

**Village of New Paltz, Ulster County New York
EPA Clean Diesel Funding Assistance Program FY 2019
Project Narrative - Cover Page**

EPA Region Region II

Project Title New Paltz Village Certified Vehicle Replacement

Applicant Information Village of New Paltz
25 Plattekill Avenue
New Paltz, NY 12561
(845) 255-0130 and (845) 255-4305
Mayor Tim Rogers, Mayor@villageofnewpaltz.org
DUNS 0373746670000

Eligible Entity Village of New Paltz is an incorporated unit of local government

Budget Summary

EPA Funding	Voluntary Cost Share	Mandatory Cost Share	Total Project Cost	Other Leveraged Funds
\$89,444.33	\$0.00	\$166,110.90	\$255,555.23	\$0.00

Vehicle/Equipment Type Long Haul

Type of Upgrade Vehicle Replacement (engine certified to meet CARB's Optional Low-NOx Standards)

Short Project Description The Village of New Paltz will replace one of its four remaining non-CARB compliant on-road diesel powered vehicles with a CARB compliant vehicle. The Village in 2018 already replaced two of its diesel vehicles using local funds.

Project Location Village of New Paltz, Ulster County, New York

Work Plan

Section 1. Project Summary and Approach

The Village of New Paltz had six (6) on-road diesel vehicles in its inventory at the beginning of 2018. None were CARB compliant. During 2018 the Village using local funds to replace two (2) of those vehicles (units 705 and 741) with CARB compliant vehicles. Our uploaded Emission Results included the emission benefits that resulted from the replacement of these two vehicles.

The Village intends to replace its four (4) remaining on-road non-CARB compliant diesel vehicles as follows:

2019 year- During 2019 we propose to use EPA Clean Diesel Funding Assistance Program assistance and local funds to replace our 1997 International 2574 6x4 Dump Truck. This vehicle is used to haul sewer sludge, stone, sand, blacktop, snow, spring clean-up, and is also set up for plowing and salting operations. This vehicle would be replaced with a 2020 Mack Granite “Model GR64FR” Tandem Axle Combo Dump-Spreader with Plow and Central Hydraulic System. The proposed vehicle purchase includes a Tenco Combo Body w/ Front Spreader Discharge from Amthor Equipment. This unit will include a CARB-compliant emission engine. The total purchase price is \$255,555.23 FOB New Paltz, NY.

2020 year- The Village of New Paltz will use local funds to replace its 2002 Freightliner Sweeper used to sweep streets, clean out catch basins and hydro excavate with a CARB-compliant sweeper.

2021 year- The Village of New Paltz will use local funds to replace its 1998 Chevy 8500 Dump Truck used for plowing/salting streets, hauling material, snow, blacktop, spring clean-up, water breaks with a CARB-compliant dump truck.

2022 year- The Village of New Paltz will use local funds to replace its 2005 Chevy 7500 dump used for plowing/salting, hauling material, snow, blacktop, spring clean-up, water main breaks, leaf clean-up with a CARB-compliant dump truck.

Section 2. Project Location

The project location is the Village of New Paltz which is an incorporated unit of local government in Ulster County, New York. The Village’s 2010 population is 6,818.

State	New York
County	Ulster
City	New Paltz
Congressional District	19
Zip Code	12561
Type and Number of Affected Vehicles	1 (replacement of 1997 International 2574 6x4 Dump Truck)
% of Time Vehicles Spend in Area	100%
Nonattainment Area	X - Ulster County, New Yhork
Air Toxic Assessment Area	NA
Goods Movement	NA

Section 3. Benefits to the Community

The Village of New Paltz is located in Ulster County east of the Shawangunk Ridge. New Paltz is midway between New York City and Albany; a Thruway interchange provides quick access. The Village is a densely developed community on the east bank of the Wallkill River.

The Village is a local retail center. SUNY New Paltz is a regional education center. The Village has two commercial corridors on Main Street/Route 299 and along Route 32. Businesses in our downtown are smaller and attract pedestrian traffic including service, food, and specialty establishments that cater to tourism and SUNY.

The Village of New Paltz was identified as a Potential Environmental Justice Area in Ulster County, New York by the NYS Department of Environmental Conservation. A copy of the NYS DEC map follows this narrative.

Local poverty at 22% is the highest rate in all of Ulster County. HUD determined the Village is 63% low and moderate income.

Our proposed project will assist the Village in its five year effort to replace all six (6) of its on-road non-CARB compliant diesel powered vehicles. Units 705 and 741 were replaced with Village funds during 2018. This proposed EPA project will replace our unit 747 dump truck. Once this project is completed our remaining three non-CARB compliant diesel powered vehicles will be replaced with local funds during 2020, 2021 and 2022.

Section 4. Community Engagement and Partnerships

New Paltz has several active citizen groups that are working with the Village and the Town to achieve environmental, including air quality, improvements for our community.

The New Paltz Climate Action Coalition (CAC) was formed in 2009 to raise awareness and organize citizens to work with the Town and Village, and with other stakeholders, to implement steps to mitigate climate change and prepare for climate adaptation steps required for the community to be resilient and prosperous in the coming years. CAC are an incorporated, educational non-profit organization designated as a tax-exempt, 501 (c) (3), meets weekly, and organizes educational meetings and other activities in support of these goals. The Climate Action Coalition supports a number of grassroots environmental improvement efforts and engages the community with 2-3 annual events plus weekly letters to the editor.

The New Paltz Environmental Conservation Board (EnCB) was originally formed as the Environmental Conservation Commission in 1972, and became a board in 2008, to assist the Town of New Paltz in the development of sound open space planning and to assure the preservation and protection of natural and scenic resources. The EnCB meets monthly in support of these goals. This Board is made up of citizen volunteers and supports many environmental projects such as single-use plastic bag and straw ban, green replacements for chemicals, alternatives to glycol phosphates, protection of pollinators, etc.

The New Paltz Climate Smart Communities Task Force (CSC) was appointed in 2017 and is made of up community volunteers. This group is working with the Town and Village to reduce greenhouse gas emissions by preparing an inventory of local government and community sources (which includes vehicle sources), setting reduction goals, and monitoring progress. The ultimate goal of New Paltz Climate Smart is to become certified. It is a point process and we are working steadily towards this certification. A coordinator was officially appointed in April 2018.

Also see Resolution 13 of 2019 affirming our commitment to the New York State Climate Smart Communities Pledge which can be found uploaded to this application.

During 2018 our Mayor Tim Rogers was appointed co-chair of the Energy and Environment Policy Committee of the New York State Conference of Mayors (NYCOM). As a member of the Energy and Environment Policy Committee, Mayor Rogers will directly be providing policy recommendations to the NYCOM Executive Committee, developing positions on various pieces of legislation, and considering new legislative proposals that will benefit cities and villages.

In our local community we are partnering with two other entities which are independently reducing emissions:

- New Paltz Central School District: Our local school district has a fleet of 73 vehicles. They replace an average of 6 vehicles per year. In 2005 diesel engines were improved to reduce emissions and in 2012 the next evolution occurred by introducing a regeneration system. Via this system Diesel Particulate Filters go through a regeneration process which removes soot and

lowers filter pressure, thus decreasing emission output. In 2010 the school district received a grant for the installation of Diesel Oxidation Catalyst mufflers. In 2012 the district received an additional grant for the installation of 27 Espar heaters. These heaters decrease the idling time needed to warm up buses at the start of the day. See the February 20, 2019 letter of the school district uploaded to this application.

- SUNY New Paltz: The State University at New Paltz has made a commitment to sustainability via Executive Order 4. SUNY's sustainability policies can be found at the following links:

<https://www.dec.ny.gov/energy/71389.html>

<https://www.ogs.state.ny.us/greenny/green-purchase.asp>

<https://www.ogs.state.ny.us/greenny/green-product-specs.asp>

As part of these efforts, SUNY New Paltz's vehicle fleet includes (1) two gas-electric non-plug in hybrids, (2) one plug-in hybrid and (3) nine 100% electric solar-powered GEM cars

Section 5. Project Sustainability

By implementing certification actions, New Paltz is experiencing the following benefits:

- Cost savings through greater efficiency;
- Greater energy independence and energy security;
- Improved air quality from switching to clean energy;
- Healthier, more walkable urban centers through smart growth;
- Conservation of green spaces for recreation and biodiversity;
- Reduction of future flood risk through climate change adaptation strategies;
- Investment in an economy that supports sustainability and green businesses; and
- Greater engagement with residents who care about the future of their hometowns

New Paltz Climate Smart has worked hard this past year to create a Greenhouse Gas Inventory for the town, village and community. It is being adopted by the town and village boards in March and will drive further actions to reduce our carbon footprint and improve our air quality.

Both the Village and Town of New Paltz installed public-use Electric Vehicle Charging Stations (EVCS) in 2018. The Village EVCS (2) are located at the Village Hall parking lot. The Town EVCS (2) are located at the Community Center. In addition, the Town Code 140-52 B2n1-6 specifies the installation of EVCS as part of site plan approval for commercial and multi-unit residential properties.

Section 6. Environmental Results - Outputs, Outcomes and Performance Measures

A. Outputs and Outcomes:

The Village of New Paltz’ goal at the start of 2018 was to replace all six of its on-road diesel powered vehicles with CARB compliant vehicles within 5 years. During 2018 the Village replaced 2 of its non CARB compliant vehicles. Four remain to be replaced. This EPA application asks for 35% grant assistance to replace one of its dump trucks. That existing 1997 International 2574 6x4 Dump Truck is used for hauling sewer sludge, transporting stone, sand and blacktop, plowing snow, applying salt/cinders and assisting with spring clean-up. This 1997 dump truck, in addition to being non CARB compliant, smokes really badly and is rusted beyond practicable repair.

Proposed outcomes are summarized by the table below:

Activities	Outputs	Outcomes
Replace 1997 International Dump Truck	Purchase 2020 Mack Granite “Model GR64FR” Tandem Axle Combo Dump-Spreader with Plow and Central Hydraulic System	Annual Emissions Reduction = 0.005 tons PM _{2.5} Lifetime Emissions Reduction = 0.005 tons PM _{2.5} Lifetime Total Project Cost Effectiveness = \$53,353/ton PM _{2.5} Lifetime Capital Cost Effectiveness = \$53,353/ton PM _{2.5}

Our proposed project supports EPA’s FY 2018-2022 Strategic Plan. We support Goal 1, “Core Mission: Deliver real results to provide Americas with clean air, land, and water, and ensure chemical safety,” Objective 1.1, “Improve Air Quality.” We will accomplish this by replacing all six (6) of our non-CARB compliant diesel powered vehicles with CARB compliant vehicles by 2022. Our timetable coincides with EPA’s 2018-2022 Strategic Plan timeframe. As noted, we have already replaced 2 of the 6 vehicles in our fleet with local funds. EPA assistance will aid us to replace the 3rd such vehicle. Local funds will replace the last three non-CARB compliant units by 2022.

B. Performance Measures:

Our goal is to replace all six of our on-road diesel powered vehicles by the end of 2022. To date we have replaced units 705 and 741. This proposed EPA project will assist us in replacing unit 747. The three remaining vehicles will be replaced at the rate of one per year during 2020, 2021 and 2022.

C. Performance Plan:

We will measure our progress for the fleet of six on-road diesel powered vehicles we have or propose to replace by conducting semi-annual emissions testing to make sure our fleet meets CARB standards for emissions.

Section 7. Programmatic Capability and Past Performance

A. Past Performance:

The Village has or is successfully completing the following Federally financed projects during the last three years:

1. New Paltz Sewer Reconstruction Project \$599,150
OCR #793PR104-15 (completed)
US Dept of HUD (Village as subgrantee to New York State) CFDA 14.228
2. Critical Sanitary Sewer Construction Required by DEC Consent Order \$750,000
OCR #793PR177-16 (completed)
US Dept of HUD (Village as subgrantee to New York State) CFDA 14.228
3. Consent Order Compliance Sewer Remediation \$750,000
OCR #793PR104-18 (underway)
US Dept of HUD (Village as subgrantee to New York State) CFDA 14.228

B. Reporting Requirements:

The Village has received \$5 million in Federally funded projects since 2010. All but \$750,000 has been spent. During the implementation of those projects the Village has reported reliably on Labor Standards Compliance, Section 3 Compliance, Financial Management and Project Progress (both semi-annually and annually). The funds in question originated with the US Department of Housing and Urban Development where the Village acted as a sub-grantee to the State of New York.

C. Staff and Resources:

This project calls for only one purchase that can be accomplished via the State Bid process. Such a purchase can be readily handled by our Public Works Director (Bleu Terwillinger) and Village Treasurer (Nancy Branco).

C. Organizational Expertise:

The Village staff, its engineer and grants administrative consultant has extensive experience with Federally funded projects. Since 2010 the Village has received and spent over \$5 million in Federal grants for its public water and sanitary sewer systems. All but \$750,000 has been spent. Our current sanitary sewer project was approved in December 2018 and will be implemented during 2019/2020. The Village has an exemplary track record in successfully implementing Federally funded projects.

Section 8. Budget Narrative and Detail

A. Expenditure of Awarded Grant Funds:

The Village will purchase the proposed 2020 Mack Granite “Model GR64FR” Tandem Axle Combo Dump-Spreader with Plow and Central Hydraulic System. The proposed vehicle purchase includes a Tenco Combo Body w/ Front Spreader Discharge from Amthor Equipment. This unit will include a CARB-compliant emission engine. The total purchase price is \$255,555.23 FOB New Paltz, NY.

The price quote of Gabrielli Truck Sales Ltd. confirms the price. The quote is a State Bid price that will allow the Village to purchase the vehicle without going out to bid. This price is valid for the balance of 2019.

Below is the specific budget:

Total Vehicle Cost	\$255,555.23
EPA Grant Request	\$89,444.33
Village Funds	\$166,110.90

Personnel, Fringe Benefit, Travel, Supplies, Contractural and Indirect costs do not apply.

The following Attachments follow this narrative:

- Applicant Fleet Description;
- Emission Reduction Calculations;
- Map of Potential Environmental Justice Area (Village of New Paltz) designated by NYDEC;
- New Paltz Central School District letter (February 20, 2019)

Village of New Paltz, Ulster County New York

Other Attachments Forms

The following documents follow this page:

- Applicant Fleet Description summarizing the following existing vehicles:
 - 1997 International 2574 6x4 Dump, used to haul sewer sludge, stone, sand, blacktop, snow, spring clean-up, and is also set up for plowing and salting operations. This would be replaced with current model year equivalent truck.
 - 2002 Freightliner Sweeper used to sweep streets, clean out catch basins and hydro excavate. Would be replaced with current model year sweeper.
 - 1998 Chevy 8500 Dump used for plowing/salting streets, hauling material, snow, blacktop, spring clean-up, water breaks. Would be replaced with current model year truck.
 - 2005 Chevy 7500 dump used for plowing/salting, hauling material, snow, blacktop, spring clean-up, water main breaks, leaf clean-up.
- Emission Results - Truck 747 to be replaced by proposed EPA Clean Diesel Funding Program application;
- Emission Results - Truck 741 replaced by the Village with local funds in 2018; and
- Emission Results - Truck 705 replaced by the Village with local funds in 2018.

APPLICANT ORGANIZATION: Village of New Paltz	PROJECT TITLE: EPA Clean Diesel Program
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Note: Similar engines may be grouped together or entered as separate engine groups.

Instructions / Units	Fleet Information	Group 1	Group 2	Group 3	Group 4
	Group Name:				
	Fleet Owner:				
	Group Type:				
	Primary Place of Performance				
	- State(s):				
	- County:				
	- City:				
	- Zip Code:				
	Vehicle or Engine Group Target:				
	Vehicle Class or Equipment Type:	Skid Steer Loaders	Class 8	Class 8	
	Quantity:				
	Vehicle Identification Number(s):				
	Vehicle Make:	John Deere	Chevrolet	Chevrolet	
	Vehicle Model:	750	7500	8500	
	Vehicle Model Year:	1985	2005	1998	
	Engine Serial Number(s) :				
	Engine Make:			CAT	
	Engine Model:			3116	
	Engine Model Year:				
	Engine Tier:				
	Engine Horsepower:				
	Engine Cylinder Displacement:				
	Engine Number of Cylinders:				
	Engine Family Name:				
	Engine Fuel Type:	ULSD	ULSD	ULSD	
	Annual Amount of Fuel Used:				
	Annual Usage Hours:				
	Annual Miles Traveled:		2385		
	Annual Idling Hours:				
	Annual Hoteling Hours:				
	Remaining Life:				
	Normal Attrition Year:				
	Year of Upgrade Action:				
	Upgrade Type:				
	Upgrade:				
	Upgrade Cost Per Unit:				
	Upgrade Labor Cost Per Unit:				
	New Engine Model Year:				
	New Engine Tier:				
	New Engine Horsepower:				
	New Engine Duty Cycle:				

Liters per cylinder per engine	NEW VEHICLE	New Engine Cylinder Displacement:				
Per engine		New Engine Number of Cylinders:				
		New Engine Family Name:				
		New Engine Fuel Type:				
Hours per vehicle; On-Highway only		Annual Idling Hours Reduced:				
Hours per vehicle; Class 8 Long-Haul Combination only		Annual Hoteling Hours Reduced:				
Gallons reduced per year per engine; Fuel reductions result from a new, more efficient engine, not		Annual Diesel Gallons Reduced:				

COPY AND PASTE ADDITIONAL COLUMNS AS NEEDED TO CAPTURE ALL ENGINE/VEHICLE GROUPS

Emission Results and Health Benefits for Project: 747

Emission Results

Here are the combined results for all groups and upgrades entered for your project.¹

<i>Annual Results (short tons)²</i>	NO_x	PM2.5	HC	CO	CO₂	Fuel³
Baseline for Upgraded Vehicles	0.070	0.005	0.006	0.022	3.4	300
Amount Reduced After Upgrades	0.066	0.005	0.006	0.020	0.3	30
Percent Reduced After Upgrades	95.2%	98.1%	92.6%	92.6%	10.0%	10.0%

<i>Lifetime Results (short tons)²</i>	NO_x	PM2.5	HC	CO	CO₂	Fuel³
Baseline for Upgraded Vehicles	0.070	0.005	0.006	0.022	3.4	300
Amount Reduced After Upgrades	0.066	0.005	0.006	0.020	0.3	30
Percent Reduced After Upgrades	95.2%	98.1%	92.6%	92.6%	10.0%	10.0%

<i>Lifetime Cost Effectiveness (\$/short ton reduced).</i>						
Capital Cost Effectiveness ⁴ (unit & labor costs only)	\$3,776,490	\$53,353,957	\$42,202,181	\$12,470,662	\$740,741	
Total Cost Effectiveness ⁴ (includes all project costs)	\$3,776,490	\$53,353,957	\$42,202,181	\$12,470,662	\$740,741	

¹ Emissions from the electrical grid are not included in the results.

² 1 short ton = 2000 lbs.

³ In gallons; fuels other than ULSD have been converted to ULSD-equivalent gallons.

⁴ Cost effectiveness estimates include only the costs which you have entered.

<i>Remaining Life</i>	747: Long Haul - Single Unit Class 8	1 years
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Emission Results and Health Benefits for Project: 741

Emission Results □

Here are the combined results for all groups and upgrades entered for your project. ¹

<i>Annual Results (short tons)²</i>	NO_x	PM2.5	HC	CO	CO₂	Fuel³
Baseline for Upgraded Vehicles	0.052	0.003	0.005	0.016	3.4	300
Amount Reduced After Upgrades	0.050	0.003	0.005	0.015	0.3	30
Percent Reduced After Upgrades	95.2%	97.8%	92.7%	92.4%	10.0%	10.0%

<i>Lifetime Results (short tons)²</i>	NO_x	PM2.5	HC	CO	CO₂	Fuel³
Baseline for Upgraded Vehicles	0.052	0.003	0.005	0.016	3.4	300
Amount Reduced After Upgrades	0.050	0.003	0.005	0.015	0.3	30
Percent Reduced After Upgrades	95.2%	97.8%	92.7%	92.4%	10.0%	10.0%

<i>Lifetime Cost Effectiveness (\$/short ton reduced).</i>						
Capital Cost Effectiveness ⁴ (unit & labor costs only)	\$5,170,297	\$87,448,128	\$56,564,257	\$17,319,879	\$758,519	
Total Cost Effectiveness ⁴ (includes all project costs)	\$5,170,297	\$87,448,128	\$56,564,257	\$17,319,879	\$758,519	

¹ Emissions from the electrical grid are not included in the results.

² 1 short ton = 2000 lbs.

³ In gallons; fuels other than ULSD have been converted to ULSD-equivalent gallons.

⁴ Cost effectiveness estimates include only the costs which you have entered.

<i>Remaining Life</i>	&#41: Long Haul - Single Unit Class 8	1 years
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Emission Results and Health Benefits for Project: 705

Emission Results

Here are the combined results for all groups and upgrades entered for your project.¹

<i>Annual Results (short tons)²</i>	NO_x	PM2.5	HC	CO	CO₂	Fuel³
Baseline for Upgraded Vehicles	0.056	0.003	0.005	0.016	3.4	300
Amount Reduced After Upgrades	0.053	0.003	0.005	0.015	0.3	30
Percent Reduced After Upgrades	95.5%	97.7%	92.7%	92.4%	10.0%	10.0%

<i>Lifetime Results (short tons)²</i>	NO_x	PM2.5	HC	CO	CO₂	Fuel³
Baseline for Upgraded Vehicles	0.056	0.003	0.005	0.016	3.4	300
Amount Reduced After Upgrades	0.053	0.003	0.005	0.015	0.3	30
Percent Reduced After Upgrades	95.5%	97.7%	92.7%	92.4%	10.0%	10.0%

<i>Lifetime Cost Effectiveness (\$/short ton reduced).</i>						
Capital Cost Effectiveness ⁴ (unit & labor costs only)	\$0	\$0	\$0	\$0	\$0	
Total Cost Effectiveness ⁴ (includes all project costs)	\$3,499,699	\$65,660,772	\$41,097,420	\$12,584,014	\$551,111	

¹ Emissions from the electrical grid are not included in the results.

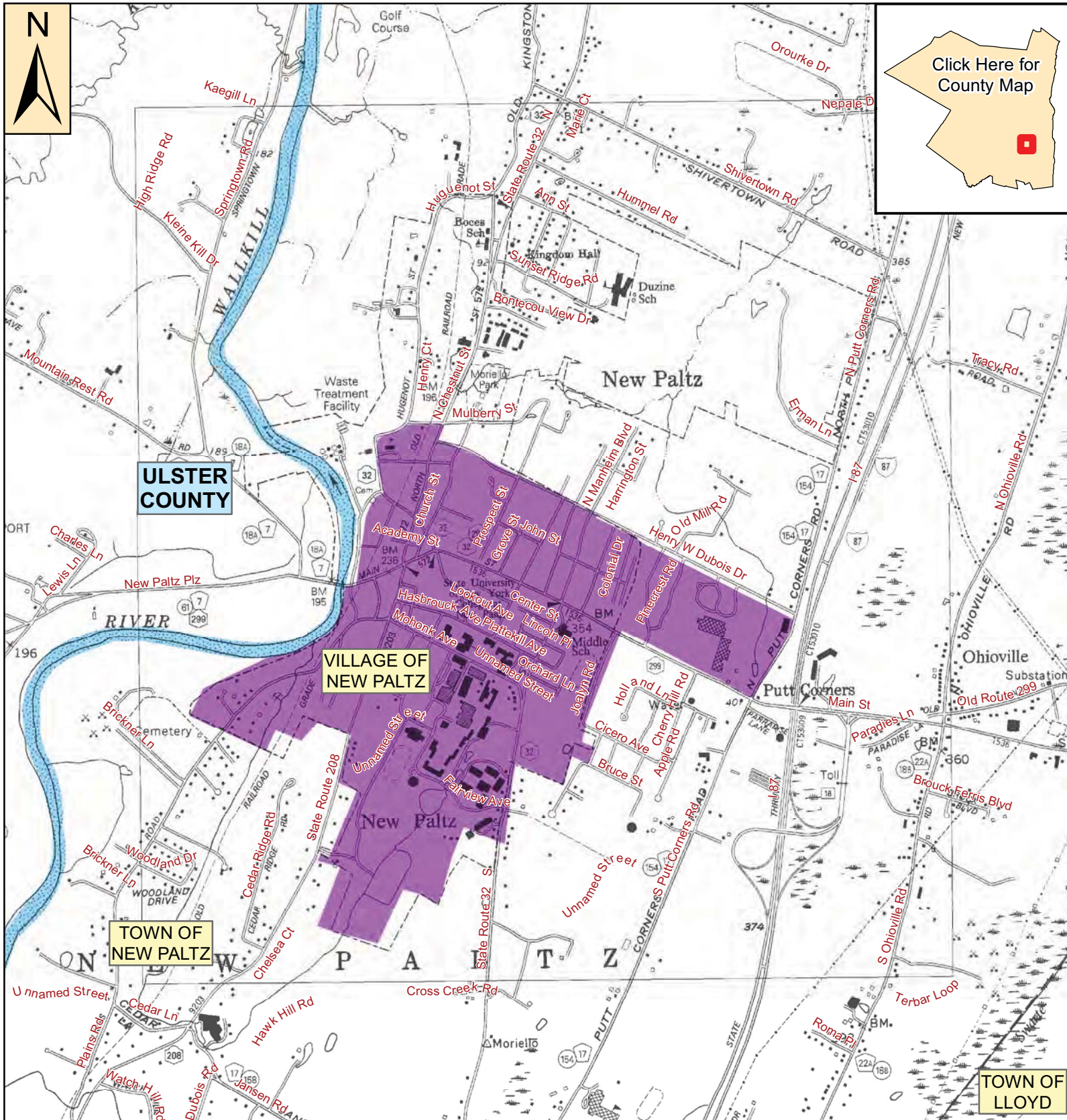
² 1 short ton = 2000 lbs.

³ In gallons; fuels other than ULSD have been converted to ULSD-equivalent gallons.

⁴ Cost effectiveness estimates include only the costs which you have entered.

<i>Remaining Life</i>	705: Long Haul - Single Unit Class 8	1 years
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Potential Environmental Justice Areas in the Village of New Paltz Ulster County, New York



This computer representation has been compiled from supplied data or information that has not been verified by EPA or NYSDEC. The data is offered here as a general representation only and is not to be used for commercial purposes without verification by an independent professional qualified to verify such data or information.

Neither EPA nor NYSDEC guarantee the accuracy, completeness, or timeliness of the information shown and shall not be liable for any loss or injury resulting from reliance.

Data Source for Potential Environmental Justice Areas:
U.S. Census Bureau, 2000 U.S. Census

Legend

- Potential EJ Area
- County Boundary
- Waterbodies

0 0.2 0.4 0.6 0.8 1
Miles

SCALE: 1:24,000

For questions about this map contact:
New York State Department of
Environmental Conservation
Office of Environmental Justice
625 Broadway, 14th Floor
Albany, New York 12233-1500
(518) 402-8556
ej@gw.dec.state.ny.us



As noted above, below please find the breakdown of the types of buses in the district's fleet:

<u>Size of Bus</u>	<u># in Fleet</u>	<u>Type of Fuel</u>
65 Passenger	37	34 Diesel, 3 Gasoline
20 Passenger	19	All Gasoline
30 Passenger	5	1 Diesel, 4 Gasoline
Wheel Chair	3	1 Diesel, 2 Gasoline
SUV/Cars	7	All Gasoline
Service Truck	1	Gasoline
Equipment Bus	1	Gasoline

I hope that you find this information useful in your endeavors to secure the EPA grant.

Sincerely



Maureen Ryan
Director of Transportation

c: Maria C. Rice, Superintendent of Schools
Richard Linden, Assistant Superintendent for Business