



Alternative Fuels Incentive Act Fund



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

Executive Summary

This Alternative Fuels Incentive Act Program Annual Report was prepared by The Department of Environmental Protection (DEP) for submission to the Environmental Resources and Energy Committees of the Senate and House of Representatives of the Pennsylvania General Assembly, respectively in accordance with state law. Pennsylvania is continuing its progress in growing a market for alternative fuels such as natural gas, propane, electricity and biofuels through the development of alternative fuel fleet vehicles, and alternative fuel storage and refueling systems. This report summarizes the activities involved in the administration of the Alternative Fuels Incentive Grant (AFIG) and Alternative Fuel Vehicle (AFV) programs; including the number of grants awarded, rebates given, as well as other expenditures and activities undertaken pursuant to the Alternative Fuels Incentive Act. This report also details the awards granted in the 2017 solicitation cycle. A listing of rebate awards, notable completed grant projects, and program and grant project expenditures during the July 1, 2017 to June 30, 2018 fiscal year are included in this report.

Alternative Fuels Incentive Grant Program Annual Report

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INTRODUCTION

DEP administers a grant and rebate program to promote the use of alternative fuels in Pennsylvania under the Alternative Fuels Incentive Act (Act of Nov. 29, 2004, P.L. 1376, No. 178). This program was originally created in 1992 and administered by the Pennsylvania Energy Office through Chapter 72 of the Vehicle Code. The Alternative Fuels Incentive Grant (AFIG) Program was expanded in 2004 and 2008. In addition, an Alternative Fuel Vehicle (AFV) Rebate Program was created.

PROGRAM OVERVIEW

The AFIG and AFV Rebate programs have helped to decrease Pennsylvania's dependence on imported oil and improve air quality by reducing vehicle emissions of carbon monoxide, particulate matter, VOCs, and oxides of nitrogen (the pollutants that contribute to the formation of ground-level ozone), as well as carbon dioxide (a principal greenhouse gas).

The AFIG Program has fostered economic development in Pennsylvania by encouraging the transfer and commercialization of innovative energy technologies and the use of the state's indigenous fuels. The fuels promoted by the program include ethanol, biodiesel, compressed and liquefied natural gas (CNG and LNG), hydrogen, hythane (a combination of compressed natural gas and hydrogen), liquefied petroleum or propane gas (LPG), and electricity and fuels derived from coal and biomass.

The AFIG program supports DEP's objectives of reducing emissions from mobile sources to improve air quality and stimulating the use of domestically produced fuels. DEP has encouraged the development of partnerships among Pennsylvania businesses; the alternative fuel providers; and key local, state and federal government agencies to accomplish the objectives of the Alternative Fuels Incentive Act. For example, since the program was revised in 2013, the AFIG Program has reimbursed 78 grantees for the purchase or conversion of 909 vehicles totaling over \$5.7 million in program funds disbursed. The 909 vehicles are estimated to be displacing over 3.2 million Gasoline Gallon Equivalents (GGE) per year. Over \$13.4 million in total incremental costs have been expended by grantees during the purchase of alternative fuel vehicles due to the incentives provided by the AFIG program. The incentives and programs offered by AFIG include:

- The AFIG Grant Program, where \$5 million in grants per year is made available for school districts, local government, nonprofit entities, and registered Pennsylvania companies for projects for the purchase and/or retrofit of alternative fuel vehicles, the construction of alternative fuel infrastructure, and innovative technology related to alternative fuel vehicles;
- The AFV Rebate Program, which rebates to Pennsylvania residents for the purchase of new and pre-owned plug-in hybrid, plug-in electric, natural gas, propane, and hydrogen fuel cell vehicles;
- The AFIG Fixing America's Surface Transportation (FAST) Act Infrastructure Program, which offers \$1 million in grants per year for alternative fuel infrastructure projects located along Pennsylvania highway corridors designated ready or pending for alternative fuel signage by the Federal Highway Administration;
- The Alternative Fuels Technical Assistance Program, which provides technical assistance to eligible organizations to maximize the benefits of alternative fuel use in PA through a professional consulting firm that is assigned by DEP to work directly with

eligible organizations for the purpose of developing technically viable and economically sustainable alternative fueling strategies.

The Alternative Fuels Incentive Act requires DEP to establish a formula and method to award AFIG Program grants. DEP is also required to establish a method to prioritize the grant applications to achieve identified goals and criteria, including the following:

1. The improvement of Pennsylvania's air quality.
2. The fulfillment of Pennsylvania's responsibilities under the Clean Air Act (69 Stat. 322, 42 U.S.C. § 7401 et seq.).
3. The protection of Pennsylvania's natural environment, including land, water, and wildlife.
4. The advancement of economic development in Pennsylvania and the utilization of the state's indigenous resources.
5. The reduction of Pennsylvania's dependence on imported crude oil and other petroleum products.
6. The most cost-effective use of private and public funding.
7. The transfer and commercialization of innovative alternative energy technologies.

The AFIG program is funded with an annual allocation from the General Fund equal to 0.25 mills of the utilities' gross receipts tax, which has ranged between \$5 and \$6 million dollars annually over the years. Up to 1.5 percent of the funds may be used to administer these rebate programs, and up to 0.5 percent may be used for program education and public outreach. The unspent portion of the annual allocation does not lapse and can be used for projects on a continuing basis.

The Alternative Fuels Incentive Act provides incentive grants that pay a percentage of each applicant's eligible project costs. The remaining project costs are paid by the grantee from other sources.

In 2017, the AFIG program used the competitive solicitation process introduced in 2016, whereby the opportunity to submit an application remained open continuously throughout the 2017 calendar year. The first submission period ended on July 14, 2017, and the second submission period ended on December 15, 2017. Applications received during each submission period were collected from DEP's eGrants system and evaluated after the end of each submission period.

In 2018, AFIG again used this process allowing the opportunity to submit an application to remain open through the 2018 calendar year. The first submission period ended on July 13, 2018, and Awards were announced on November 9, 2018. The second submission period ended on December 14, 2018. Applications received in the second submission period have been collected and are currently being evaluated.

The following limitations may apply to the AFIG competitive solicitation and AFV rebate programs:

1. A single funding recipient can receive no more than 10 percent of the funds available in any one funding year.
2. The total dollar amount of awards to recipients operating within and including any county shall not exceed 15 percent of the funds available in any one funding year.
3. If the total funding to be awarded in a funding year is less than the amount available for that year, then DEP may increase the established 10 percent and the 15 percent funding levels in (1) and (2) above, not to exceed 40 percent of the fund.
4. DEP reserves the right to not award any additional funds to applicants that have failed to complete previous projects funded by the AFIG Program.
5. Applicants who have received grants and completed projects through the AFIG Program, but have failed to submit the proper reporting forms, may not be considered for funding.

2017-18 PROGRAM YEAR REVIEW

The following is a report on programs which were available during the period of this report, July 1, 2017 through June 30, 2018:

Alternative Fuel Incentive Grant Solicitation 2017

The 2017 Alternative Fuels Incentive Grant Program began accepting applications through the DEP eGrants system on May 26, 2017. The program remained open continuously through the 2017 calendar year, with two submission periods approximately four months in length, during which prospective applicants may submit applications for consideration. These submission periods ended July 14 and December 15, 2017. Award Summaries for the two submission periods are detailed below. The AFIG program was open to applications for projects involving the purchase and/or conversion of alternative fuel vehicles, projects resulting in the installation of alternative fuel refueling infrastructure, and projects that promote innovative alternative fuel technology. After each submission period, AFIG staff evaluated all applications received to determine grant awards.

AFIG 2017 First Submission Period Awards Summary

The first submission period ended on July 14, 2017 with a total of 14 applications submitted resulting in a total grant fund request of \$2,224,826. Eleven applications were submitted in the Vehicle Retrofit and/or Purchase category, and three applications were submitted in the Refueling Infrastructure category. No applications were submitted in the Innovative Technology category. After evaluation by DEP staff, five projects were selected - totaling \$1,128,484 in grant funds awarded. The recommended projects included three Vehicle Retrofit and/or Purchase projects and two Refueling Infrastructure projects.

Note: Please see Appendix A for summary descriptions of each awarded project.

Vehicle Retrofit/Purchase Projects

- Total Number of Applications: **11**
- Number of Awarded Projects: **3**
 - Note: Two applications were deemed ineligible
- Total Grant Request: **\$1,152,776**
- Recommended Amount of Award Funding: **\$228,484**
- Total Number of Vehicles Applied For: **101**
- Total Number of Awarded Vehicles: **35**
- Total Estimated Gasoline Gallon Equivalents (GGE) saved per year: **164,936 (awards)**
- New Fueling Stations Supported: **0**
- Existing Fueling Stations Supported: **2**

Refueling Infrastructure Projects

- Total Number of Applications: **3**
 - Fleet Refueling Applications: **3**
- Number of Awarded Projects: **2**
 - Note: One application was deemed ineligible
- Total Grant Request: **\$1,072,050**
- Recommended Amount of Award Funding: **\$900,000**

AFIG 2017 Second Submission Period Awards Summary

The second submission period ended on December 15, 2017 with a total of 27 applications submitted resulting in a total grant fund request of \$2,903,322. Eighteen applications were submitted in the Vehicle Retrofit and/or Purchase category, two applications were submitted in the Innovative Technology category, and seven applications were submitted in the Refueling Infrastructure category. After evaluation by DEP staff, 19 projects were selected - totaling \$1,642,014 in grant funds awarded. The recommended projects included 12 Vehicle Retrofit and/or Purchase projects, six Refueling Infrastructure projects, and one Innovative Technology project.

Note: Please see Appendix A for summary descriptions of each awarded project.

Vehicle Retrofit and/or Purchase Projects

- Total Number of Applications: **18**
- Number of Awarded Projects: **12**
- Total Grant Request: **\$ 1,297,858.75**
- Amount of Funding Awarded: **\$690,783**
- Total Number of Vehicles Applied For: **131**
- Total Number of Awarded Vehicles: **93**
- Total Estimated GGE saved per year: **180,166 (awards)**
- New Fueling Stations Supported: **1**
- Existing Fueling Stations Supported: **20**

Refueling Infrastructure Projects

- Total Number of Applications: **7**
 - **5** Fleet Refueling Applications
 - **2** Home-Based Refueling Applications
- Number of Awarded Projects: **6**
- Total Grant Request: **\$1,211,363.50**
- Amount of Funding Awarded: **\$811,364**

Innovative Technology Projects

- Total Number of Applications: **2**
- Number of Awarded Projects: **1**
- Total Grant Request: **\$340,050**
- Recommended Amount of Award Funding: **\$140,050**

Alternative Fuel Incentive Grant Solicitation 2018

The 2018 Alternative Fuels Incentive Grant Program began accepting applications through the DEP eGrants system on May 4, 2018. The program will remain open continuously through the 2018 calendar year, with two submission periods during which prospective applicants may submit applications for consideration. For application submission this year, the program has migrated to DCED's Electronic Single Application System (ESA).

Changes to the program for the 2018 Solicitation included increasing award requests to 100% of vehicle incremental cost for new CNG, LNG, Biodiesel vehicles using a blend greater than B20, Electric Vehicles with a battery system capacity equal to or greater than 20 kWh, and Hydrogen Fuel Cell vehicles. Applicants may request 100% of the incremental cost of the vehicle up to \$40,000 per vehicle. In addition, priority will be given in awards to projects that include the use of funded vehicles by emergency personnel in emergency responses, rescues, and evacuations (to include police, fire, public safety, and ambulatory vehicles).

Refueling infrastructure projects located along Pennsylvania Interstate Highway corridors not currently designated as alternative fuel "pending" or "ready" FAST Act Corridors were given priority in consideration for awards.

(https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/). These interstates include but may not be limited to I-70, I-78, I-81, I-83, I-84, I-99, and I-180.

The first submission period ended July 13, 2018. The second submission period ended December 14, 2018.

Pennsylvania FAST Act Alternative Fuel Corridor Infrastructure Program

The Pennsylvania FAST Act Alternative Fuel Corridor Infrastructure Program is a special solicitation under the AFIG program that provides up to a 50 percent reimbursement grant to install public re-fueling infrastructure along select highway corridors in Pennsylvania. Eligible corridors are designated by the Federal Highway Administration in the FAST Act (Fixing America's Surface Transportation Act - Pub. L. No. 114-94) as alternative fuel corridors, which are "Signage Ready" or "Signage Pending." These corridors include specific sections of interstates located in Pennsylvania: I-76, I-276, I-476, I-70, I-95, and I-80.

One million dollars in grants were made available to municipal authorities, political subdivisions, non-profit entities, corporations, and limited liability companies or partnerships incorporated or registered in the commonwealth to install public-use electric, hydrogen, propane and compressed natural gas refueling infrastructure. The infrastructure must support refueling of alternative fuel vehicles including: electric vehicle (EV) charging, hydrogen, propane, or compressed natural gas refueling, and must be publicly accessible at all times. Projects must incorporate roadway signage compliant with the FAST Act, offer an open and common payment platform, feature standardized nozzles and connectors, and be co-located with consumer amenities. Project infrastructure must be designed to meet 5-year future projections of anticipated usage for the public at the proposed public stations. All projects must be sited within approximately five roadway miles of the eligible corridor segment. Individual project awards are capped at \$500,000.

The application period was open from September 30, 2017 until November 17, 2017.

The FAST Act program awarded one grant of \$178,785 to CNG Fuel LLC. The project will expand an existing CNG refueling station located two miles north of Exit 60 of I-80. The expansion of the fuel dispensing, storage, and compression systems will expand the deliverable CNG volume by over 260% and allow the station to service heavy duty semi-tractor trailer fleet vehicles traveling the I-80 corridor. An estimated 116,650 gallons of diesel/gasoline will be displaced annually because of the project, which equates to 86,078 lbs/year of CO₂ reductions and 322,728 pounds/year of NO_x reductions.

The PA FAST Act program will reopen again in 2018.

Note: Please see Appendix A for a summary description of the awarded project.

AFIG 2017-2018 Project Summary

Between July 1, 2017 and June 30, 2018, the AFIG program had 27 projects that were successfully completed by grantees. These projects expended \$3,451,603.06 in grant funds and resulted in a leveraged grantee cost share of \$6,912,463.42. The completed vehicle purchase and/or retrofit projects resulted in the purchase or conversion of 336 alternative fuel vehicles which are estimated to displace 1.8 million GGE per year. A total of 10 new and 24 existing alternative fuel stations are supported by these projects. The projects completed in 2017-18 are as follows:

Project Name	Grantee	Project Type	Total Amount Reimbursed
Claysburg Propane Bus Purchase	A&M Transit Company	Vehicle Purchase and/or Retrofit	\$19,982.00
Purchase and Delivery of 20 New Class 5 Delivery Vehicles	Bimbo Bakeries USA, Inc.	Vehicle Purchase and/or Retrofit	\$135,000.00
Second Avenue Charging Infrastructure Project	City of Pittsburgh	Refueling Infrastructure	\$175,000.00
Second Avenue Electric Vehicle Project	City of Pittsburgh	Vehicle Purchase and/or Retrofit	\$69,269.00
Silvi Concrete CNG Mixer Deployment	Constructural Dynamics, Inc.	Vehicle Purchase and/or Retrofit	\$106,532.00
CNG Vehicles	Dandy Mini Marts, Inc.	Vehicle Purchase and/or Retrofit	\$9,850.00
The Derry Township School District Propane School Bus Conversion Initiative	Derry Township School District	Vehicle Purchase and/or Retrofit	\$14,084.00
Ride the Green Bus at Greensburg Salem School District	DMJ Transportation, Inc.	Vehicle Purchase and/or Retrofit	\$74,400.00
E & B Transportation Company Propane School Bus Fleet	E&B Transportation Co.	Vehicle Purchase and/or Retrofit	\$19,782.00
ESASD Propane School Bus Conversion Initiative	East Stroudsburg Area School District	Vehicle Purchase and/or Retrofit	\$200,000.00
East Stroudsburg Area School District Propane Station Initiative	East Stroudsburg Area School District	Refueling Infrastructure	\$180,000.00
Harmar 2016 Expansion: Phase I	Freight Equipment Leasing, LLC	Vehicle Purchase and/or Retrofit	\$200,000.00
Natural Gas/Diesel Locomotive	GE Transportation	Innovative Technology	\$950,000.00
Maintaining a Green Fleet Legacy- Acquisition of Nine (9) Compressed Natural Gas Buses	Lower Merion School District	Vehicle Purchase and/or Retrofit	\$121,752.00
Phase II - Propane Bi-Fuel Conversion Program	McCandless Township Sanitary Authority	Vehicle Purchase and/or Retrofit	\$12,800.00

Project Name	Grantee	Project Type	Total Amount Reimbursed
Western Pennsylvania Alternative Fuel School Bus Program	Pittsburgh Region Clean Cities	Vehicle Purchase and/or Retrofit	\$250,000.00
Western Pennsylvania Alternative Fuel Vehicle Program	Pittsburgh Region Clean Cities	Vehicle Purchase and/or Retrofit	\$167,338.90
Pocono Mountain School District Propane Bus Purchase	Pocono Mountain School District	Vehicle Purchase and/or Retrofit	\$100,000.00
LPG Delivery Vehicles	RMP Transportation Company, Inc.	Vehicle Purchase and/or Retrofit	\$37,375.00
Hatboro-Horsham School District Propane Bus Conversion Initiative	School District of Hatboro-Horsham	Vehicle Purchase and/or Retrofit	\$22,500.00
The Haverford School District Propane School Bus Conversion Project	School District of Haverford Township	Vehicle Purchase and/or Retrofit	\$40,000.00
UGI Utilities CNG Vehicle Acquisition	UGI Utilities, Inc.	Vehicle Purchase and/or Retrofit	\$179,190.00
CNG Delivery Truck Project	United Parcel Service	Vehicle Purchase and/or Retrofit	\$100,000.00
Purchase of Ten (10) CNG Transit Vehicles	Williamsport Bureau of Transportation	Vehicle Purchase and/or Retrofit	\$200,000.00
Fleet expansion - Wilson of Wallingford, Inc.	Wilson of Wallingford, Inc.	Vehicle Purchase and/or Retrofit	\$7,350.00
Worley & Obetz Propane Fleet	Worley & Obetz, Inc.	Vehicle Purchase and/or Retrofit	\$15,900.00
Worley & Obetz Propane Fleet Fueling Station	Worley & Obetz, Inc.	Refueling Infrastructure	\$33,498.16

Note: In June 2018, Worley & Obetz declared bankruptcy. Both AFIG projects had been completed and fully reimbursed prior to the notification of bankruptcy. The grant term for the two AFIG projects had not yet expired and DEP is working to either recover grant funding for equipment purchased or will evaluate a request to transfer the responsibilities of grant agreement to the new owner/operator for the remainder of the grant period.

Alternative Fuels Incentive Grant Program Recent Success Stories

River Valley Transit, Lycoming County – River Valley Transit is the public transit provider servicing most of Lycoming County, as well as portions of Clinton County. River Valley Transit was awarded a grant for \$200,000 covering approximately 40% of the incremental cost for the purchase of 10 compressed natural gas (CNG) Gillig, Inc. transit buses. The addition of these buses to the RVT fleet brings their total number of natural gas-powered vehicles to 18. Two buses were delivered to RVT in December 2016, four buses in July 2017, and four buses in January 2018. They also plan to replace all remaining diesel buses in their fleet (12 additional buses) with CNG over the next few years. RVT constructed their own fast fill CNG fueling station in 2013, which provides both fleet refueling for their buses, as well as public refueling. Total cost of the vehicles was \$5,798,692. Total anticipated fuel displacement is 84,000 gallons per year of diesel, which equates to operating cost savings of around \$100,000 annually.



A&M Transportation – A&M Transit Company is a school bus contractor for the Claysburg Kimmel School District located in Blair County, Pennsylvania. A&M Transit was awarded a grant for \$19,982 covering 50% of the incremental cost of six propane-powered school buses. One bus was delivered to A&M in August 2016 with the remainder delivered in July 2017. A&M installed propane fueling infrastructure at their Claysburg garage for the purpose of fueling the buses. The propane is purchased for the site by the school district. Total cost of the vehicles was \$5,550,459. Total fuel displacement for the first year of operation was 16,822 gallons of diesel.



Alternative Fuels Vehicle Rebate Program

The AFV Rebate Program supports Pennsylvania residents who purchase a new qualified alternative fuel vehicle registered in Pennsylvania and powered by CNG, electricity, fuel cells (FC) or LPG. Since 2011, the program has provided a total of over \$7.6 million in rebate funds to 3,699 Pennsylvania residents.

This year, DEP approved 589 rebates for alternative fuel vehicles purchased and then registered in Pennsylvania from July 1, 2017 through June 30, 2018 providing \$851,750 in rebate reimbursements during this time.

From July 1, 2017 to March 18, 2018 the rebate structure was based on the following:

Electric and Electric Hybrids

- \$1,750 rebate for a Plug-In Hybrid Electric Vehicle (PHEV) or Battery Electric Vehicle (EV) with a battery system capacity equal to or greater than 20 kWh
- \$1,000 rebate for a rebate for a PHEV or EV with a battery system capacity between 10 kWh and 20 kWh
- \$750 rebate for a rebate for a PHEV or EV with a battery system capacity less than 10 kWh
 - Note: All rebate levels can include electric motorcycles, ATVs, and low speed electric vehicles if registered in Pennsylvania.

CNG and Propane

- \$1,000 rebate for a Natural Gas (CNG) fueled vehicle including original equipment manufacturer (OEM)/Certified Retrofits only
- \$1,000 rebate for a Propane (LPG) fueled vehicles including OEM/Certified Retrofits only
 - Note: Rebates for CNG and Propane include both new vehicles and original equipment manufacturer certified retrofits.

Hydrogen

- \$1,000 rebate for a Hydrogen and/or Fuel Cell (FC) vehicles

The program also included a cap of \$50,000 manufacturer suggested retail price for new alternative fuel vehicles (AFV) to be eligible for a rebate. Rebates for used vehicles were available for one-time preowned AFVs with 75,000 miles or less and with a true market value of less than \$50,000 from a registered dealer and as meets other registration location and income requirements as well.

The rebate program was renewed in March of 2018 to June 30, 2018 using the same rebate structure.

The following table breaks down the rebates by type of project:

July 1, 2017 – June 30, 2018

Project	No. Of Rebates	Rebate Amount
Electric Motorcycles	3	\$2,250
Electric Vehicle (capacity < 10kWh)	0	\$0
Electric Vehicle (capacity 10kWh-20kWh)	0	\$0
Electric Vehicle (capacity > 20 kWh)	319	\$558,250
PHEV (capacity < 10kWh)	125	\$93,750
PHEV (capacity 10kWh-20kWh)	68	\$68,000
PHEV (capacity > 20kWh)	74	\$129,500
Totals	589	\$851,750

Alternative Fuels Technical Assistance Program

The Alternative Fuels Technical Assistance (AFTA) program was created to provide technical support to eligible entities, including municipalities, school districts, municipal authorities, and non-profits, for the purpose of helping those organizations develop cost-effective alternative fuel solutions for their fleets. DEP provides this technical assistance through the use of qualified contractors who work directly with eligible organizations approved by DEP for inclusion into the program.

Following an initial round of AFTA technical assistance projects that concluded in Fall 2017, DEP determined there was sufficient interest and need for a second round of projects in 2018. An alternative fuels contractor, Wilson Engineering Services, a PA-based small business, was awarded a \$40,700 contract to perform alternative fuels fleet analyses for the five eligible organizations listed below. Each assessment resulted in a final report containing an economic and environmental analysis of alternative fuel options for the participating organization's fleet. Follow up meetings were held with each of the organizations to help them understand their alternative fuel options and to assist them with next steps towards implementation of the best alternative fuel options.

DEP plans to monitor and assist these organizations into 2019 to assess their progress in implementing the contractor's recommendations. All five reports have been posted for public access on the AFIG website (<https://www.dep.pa.gov/Citizens/GrantsLoansRebates/Alternative-Fuels-Incentive-Grant/Pages/default.aspx>) under the AFTA section to serve as examples for similar organizations. Since no additional organizations applied for technical assistance following the completion of the 2018 round of projects, DEP decided to pause the AFTA program through 2019 in order to evaluate the demand for the program. The projects completed under the second round of AFTA include:

- Allegheny County Sanitary Authority (ALCOSAN)
- City of Philadelphia
- Community Transit of Delaware County
- Lower Merion Township
- Pittsburgh Public School District

Note: Please see Appendix B for summary descriptions of these projects.

STATEMENT OF REVENUES AND EXPENDITURES
ALTERNATIVE FUELS INCENTIVE GRANT FUND
As of June 30, 2018

Beginning Balance - July 1, 2017	\$17,391,656
Cycle 23 Revenue - Transfer made in May 2018	\$5,075,561
<u>Expenditures</u>	
Personnel:	-\$78,369
Operating:	-\$55,903
Grants:	-\$4,265,883
Rebates:	-\$851,750
 Total Expenditures:	 -\$5,251,905
Ending Balance - June 30, 2018	\$ 17,215,312

The fund balance of **\$17,215,312** on June 30, 2018, contained:

- \$3,515,616 of committed grant contract obligations,
- \$1,679,303 of grant awards awaiting to be committed into grant contracts,
- \$2,500,000 of programmatic set aside for rebate payments,
- \$ 120,500 in planned operational costs

This results in a current uncommitted balance of **\$9,399,893**.

Note: **\$5,075,561** of the uncommitted balance was only recently received into the AFIG account as revenue in May 2018.

2017-2018 ACTIVE PROJECTS

The following are current/active AFIG projects as of September 2018:

Alternative Fuels Incentive Grant Program 2014

Project Name	Funding Recipient	County	Project Status	Total Grant Funding	Total Amount Invoiced	Expected Completion Date	% Complete
CNG vehicle procurement	Cambria County Transit Authority	Cambria	In Progress	\$75,000	\$37,500	12/30/2018	50%
Demonstration and Pilot Production of All-Climate Battery for Electric Vehicles	Pennsylvania State University	Centre	In Progress	\$525,000	\$274,335	12/30/2018	80%
Rev LNG SSL TR	Rev LNG, LLC	Lycoming	In Progress	\$800,000	\$405,000	11/01/2018	35%

Alternative Fuels Incentive Grant Program 2016 Round 1

Project Name	Funding Recipient	County	Project Status	Total Grant Funding	Total Amount Invoiced	Expected Completion Date	% Complete
Electric Vehicle-Grid-Integration	Partnerships One, LLC	Phila.	In Progress	\$250,300	\$30,247	05/30/2018	20%

Alternative Fuels Incentive Grant Program 2016 Round 2

Project Name	Funding Recipient	County	Project Status	Total Grant Funding	Total Amount Invoiced	Expected Completion Date	% Complete
DM Industries, Inc. Refueling Project	DM Industries, Inc.	Elk	In Progress	\$19,957	\$0	12/31/2018	20%
ESASD Propane School Bus Conversion Initiative	East Stroudsburg Area School District	Monroe, Pike	In Progress	\$200,000	\$0	10/31/2018	95%
Tri-County Ind. - New Refueling Station	Tri-County Industries Inc.	Mercer	In Progress	\$500,000	\$0	03/07/2019	0%
Wallypark CNG Shuttle Bus Deployment	WallyPark Pennsylvania LLC	Delaware, Phila.	In Progress	\$77,600	\$0	10/31//2018	0%

Alternative Fuels Incentive Grant Program 2016 Round 3

Project Name	Funding Recipient	County	Project Status	Total Grant Funding	Total Amount Invoiced	Expected Completion Date	% Complete
The Centennial School District Propane Refueling Project	Centennial School District	Bucks	In Progress	\$292,338	\$0	10/31//2018	95%
Proposed EV Charging Stations at Four Center City Garages	Philadelphia Parking Authority	Phila.	In Progress	\$43,332	\$0	03/07/2019	0%
Proposed EV Charging Stations at the Philadelphia International Airport	Philadelphia Parking Authority	Phila.	In Progress	\$43,332	\$0	03/07/2019	0%
Teach green to our teens, our future	Scheeren Insurance Group	Armstrong	In Progress	\$16,000	\$8,000	11/30/2018	50%

Alternative Fuels Incentive Grant Program 2017 Round 1

Project Name	Funding Recipient	County	Project Status	Total Grant Funding	Total Amount Invoiced	Expected Completion Date	% Complete
The Derry Township School District Propane School Bus Conversion Initiative	Derry Township School District	Dauphin	Awaiting Payment	\$14,084	\$14,084	10/31/2018	100%
Trillium CNG Lancaster Station	Trillium Transportation Fuels, LLC	Lancaster	In Progress	\$500,000	\$0	02/01/2019	0%
Valley Waste Service - Public and Fleet CNG Fueling Station	Valley Waste Service Inc.	Beaver	In Progress	\$400,000	\$0	07/17/2019	0%
Camp Hill CNG Conversion Initiative	WW Transport Inc.	Cumberland	In Progress	\$140,000	\$0	11/30/2018	95%

Alternative Fuels Incentive Grant Program 2017 Round 2

Project Name	Funding Recipient	County	Project Status	Total Grant Funding	Total Amount Invoiced	Expected Completion Date	% Complete
AAA Propane Vehicle Project	AAA Club Alliance	Philadelphia	Awaiting Payment	\$14,800	\$14,800	10/07/2018	100%
Honey Brook Biodiesel Fleet Refueling Station	A.J. Blosenski, Inc.	Chester	Grant Execution	\$446,749	\$0	04/13/2020	0%
Med CNG Retrofit - Armstrong Conservation District	Armstrong Conservation District	Armstrong	In Progress	\$5,958	\$0	04/13/2019	0%
Slippery Rock Area Alternative Fuel School Bus Initiative	Buco Transportation, Inc.	Butler	Grant Execution	\$15,000	\$0	04/13/2019	0%
Chatham University Vehicle Replacements	Chatham University	Allegheny	In Progress	\$14,881	\$0	04/13/2019	0%
CNG Commercial Recycling Trucks	Centre County Recycling and Refuse Authority	Centre	In Progress	\$36,424	\$0	04/13/2019	0%
Innovative High-Pressure Hydrogen Storage	CP Industries, Inc.	Allegheny	In Progress	\$140,050	\$0	04/13/2020	0%
Hospital EV Charging Station for Staff & Public	Einstein Medical Center Montgomery	Montgomery	In Progress	\$42,105	\$0	04/13/2020	0%
Rhoads Energy Autogas Fleet Project	Jerome H. Rhoads, Inc. DBA Rhoads Energy	Lancaster	In Progress	\$25,489	\$0	04/13/2019	0%

Alternative Fuels Incentive Grant Program 2017 Round 2

Project Name	Funding Recipient	County	Project Status	Total Grant Funding	Total Amount Invoiced	Expected Completion Date	% Complete
Rhoads Energy Autogas Refueling Station Project	Jerome H. Rhoads, Inc. DBA Rhoads Energy	Lancaster	In Progress	\$19,709	\$0	04/13/2020	0%
Propane 2017 - Mlaker, LLC	Mlaker, LLC	Somerset	Complete	\$45,000	\$45,000	08/09/2018	100%
NOMA CNG BI-Fuel Vehicle Purchase	New Oxford Municipal Authority	Adams	In Progress	\$12,450	\$0	04/13/2019	0%
NOMA CNG Fueling Station	New Oxford Municipal Authority	Adams	In Progress	\$5,500	\$0	04/13/2020	0%
Peoples Refueling Infrastructure Project	Peoples Natural Gas Company, LLC	Allegheny, Washington	In Progress	\$272,500	\$0	04/13/2020	0%
Peoples Vehicle Retrofit and/or Purchase Project	Peoples Natural Gas Company, LLC	Allegheny, Washington	In Progress	\$129,771	\$0	04/13/2019	0%
Rose Tree Media School District Natural Gas Project Phase 4	Rose Tree Media School District	Delaware	Awaiting Payment	\$38,489	\$38,489	04/13/2019	100%
Propane Powered Frozen Food Delivery	Schwan's Home Service, Inc.	Butler, Cumberland, Lancaster, Washington, Westmoreland	Grant Execution	\$290,605	\$0	04/13/2019	0%
Philadelphia Propane Fueling Infrastructure Project	Sharp Energy	Philadelphia	In Progress	\$24,800	\$0	04/13/2020	0%
UPMC Gas Migration Project, Phase III	UPMC	Allegheny	In Progress	\$61,925	\$0	04/13/2019	0%

Alternative Fuels Incentive Grant Program 2017 FAST Act Infrastructure Grant

Project Name	Funding Recipient	County	Project Status	Total Grant Funding	Total Amount Invoiced	Expected Completion Date	% Complete
Fleet Capable, Fast Fill, High Volume CNG Refueling Station	CNG Fuel LLC	Clarion	In Progress	\$178,785	\$0	02/27/2020	0%

APPENDIX A

2017 Round 1 Vehicle Projects

Awardee: Derry Township School District

Applicant Address: 30 East Granada Ave. Hershey, PA 17033

Project Site: 650 Clearwater Road Hershey, PA 17033

Project: The Derry Township School District Propane School Bus Conversion Initiative

County: Dauphin

Award Total: \$14,084

Number of Vehicles: 4

Estimated GGE saved per year: 2,936

Project Description: The Derry Township School District Propane School Bus Conversion Initiative will purchase of four school buses that will run on propane fuel. The buses will be fueled at their bus depot.

Awardee: DMJ Transportation Inc.

Applicant Address: 5165 Carpentertown Road Mt. Pleasant, PA 15666

Project Site: 5165 Carpentertown Road Mt. Pleasant, PA 15666

Project: Ride the Green Bus at Greensburg Salem School District

County: Westmoreland

Award Total: \$74,400

Number of Vehicles: 24

Estimated GGE saved per year: 48,000

Project Description: DMJ Transportation will purchase 24 72-passenger propane buses. Vehicles will be fueled at a local facility that has agreed to install propane dispensers. This fueling station is accessible to the public via fleet cards.

Awardee: WW Transport Inc.

Applicant Address: PO Box 535, 701 E. Mt. Pleasant Street West Burlington, IA 52655

Project Site: 811 Spangler Rd Camp Hill, PA 17011

Project: Camp Hill CNG Conversion Initiative

County: Cumberland

Award Total: \$140,000

Number of Vehicles: 7

Estimated GGE saved per year: 114,000

Project Description: WW Transport will purchase seven vehicles for its fleet to run on CNG. Mobile Fueling Solutions' delivery service will be utilized to fuel these vehicles in Camp Hill.

2017 Round 1 Refueling Infrastructure Projects

Awardee: Valley Waste Service Inc.

Applicant Address: 261 Wallace Run Road Beaver Falls, PA 15010

Station Address: 261 Wallace Run Road Beaver Falls, PA 15010

Project: Valley Waste Service - Public and Fleet CNG Fueling Station

County: Beaver

Award Total: \$400,000

Project Description: Valley Waste Service, a waste hauler subsidiary of Vogel Holding, Inc., will construct an on-site CNG fueling station to allow fleet vehicles access to CNG fueling at

their home location. This station will be owned by Valley Waste Service and available to the public.

Awardee: Trillium Transportation Fuels, LLC

Applicant Address: P.O. Box 26210, Oklahoma City, OK 77019

Station Address: 202 Greenfield Road Lancaster, PA 17601

Project: Trillium CNG Lancaster Station

County: Lancaster

Award Total: \$500,000

Project Description: Trillium CNG is will construct a public access CNG fueling station. The station is anticipated serve the City of Lancaster. In a five-year period, the project is estimated to reduce 39.92 tons of NOx, 3,864 metric tons of GHG emissions and displace 1.3 million gallons of conventional petroleum fuel.

2017 Round 2 Vehicle Projects

Awardee: AAA Club Alliance

Applicant Address: 1 River Place, Wilmington, DE 19801

Project Site: 7777 Brewster Ave Philadelphia, PA 19153

Project: AAA Propane Vehicle Project

County: Philadelphia

Award Total: \$14,800

Number of Vehicles: 2

Estimated GGE saved per year: 9,000

Project Description: AAA Mid-Atlantic will purchase two vehicles that run on propane to be used in their towing service. These vehicles will help them make a company-wide decision as to the use of further alternative fueled vehicles within their Mid-Atlantic fleet.

Awardee: Armstrong Conservation District

Applicant Address: 124 Armsdale Rd. - Suite B2 Kittanning, PA 16201-3738

Project Site: 124 Armsdale Rd. - Suite B2 Kittanning, PA 16201-3738

Project: Mobile Education Display CNG Retrofit

County: Armstrong

Award Total: \$5,957

Number of Vehicles: 1

Estimated GGE saved per year: 818

Project Description: The Armstrong Conservation District will purchase one 2017 GMC Sierra 3500 HD pickup truck to run on CNG that will be used in a new education & outreach program.

Awardee: Buco Transportation Incorporated

Applicant Address: 258 Grove City Road Slippery Rock, PA 16057

Project Site: 258 Grove City Road Slippery Rock, PA 16057

Project: Slippery Rock Area Alternative Fuel School Bus Initiative

County: Butler

Award Total: \$15,000

Number of Vehicles: 3

Estimated GGE saved per year: 8,571

Project Description: Buco Transportation will purchase three propane powered Blue Bird Vision school buses.

Awardee: Centre County Recycling and Refuse Authority

Applicant Address: 253 Transfer Road Bellefonte, PA 16823

Project Site: 253 Transfer Road Bellefonte, PA 16823

Project: CNG Commercial Recycling Trucks

County: Centre

Award Total: \$36,424

Number of Vehicles: 2

Estimated GGE saved per year: 2,286

Project Description: The CCRRA will purchase two CNG commercial recycling trucks as part of a fleet overhaul to replace all diesel recycling collection equipment to CNG powered vehicles.

Awardee: Chatham University

Applicant Address: 1 Woodland Rd. Pittsburgh, PA 15232

Project Site: 1 Woodland Rd. Pittsburgh, PA 15232

Project: Chatham University Vehicle Replacements

County: Allegheny

Award Total: \$14,881

Number of Vehicles: 3

Estimated GGE saved per year: 600

Project Description: Chatham University will purchase a 2017 Toyota Camry LE and two 2017 Chrysler Pacifica hybrid vehicles for use within the university community. The Toyota Camry would be used by the Chatham Police Department and the other vehicles would be used to transport students between campuses and for other transportation needs.

Awardee: Jerome H. Rhoads, Inc. DBA Rhoads Energy

Applicant Address: 624 S. Prince Street Lancaster, PA 17603

Project Site: 223 E. State St. Quarryville, PA 17566

Project: Rhoads Energy Autogas Fleet Project

County: Lancaster

Award Total: \$50,977

Number of Vehicles: 8

Estimated GGE saved per year: 6,247

Project Description: Rhoads will retrofit eight new leased vehicles (Seven Ford Transits for service and 1 Ford Explorer for staff) to replace aging vehicles in their fleet. All eight will be retrofitted as propane/dual fuel vehicles. Once completed, total propane fleet will number 25.

Awardee: Mlaker, LLC

Applicant Address: 1976 Valley View Dr. Davidsville, PA 15928

Project Site: 1976 Valley View Dr. Davidsville, PA 15928

Project: Propane 2017

County: Somerset

Award Total: \$45,000

Number of Vehicles: 9

Estimated GGE saved per year: 31,500

Project Description: Mlaker will the purchase nine new, environmentally friendly, propane powered school buses.

Awardee: New Oxford Municipal Authority

Applicant Address: 409 Water Works Rd New Oxford, PA 17350

Project Site: 106 Tracey Ave New Oxford, PA 17350

Project: NOMA CNG BI-Fuel Vehicle Purchase

County: Adams

Award Total: \$12,450

Number of Vehicles: 2

Estimated GGE saved per year: 191

Project Description: New Oxford Municipal Authority (NOMA) will purchase two CNG BI-Fuel vehicles. This project will be completed in conjunction with a Refueling Infrastructure project.

Awardee: Peoples Natural Gas Company LLC

Applicant Address: 375 North Shore Drive Pittsburgh, PA 15212

Project Site: 65 Ginger Hill Road Finleyville, PA 15332; 1201 Pitt Street Pittsburgh, PA 15221

Project: Peoples Vehicle Retrofit and/or Purchase Project

County: Washington, Allegheny

Award Total: \$129,771

Number of Vehicles: 17

Estimated GGE saved per year: 6,201

Project Description: Peoples Natural Gas will purchase and convert 17 new bi-fuel natural gas vehicles (NGV) that will expand their current NGV fleet. This project will be completed in conjunction with a Refueling Infrastructure project.

Awardee: Rose Tree Media School District

Applicant Address: 308 N. Olive Street Media, PA 19063

Project Site: 308 N. Olive Street Media, PA 19063

Project: Rose Tree Media School District Natural Gas Project Phase 4

County: Delaware

Award Total: \$38,480

Number of Vehicles: 2

Estimated GGE saved per year: 4,452

Project Description: Rose Tree Media School District will purchase two CNG buses. This project will increase the number of CNG buses used by the District to 37 and will make the fleet 50% CNG fueled buses.

Awardee: Schwan's Home Service, Inc.

Applicant Address: 115 West College Drive Marshall, MN 56258

Project Site: 120 Stover Drive Carlisle, PA 17015; 101 East Kinsinger Drive Cranberry, PA 16066; 75 Old Route 66 Delmont, PA 15626; 23 Prestige Lane Lancaster, PA 17603; 407 Porter Avenue Scottsdale, PA 15863; 1700 Route 136 Eighty-Four, PA 15330

Project: Propane Powered Frozen Food Delivery

County: Butler, Cumberland, Lancaster, Washington, Westmoreland

Award Total: \$290,605

Number of Vehicles: 38

Estimated GGE saved per year: 95,000

Project Description: Schwan's Home Service will lease 38 propane powered, Class 4 frozen food delivery trucks. These vehicles will be deployed across six Schwan's operated depots within Pennsylvania and all six of these locations will have on site refueling provided by Schwan's Home Service.

Awardee: UPMC

Applicant Address: 600 Grant Street Pittsburgh, PA 15219

Project Site: 1920 Forbes Avenue Pittsburgh, PA 15219

Project: UPMC Gas Migration Project, Phase III

County: Allegheny

Award Total: \$61,925

Number of Vehicles: 6

Estimated GGE saved per year: 15,300

Project Description: UPMC will purchase six new dedicated Compressed Natural Gas buses to replace six diesel buses in the UPMC Employee Transit operation.

2017 Round 2 Refueling Infrastructure Projects

Awardee: A.J. Blozenski, Inc.

Applicant Address: PO Box 392 Elverson, PA 19520

Station Address: 1600 Chestnut Tree Rd Honey Brook, PA 19344

Project: Honey Brook Biodiesel Fleet Refueling Station

County: Chester

Award Total: \$446,749

Project Description: A.J. Blozenski, Inc. will develop and construct a fleet refueling station to dispense biodiesel fuel to an existing fleet of more than 100 light duty and heavy-duty trucks at their facility in Honey Brook, Chester County, Pennsylvania. The fueling station will serve the applicant's existing fleet, which provides waste and recycling collection services in Southeastern Pennsylvania to more than 100,000 Pennsylvanians.

Awardee: Einstein Medical Center Montgomery

Applicant Address: 559 West Germantown Pike East Norriton, PA 19403

Station Address: 559 West Germantown Pike East Norriton, PA 19403

Project: Hospital EV Charging Station for Staff & Public

County: Montgomery

Award Total: \$42,105

Project Description: Einstein Medical Center will install 10 wireless network-controlled EV Charging stations for visitor, employee and community electric vehicle charging in the parking lot of their non-profit community hospital in East Norriton, Pennsylvania.

Awardee: Jerome H. Rhoads, Inc. DBA Rhoads Energy

Applicant Address: 624 S. Prince St. Lancaster, PA 17603

Station Address: 223 E. State St. Quarryville, PA 17566

Project: Rhoads Energy Autogas Refueling Station Project

County: Lancaster

Award Total: \$19,709

Project Description: Rhoads Energy will install a propane fueling station at their bulk plant. They currently have 17 propane vehicles and plan on adding 8 more. At least 10 of these vehicles will use the new station. This project will be completed in conjunction with a Vehicle project.

Awardee: New Oxford Municipal Authority

Applicant Address: 409 Water Works Rd New Oxford, PA 17350

Station Address: 106 Tracey Ave. New Oxford, PA 17350

Project: NOMA CNG Fueling Station

County: Adams

Award Total: \$5,500

Project Description: The New Oxford Municipal Authority will install CNG fueling infrastructure at the water/sewer treatment facility owned by the Authority. This project will be completed in conjunction with a Vehicle project.

Awardee: Peoples Natural Gas Company LLC

Applicant Address: 375 North Shore Drive Pittsburgh, PA 15212

Station Address: 65 Ginger Hill Road Finleyville, PA 15332; 1201 Pitt Street Pittsburgh, PA 15221

Project: Peoples Refueling Infrastructure Project

County: Washington, Allegheny

Award Total: \$272,500

Project Description: Peoples Natural Gas Company will upgrade two of Peoples compressed natural gas (CNG) fueling stations. This project will be completed in conjunction with a Vehicle project.

Awardee: Sharp Energy

Applicant Address: 5011 N DuPont Hwy Dover, DE 19901

Station Address: 7600 Holstein Ave Philadelphia, PA 19153

Project: Philadelphia Propane Fueling Infrastructure Project

County: Philadelphia

Award Total: \$24,800

Project Description: Sharp energy will be construct, maintain, and own a propane refueling station located on DHL property as part of the Philadelphia Propane Fueling Infrastructure Project. This project will help the delivery company DHL fuel its vehicles with propane/autogas.

2017 Round 2 Innovative Technology Project

Awardee: CP Manufacturing

Applicant Address: 2214 Walnut Street McKeesport, PA 15132

Project Address: 2214 Walnut Street McKeesport, PA 15132

Project: Innovative High-Pressure Hydrogen Storage

County: Allegheny

Award Total: \$140,050

Project Description: CP Industries Holdings, Inc. will design and test pressure vessels for the storage and transportation of industrial gases and CNG. The vessels manufactured as a result of this project will primarily be used to transport hydrogen generated in Pennsylvania to hydrogen refueling infrastructure.

2017 AFIG FAST Act Refueling Infrastructure Project

Awardee: CNG Fuel LLC

Project Site: 20561 Paint Blvd. Shippensburg, PA 16254

Project: Fleet Capable, Fast Fill, High Volume CNG Refueling Station

Fuel Type: CNG

County: Clarion

Award Total: \$178,785

Estimated GGE saved per year (5-year estimate): 116,650

Project Description: CNG Fuel LLC will expand an existing CNG refueling station located two miles north of Exit 60 of I-80.

APPENDIX B

AFTA Report Summaries

Allegheny County Sanitary Authority (ALCOSAN)

Allegheny County Sanitary Authority (ALCOSAN) is a municipal authority with a wastewater treatment plant located in Pittsburgh, and serves 83 municipalities within Allegheny County. ALCOSAN manages a fleet of service, hauling, plant maintenance, and administrative vehicles. The report evaluated which vehicles in ALCOSAN's fleet are most suited towards replacement with alternative fuel vehicles, and provided economic analysis and discussion of the most viable options. The report found that switching to a B20 biodiesel blend for the diesel fleet would provide significant greenhouse gas reductions for minimal cost impact. Vehicle upfits for alternative fuels are not viable without the AFIG program, that offsite CNG fueling would provide immediate cash flow at current fuel prices, and onsite CNG fueling provides the most fuel savings based on current economics. The report also concluded that EV developments may offer an opportunity for the Authority in the near future.

City of Philadelphia

The City of Philadelphia owns and operates a fleet of approximately 5,400 vehicles. The City has taken some steps to acquire a limited number of efficient or alternative fuel vehicles, but currently does not have a "clean fleet plan." The City's aggressive environmental commitment to reduce citywide carbon emissions 80 percent by 2050 necessitates a clean fleet plan be developed to inform future fleet purchasing and management decisions. The report examined the fleet on a broad level and made recommendations for areas to evaluate during the development of the City's clean fleet plan. Recommended steps for developing the Clean Fleet Plan included meeting with stakeholders to establish goals for the project; summarize existing conditions of the City fleet; and provide analysis of alternative fuel options by vehicle type use and class, considering capital cost, operating and maintenance cost, and environmental impact and fueling station options for vehicles.

Community Transit of Delaware County

Community Transit of Delaware County (CTDC) is a private nonprofit corporation which provides shared ride transportation to residents of Delaware County. Most of the riders served by CTDC are seniors or individuals with disabilities, who are not well-served by conventional means of public transportation. CTDC also transports riders to Philadelphia and bordering counties, on request and as capacity permits. Delaware County covers 191 square miles and is the third smallest county in the Commonwealth of Pennsylvania by area, but is the fifth largest

by population. The report found that Propane and offsite CNG provide some fuel cost savings and positive cash flow with the AFIG program. They also found that on-site CNG fueling is the best option based on current economics for both cash flow and simple payback, even without grant funding, and that electric vehicles are not appropriate right now. However, they may be the best option both economically and environmentally in 5-10 years.

Township of Lower Merion

The Township of Lower Merion is a suburb of Philadelphia with a population of approximately 58,000 people and an area of 24 square miles. The township owns and manages a fleet which is made up of administrative, service, construction, refuse, law enforcement, and public safety vehicles. The report evaluated which vehicles in the township's fleet are most suited towards replacement with alternative fuel vehicles, and provides economic analysis and discussion of the most viable options. Recommendations included monitoring the Driving PA Forward Grant Program rules for potential project funding and investigating availability of a convenient location for constructing a fast fill station where both police SUVs and trash trucks can refuel. The report found that police SUVs and trash trucks offer the greatest savings potential due to fuel use if the costs of the fueling station can be spread over more fuel savings. Other recommendations included propane conversion of some police patrol cars or lighter duty trucks to propane as a pilot project. The township could contact several local propane suppliers for a site assessment of the administration building to determine where a propane tank and dispenser could be located. Finally, Ford Fusion hybrid and plug in hybrid should be considered for any future purchases of police sedans, as these will provide reasonable return on investment as long as the annual mileage is relatively high.

Pittsburgh Public Schools

Pittsburgh Public Schools (PPS) is the second largest school district in Pennsylvania, and serves approximately 25,000 students at 54 schools. PPS owns and manages a fleet which is made up of service and administrative vehicles, but not school buses. The report evaluated which vehicles in the PPS fleet are most suited towards replacement with alternative fuel vehicles, and provides economic analysis and discussion of the most viable options. The report found that projects are not viable without the AFIG program, that annual usage per vehicle is insufficient to justify an onsite CNG fueling station. However, an offsite CNG fueling is the best option based on current economics. Finally, it found that EV developments may offer an opportunity for PPS in the near future.

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ENERGY PROGRAMS OFFICE**

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