heavy-duty trucks. However, there were some comprehension issues with diesel products such as off-road diesel, No.1 diesel, and biodiesel. A retrieval issue found in the research was the inability for many respondents to split the diesel volumes between truck diesel and total diesel. Based on the feedback and recommendations received from the cognitive study, the program office was able to implement various changes that further improved Form EIA-878 Schedule B and Form EIA-888 Schedule B.

# 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

EIA began protecting information under the Confidential Information Protection and Statistical Efficiency Act (CIPSEA) on June 7, 2004, for both Form EIA-878, *Motor Gasoline Price Survey*, and Form EIA-888, *On-Highway Diesel Fuel Price Survey*, and on October 7, 2019, for Form EIA-877, *Winter Heating Fuels Telephone Survey*. In 2004, there were approximately 800 stations reporting prices on the EIA-878 survey and 350 stations on the EIA-888 survey. Since both surveys collect information primarily by telephone, a CIPSEA notification script was read to each respondent over the telephone on June 7, 2004, prior to collecting the price information. The EIA-878 and EIA-888 were the only surveys where a telephone script was read to the respondents to inform them of the change in confidentiality provisions rather than sending the notice by mail. The response rates remained the same on the EIA-888 survey for the week the CIPSEA notification was read over the telephone, however, the EIA-878 survey showed a significantly different pattern.

Figure 6 shows that response rates remained stable for Form EIA-878 during 2004 but fell 10% from 98% to 88% for the weekly price collection on June 7, 2004, when the CIPSEA notice was read to respondents over the telephone. Figure 7 shows that the number of prices imputed on the EIA-878 survey also reached a record high of 273 prices for 2004 during that same week. Table A4 shows that the average cost for collecting the price information on the EIA-878 survey also jumped during the week of June 7, 2004. The estimated cost per station was $3.40 for the week of June 7, 2004, and the weekly average for 2004 was $2.01.

Table A5 shows that the average cost for collecting the price information on the EIA-888 survey also jumped during the week of June 7, 2004. The estimated cost per station reporting on the EIA-888 survey was $2.32 for the week of June 7, 2004, and the weekly average for 2004 was $1.68. The EIA-878 gasoline survey collects three prices, one for each grade of gasoline, whereas the EIA-888 diesel fuel survey only collects one price.

EIA derived the average time per station as a weighted average of the average time it takes for collecting prices across the three modes of data collection which include fax, telephone, and email. The average cost per station is calculated based on the total amount of staff time needed to complete the collection of prices for one station, including interviewer, management/supervisory personnel, and programming and is derived as a function of the average time per station. The costs also show that all three modes of price collection required more time for collecting the weekly price information for the week that the CIPSEA notice was read to respondents. A shorter telephone script is used instead of the longer text for the weekly telephone surveys to minimize collection costs and reduce burden time for respondents following the 2004 results.

Figure 6. EIA-878 station response rates, 2004

Figure 7. EIA-878 number of weekly price imputations, 2004

Table A4. Cost of collecting price information on the EIA-878 survey

**(time measured per minute)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Survey date | Average call time per station  | Average email time per station | Average fax time per station | Average time per station | Estimated cost per station (dollars) |
| 2004 annual average | 1.64  | 0.79 | 0.85 | 1.41 | $2.01 |
| 6/7/04 | 2.03  | 2.44 | 2.53 | 2.40 | $3.40 |

Table A5. Cost of collecting price information on the EIA-888 survey

**(time measured per minute)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Survey date | Average call time per station  | Average email time per station | Average fax time per station | Average time per station | Estimated cost per station (dollars) |
| 2004 annual average | 2.02  | 0.48 | 0.34 | 1.18 | $1.68 |
| 6/7/04 | 2.90  | 0.30 | 0.57 | 1.64 | $2.32 |

One disadvantage of EIA collecting information under CIPSEA is that energy information currently being used by other federal agencies for non-statistical purposes would be terminated. Various statutes require EIA to share company-level information with other federal agencies even though their use may not qualify as statistical use.[[3]](#footnote-5) EIA shares company-level information with other federal agencies, including the U.S. Department of Energy (DOE). Section 12(f) of the Federal Energy Administration Act of 1974 requires EIA to share information, in a manner designed to preserve its confidentiality, with other federal agencies that is consistent with their official use and purpose.[[4]](#footnote-6)

Information reported on Forms EIA-877, EIA-878, and EIA-888 have not been shared with other federal agencies, so there are no concerns with obstructing any current federal data sharing activity. All three weekly price surveys have high practical utility. It is important to protect the identity of the reporting outlets in the sample. The aggregate price statistics are used for adjusting shipping contracts, for financial agreements, and for the SHOPP program. The aggregated price estimates are used for administering benefits under the Department of Health and Human Services’ Low Income Heating and Energy Assistance Program. See Section A.2. for further details on the use and purpose of these three weekly price surveys.

The information reported on the petroleum marketing survey Forms EIA-877, EIA-878, and EIA-888 is protected as confidential information in accordance with CIPSEA 2018.

EIA-877, EIA-878, and EIA-888 are weekly telephone surveys. These telephone surveys use a shorter version of the agency’s CIPSEA pledge that is provided to the respondent in initiation and non-respondent letters.

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. 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 report to EIA.

The instructions to the petroleum marketing survey Forms EIA-14, EIA-182, and EIA-856 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) or 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 non-statistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

# A.11. Justification for Sensitive Questions

EIA asked no questions of a sensitive nature on the six 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 $2,603,256. Based on the reporting burden, the cost to the respondents is estimated to be: 28,557 hours x $91.16 per hour. The 28,557 burden hours is the fixed value each year. An average cost per hour of $91.16 is the cost variable that changes every year, and it is used because that is the average salary plus benefits for an equivalent EIA employee in 2024 (Table A6). EIA assumes the hourly pay rate of survey respondents is equal to the pay rate of EIA employees. EIA estimates 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 A6. Average hourly loaded cost of an EIA employee, FY 2024

|  |  |  |  |
| --- | --- | --- | --- |
|  | ****Number of employees**** | ****Average annual salary**** | ****Average loaded**** ****hourly cost**** |
| Administrative/Professional | 319 | $145,911 | $88.37 |
| Executive (EJ, ES, EX, SL) | 25 | $209,214 | $126.72 |
| All EIA employees | 344 | $150,512 | $91.16 |

Table A7. Estimated respondent burden

|  |
| --- |
|  |
| **EIA form number/title** | **Annual reporting frequency** | **Number of respondents** | **Annual number of responses** | **Burden** **hours per responsea** | **Annual burden hoursb** |
| EIA-14 (M) | 12 | 62 | 744 | 1.75 | 1,302 |
| EIA-182 (M) | 12 | 91 | 1,092 | 4.30 | 4,696 |
| EIA-856 (M) | 12 | 38 | 456 | 6.10 | 2,782 |
| EIA-877 (S) | 32 | 3,000 | 96,000 | 0.10 | 9,600 |
| EIA-878 (W) | 52 | 1,300 | 67,600 | 0.11 | 7,323 |
| EIA-888 (W) | 52 | 650 | 33,800 | 0.08 | 2,704 |
| Pretest methodology | 1 | 100 | 100 | 1.5 | 150 |
| **Total** |  | **5,241** |  **199,792** |  | **28,557** |

a Burden hours are rounded to the nearest hundredth.

 b Annual burden may not equal the product of burden hours and annual number of responses due to rounding in the burden hour estimates.

Data source: U.S. Energy Information Administration

Note: Codes following EIA form numbers represent reporting frequency. Q=quadrennial, A=annual, M=monthly, S=weekly (Oct–Mar) or monthly (Apr–Sep), W=weekly

# A.13. Annual Cost to the Federal Government

The annual cost estimate for the six surveys in the Petroleum Marketing Program is $3,456,443, which includes personnel, development and maintenance, collection, processing, analysis, publication, and contractor costs. This cost of federal employees working on this survey program is $1,283,443 and is calculated for 8 FTE federal staff and 15 FTE contractor staff. This cost includes an overhead cost of 20% for the federal staff to cover indirect costs such as space, supplies, etc., and the total contractor staff cost, which already included overhead costs. The contractor costs are $2,173,000 for support on data collection and processing for all surveys in this PMP information collection.

Table A8. Petroleum Marketing Program annual survey costs

|  |  |
| --- | --- |
| Staff type | Annual cost |
| Federal | $1,283,443 |
| Contractor | $2,173,000 |
| Total government cost | $3,456,443 |

# A.14. Changes in Burden

Table A9. Changes in burden

a Burden hours are rounded to the nearest hundredth.
b Annual burden may not equal the product of burden hours and annual number of responses due to rounding in the burden hour estimates.
c EIA annualized the respondent burden over four years in Table A8 and Table A9 because Form EIA-863 is a quadrennial form.

Table A10. Information Collection Request summary of burden

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | Requested | Program change due to agency discretiona | Change due to adjustment in agency estimate | Previously approved |
| Total number of responses |  199,792 | 46 |  0 | 199,746 |
| Total time burden (hours) |  28,557 | -34,484 |  0 | 63,040 |

a Burden estimates have been rounded, so change in burden plus previously approved burden may not equal requested burden.

# A.15. Reasons for Changes in Burden

There will be an increase of 50 new respondents per year with annual burden of 75 hours for cognitive pretesting. This increase is due to the program wanting to continually improve its data collection and survey initiatives. EIA will conduct up to 100 evaluative methodology techniques each year for testing purposes. These methodologies will test or evaluate new terminology, unclear questions in surveys, unclear instructions, or questions that may be added to the Petroleum Marketing Program surveys for the following clearance schedule. This will help improve ongoing surveys and reduce errors due to respondent confusion.

The overall decrease of 34,484 annual burden hours as shown under “program change due to agency discretion” in Table A10 is largely due to the discontinuation of the EIA-782A, EIA-782C, EIA-821, and EIA-863 surveys. In addition, the decrease in the number of respondents and burden hours for the EIA-14 is due to changes in the market such as company mergers, acquisitions, and deaths.

EIA suspended the EIA-863 survey in 2011. Since then, EIA adjusted or redesigned the sampling methodologies of other surveys so they no longer require data from the EIA-863 (for example, sales volumes from the EIA-863 survey). EIA proposes to permanently discontinue the EIA-863 survey.

Recently, the EIA suspended three additional surveys: the EIA-782A, the EIA-782C, and the EIA-821. Market consolidation and the application of data disclosure rules have resulted in fewer publication cells and lower data quality, as well as increasing the burden and operating costs of the surveys. EIA’s priority is to provide timely data for use during emergencies and to have resource flexibility to adapt to transitions in energy markets. Prior to their suspension, both the EIA-782A and EIA-782C data were published two months after collection (for example, November data would be released the first of February of the following year). The EIA-821 was published annually, typically 14 months after the end of the report year. While EIA recognizes the value of the three surveys, given these publication timelines and operating costs, they are no longer an efficient use of resources, and EIA proposes to discontinue them.

If these surveys are discontinued, stakeholders will use alternative sources of data from its *Weekly Petroleum Status Report* (WPSR) and *Short-Term Energy Outlook* (STEO) as well as from external sources such as Bloomberg, the California Energy Commission, the Federal Highway Administration (FHWA), the New York State Energy and Research Authority (NYSERDA), the Oil Price Information Service (OPIS), and LSEG. Each of these alternative sources may provide elements of data that overlap with the data collected on the proposed discontinued surveys.

For the EIA-877, the burden increase of 1,078 hours will allow for changes in sample composition needed to reflect changes over time in the populations of residential propane sellers and No. 2 heating oil sellers in selected U.S. states, plus the limited amount of available sales volume information used as an outlet’s measure of size in the sample design.

The burden increase of 760 hours for the EIA-878 will allow for changes in sample composition needed to reflect changes over time in the number of big-box outlets in the United States and changes in the definitions of the reformulated gasoline program areas.

For the EIA-888, the burden increase of 250 hours will allow for changes in sample composition needed to reflect changes over time in the population of retail outlets in the contiguous United States that sell on-highway diesel fuel and adjust for the limited amount of available sales volume information used as an outlet’s measure of size in the sample design.

All changes are reported as Changes Due to Agency Discretion because it is within EIA’s discretion to address sample deficiencies.

# A.16. Collection, Tabulation, and Publication Plans

* [*Gasoline and Diesel Fuel Update* (GDFU)](http://www.eia.gov/petroleum/gasdiesel/): 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). On Wednesday, these data are also published in the [*Weekly Petroleum Status Report* (WPSR)](http://www.eia.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html) at 10:30 a.m. ET and in the [*This Week in Petroleum* (TWIP)](https://www.eia.gov/petroleum/weekly/) at 1:00 p.m. ET.
* [*Heating Oil and Propane Update* (HOPU)](https://www.eia.gov/petroleum/heatingoilpropane/): Weekly data reported on Form EIA-877 are collected from October 1 through March 31. These data are published concurrently in the HOPU and in [*This Week in Petroleum* (TWIP)](https://www.eia.gov/petroleum/weekly/) at 1:00 p.m. ET on Wednesday as well as used in the monthly STEO.Form EIA-877 data are collected monthly from April 1 through September 30 on the second Monday of each month. They are published in the HOPU at 1:00 p.m. ET on the Wednesday of next week following data collection.
* [*Petroleum Marketing Monthly* (PMM)](http://www.eia.gov/oil_gas/petroleum/data_publications/petroleum_marketing_monthly/pmm.html): Data collected from the monthly surveys (Forms EIA-14, EIA-182, and EIA-856) are collected and published in the PMM according to the following schedule:

Monthly forms due 30 calendar days after the end of reference month

Processing of data completed 45 calendar days after the end of reference month

PMMpublished 60 calendar days after the end of reference month

# 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. The OMB Number (1905-0174) and expiration date will be displayed on all the data collection forms and instructions.

1. <http://tracker.gasbuddy.com> [↑](#footnote-ref-3)
2. <https://www.gasbuddy.com/go/support> [↑](#footnote-ref-4)
3. Sections 12, 20, and 59 of the Federal Energy Administration Act of 1974 (15 U.S.C. 771, 779, 790h); Section 11 of the Energy Supply and Environmental Coordination Act of 1974 (15 U.S.C. 796); and Sections 205 and 407 of the Department of the Energy Organization Act of 1977 (42 U.S.C. 7135, 7177). [↑](#footnote-ref-5)
4. 15 USC 771(f), as amended. [↑](#footnote-ref-6)