

ACADEMY EXPRESS LLC
111 Paterson Avenue
Hoboken, New Jersey, 07030

September 16, 2025

Commissioner Rohit Aggarwala
Department of Environmental Protection
59-17 Junction Blvd., 8th Floor
Flushing, NY 11373

Dear Commissioner,

Enclosed is an application for a variance pursuant to §24-1 IO of the New York City Administrative Code on behalf of Academy Express, L.L.C., and Academy Lines, L.L.C. (hereinafter collectively "Academy"). By way of background, Academy is one of New York City's leading passenger motor carriers. Academy provides intrastate and interstate passenger transportation services to the public, including regular route service, chartered party service, and special operations.

Academy has built long-term relationships with the City of New York, the Metropolitan Transportation Authority, New Jersey Transit, and other local governments and transportation agencies. Academy offers contracted transportation services for these agencies, including transportation for residents and tourists to signature events like the NYC Marathon, US Open Tennis, and the U.S. PGA Tour.

Academy is proud of its environmental record. As detailed in our variance application, Academy has implemented a series of measures that have successfully and sharply reduced the emissions attributable to our vehicles. Additionally, transporting people within our region by bus is an important emissions reduction strategy. Academy moves over one million passengers each year. If only half of those trips had been made by private automobile, an additional 2.5 million metric tons of carbon would have entered the atmosphere - equivalent, according to the U.S. EPA's Greenhouse Gas Equivalencies Calculator, to the annual carbon emissions of more than five natural gas-fired power plants.

Academy submits this application for your consideration because Academy has done what it can to eliminate unnecessary idling and to reduce the impact of the emissions our buses produce. However, providing bus service to visitors and residents of New York City involves some idling, which is necessary to keep essential systems powered as required by Federal regulations.

Academy is prepared to answer your questions regarding this variance application at your earliest convenience.

I. **Details of the vehicle or description of the fleet:**

The applicant is the largest private provider of ground mass passenger transportation in the New York area. Academy's commuter motor coach fleet includes Prevost model H3-45 and Motor Coach Industries (MCI) model D4500CT motorcoaches. Coincidentally, these are the same types of motor coaches used by MTA and the New York City Transit Authority to provide passenger transportation services between Manhattan and its outer boroughs. (Exhibit 1, Academy Bus Fleet)

II. **Does this vehicle or fleet run on gasoline or diesel?**

The motor coaches operate solely on ultra-low sulfur diesel (ULSD, 15 ppm sulfur) fuel, in accordance with U.S. EPA regulations.

111. **What is the vehicle's weight rating (GVWR) and registered weight for the vehicle? If the vehicles are identical, please provide just one weight of the vehicle.**

(Please see the fleet list Exhibit 1).

IV. **How much power is required to power all the required units in the vehicle fleet? List all of the equipment that requires external power. How many hours is required for each piece of equipment to run on external power?**

Modern motor coach design requires the engine to run whenever a bus is occupied or during preparations for passengers to board, because the following essential systems all need engine power.

- Interior air circulation and climate control systems, wheelchair lift systems, and electronic systems, including onboard cameras, GPS, driver monitoring systems, and electronic logging devices, all draw power from the buses' batteries. These batteries, in turn, are charged by the engine's alternator to keep the 24-volt electrical system functioning.
- Bus kneeling systems, front, and rear access door systems, along with the operational and safety (emergency) braking systems, all require 120 PSI of air pressure to operate. The air compressor is powered by the engine, and once the engine is turned off the pressure quickly drops.
- Clean diesel emissions regeneration systems, which prevent diesel soot from being released into the air, do not operate when engines

are off and controlled by computers to avoid system failures.
(Exhibit 2, Motor Coach Engine Efficiency and Sustainability
Advancements)

Given the importance of these systems and the nature of bus operations in New York City, it is not practical to turn off the engine while the bus is in service. For example, when a bus driver stops and shuts off the engine, the air pressure quickly drops below 60 PSI, which automatically engages and locks the brake system. It takes about two minutes to rebuild enough air pressure to unlock the brakes. These two-minute delays, at random intervals, can disrupt the schedule not only for that bus but also for other buses that need to pull into the same stop. This unreliable scheduling makes bus service less attractive and encourages more car use, which increases exhaust emissions.

V. **Have you considered installing a battery-power APU unit or gasoline power APU? If yes, list API details:**

Academy researched and has not been able to find any commercially available, viable APU products capable of providing power for the critical onboard systems listed above.

Academy reviewed a solution developed by one of our bus manufacturers to convert buses into "entertainment coaches" or "sleeping buses." These solutions mainly involve mounting heat pump units on the bus roof and installing a diesel-electric generator in a baggage compartment. This product is not practical in New York City because roof-mounted heat pump units add at least 10-14 inches (air circulation units) to the height of the bus, which would prevent the use of such motorcoaches in tunnels like the Holland Tunnel, Lincoln Tunnel, Hugh L. Carey (Brooklyn-Battery) Tunnel, Queens-Midtown Tunnel, Port Authority Bus Terminal, and other locations in New York City with height restrictions. For example, the H series Prevost is 12'4" tall. (See Exhibit 8, New York State Department of Motor Vehicles Information Concerning Oversized/Overweight Vehicles)

HVAC units are installed on the roof because this promotes efficient airflow and ventilation. These units cannot be fully mounted inside luggage bays due to engineering challenges, such as intake and exhaust venting and ducting conditioned air to the passenger cabin. These systems are not built to connect to the existing HVAC but instead require their own ducting system. Both State and Federal Departments of Transportation would require extensive documentation as to installation of such units and would require pre-approval before any design could be considered. There are no APU's in use today by commercial bus fleets in the US, either by public transit agencies or privately operated, to the best of our knowledge.

Furthermore, while these APUs might meet the legal requirements of the anti-idling law, they do not reflect the intent of the law, as their emissions

are comparable to those of a Tier 4 diesel construction generator. See: <https://www.cummins.com/generators/tier-4-frequently-asked-questions>
In fact, the diesel particulate and hydrocarbons are substantially higher in APU exhaust than in a class 8 clean diesel bus engine. Reference 40 CFR 1039.101 40 CFR 1036.

Luggage bay APU systems also greatly reduce the available baggage storage capacity for passengers, which severely limits the bus's usability and subsequently lowers revenue needed to cover costs. Finally, these units increase the vehicle's weight and make it more difficult to comply with bridge and street axle weight restrictions. (See Exhibit 8)

Academy, along with other industry members, continues to engage APU and bus manufacturers to promote the development of new designs that meet vehicle height clearances, weight restrictions, match the capacity of our buses' heating, ventilation, and air conditioning (HVAC) systems, and are capable to run compressors and other components that power systems that are critical for the safety and health of all those on board.

Importantly, the leadership of our bus manufacturers is essential to maintain manufacturer warranties and to handle the federal and state approvals for modifications to the bus structural integrity, including rollover testing. See, e.g., 49 CFR§ 571.227.

Academy looks forward to implementing APUs if/when it becomes practical.

VI. **Explain in detail why the Commissioner should approve your waiver, including a cost analysis, undue hardship burdens, and improvements to your fleet to reduce engine idling.**

Academy has been transporting New York City's riding public for nearly sixty years - since 1968. It is a crucial part of the city's passenger ground transportation network. Academy works closely with and supports MTA, NYCTA, and **NJ** Transit to provide mass commuter services. Additionally, Academy serves major NYC universities, including New York University and Columbia University. It delivers essential services to airports, hotels, and convention centers, helping visitors access NYC's museums, theaters, and sports venues. Academy's safety standards and efficient services go far beyond basic bus transit. It takes pride in safely and comfortably moving millions of people each year, reducing cars on NYC streets, which helps lower congestion and emissions. Modern motor coaches are, on a per-passenger mile basis, the greenest form of public transportation in the country. (Refer to the American Bus Association (ABA) Sustainability Study attached. Exhibit 3).

As you consider our application, please consider the following points.

Modern motor coaches are designed to keep climate control and air circulation systems running whenever the bus is occupied or about to be occupied.

- The temperature inside the passenger compartment fluctuates significantly because of the many windows, lack of insulation, and metal structure of the bus. When it's hot outside, the inside temperature rises quickly, especially if the bus is in the sun. Conversely, when it is cold outside, the heat inside the bus quickly escapes.
- Motorcoaches have enclosed interiors. The windows do not open to allow for ventilation. There is no way to control the temperature or circulate air on the buses unless the HVAC system is turned on, and the HVAC system can only be engaged when the engine is running.
- The passenger compartment of the bus is large, and the climate control needs some time to bring the bus to a temperature within the 68-75°F range, which requires idling before passengers' board. Indeed, the presence of passengers on board, along with the heat and humidity generated by their bodies, significantly impacts the air quality inside the cabin. The interior environment quickly becomes uncomfortable if the HVAC system is not running.
- The industry uses the same Prevost and MCI buses as MTA Bus Company and New York City Transit Authority, which provide express bus service for residents of Brooklyn, the Bronx, Queens, and Staten Island. MTA Bus Company and New York City Transit Authority drivers keep their engines idling while in service, for the same reasons that Academy does - that is how these buses are designed to operate. (Exhibit 6, OEM Letter Regarding the necessity of idling)

Climate control and air circulation systems are essential for maintaining passenger comfort and safety, as well as/or complying with federal regulations and standards.

- Academy's fleet transports seniors and children, who are generally less able to regulate their internal temperatures and are more susceptible to chills, dehydration, or heat exhaustion. Academy must take special precautions to ensure the health and safety of these passengers.
- Additionally, the air circulation system's HEPA filters reduce the risk of airborne pathogen transmission, which is especially important for

people with weakened or compromised immune systems, as well as for the overall health and safety of the riding public.

- The Federal Motor Carrier Safety Regulation at 49 CFR § 374.313(a), which applies to all federally regulated motor passenger carriers operating on regular routes, requires all buses (except those used in commuter service) to be maintained at a "reasonable temperature."¹¹ OSHA recommends workplaces keep the temperature between 68 and 76 degrees (see OSHA Technical Manual Section 11.1(2)(V)). Additionally, the New York State Department of Environmental Conservation rules, which enforce the state's idling law, permit idling as needed to comply with federal, state, or local agency regulations that "require the maintenance of a specific temperature for passenger comfort." See 6 NYCRR § 217-3.3(b).
- Academy is aware of at least one union representing certain Massachusetts motorcoach drivers that filed an unfair labor practice claim against a bus company concerning idling. The union demanded that the company's management stop issuing disciplinary warnings and taking action related to violations of the idling law, arguing it was impossible to comply with the law while also protecting passenger health and safety. Refer to the Class Action Grievance by ATU Local 1512 -Aug 23, 2024.
(Exhibit 4,ABA correspondence to Mayor Eric Adams dated April 21, 2025)

Improvements to the fleet to reduce engine idling.

- Academy provides thorough training to bus drivers to minimize unnecessary idling. Our bus drivers are instructed to turn off the bus whenever possible unless idling is necessary to maintain a comfortable and safe environment for both the driver and passengers. Academy teaches bus drivers that idling increases fuel costs and causes twice the wear on engine parts compared to driving at normal speeds. This training is provided to all new bus drivers and is regularly reinforced during staff meetings, as well as through posters and other written materials.
- Academy uses the onboard electronic logging device to track idling and identify bus drivers who may need a reminder about the importance of reducing unnecessary idling.
(Exhibit 5, BANY/BUS4NYC correspondence to Commissioner Aggarwala, dated June 26, 2025)

Improvements to the fleet to reduce the impact of engine idling.

Academy's fleet complies with all current federal and state emissions standards, including the latest EPA standards for Clean Diesel Technology.

- Bus manufacturers have integrated technologies into the bus to lower emissions, including diesel particulate filters, diesel oxidation catalyst systems, and exhaust filter regeneration systems. Academy has also adopted a series of maintenance practices to reduce emissions, such as regular exhaust system inspections, frequent oil changes, and the use of cleaner fuel blends and motor oils.
- Academy is a founding member of the "NYC Bus Anti-Idling Best Practices Workgroup," where Academy shares information about available technologies and practices to reduce the industry's carbon footprint. This group meets weekly with the senior leadership of the American Bus Association, based in Washington, D.C.

Electric Buses

- In 2018, Academy became the first bus operator in NYC to offer shuttle service using fully electric New Flyer transit buses on behalf of Columbia University. The service operates on a fixed route loop, with the University providing the charging infrastructure. This service, which continues today, has faced some challenges. The out-of-service rate for these buses is high due to the unreliability of current bus electrification technology.
- Short-distance, fixed-route local transit services, like Academy's work under the Columbia University contract, are the best fit for electric buses, partly because they enable battery charging. However, most of Academy's routes do not follow this model and instead cover longer distances on irregular routes.
- Academy knows about electric buses, claiming they are suitable for long-distance travel. However, their range is limited, especially since the advertised range doesn't consider weather conditions or battery wear over time. Additionally, because these buses take several hours to recharge, Academy might need to buy more electric buses to keep the same service, which is costly since electric buses cost more than twice as much as traditional diesel buses.

- Academy looks forward to the day when an electric fleet is feasible; however, that day appears to be at least a few years away. (Exhibit 7, Multiple reports concerning electric bus unreliability, cost, and use)

Variance request:

The applicant requests a variance to permit its vehicles to idle for more than three minutes (1) when the driver or passengers are on board the bus, or (2) when preparing the bus for passengers.

Consider this variance as potentially related to the model year of the bus. Buses from 2007 model year and newer are equipped with diesel particulate filters and other clean diesel technologies as standard, making them much cleaner than buses from earlier years. Reference: Motorcoach Engine Efficiency & Sustainability Advancements, Exhibit 2 and 3). Over time, the model year variance may also change. For instance, in three years, the minimum model year could shift to 2010 models, and later.

NYC DEP should issue this waiver for the benefit of the riding public who are provided with this service. Because it is infeasible to comply with the anti-idling law while buses are in service. Beyond all the data provided above, it is an unreasonable financial hardship (impossible to fund) to try and develop commercial bus qualified APU's that currently do not exist, and/or try to fund electric buses which are not capable of the service demands of current clean diesel buses. Academy has received a staggering number of violations. Since January 2025, Academy has been issued over 650 anti-idling summonses, resulting in hundreds of thousands of dollars in fines. Beyond the expenses related to the fine, Academy also spends many tens of thousands of dollars on investigating the facts related to these complaints and administering our responses to the City. As a private provider of public mass transportation with no public subsidies and thin operating margins, this is a major, unsustainable hardship that impacts the company's ability to provide much-needed public transportation services, keep people employed, and continue to offer intrastate and interstate transportation within New York City and surrounding areas. The issue is not limited to Academy but affects the entire motor coach industry servicing New York City.

In the past, when the volume of summonses was relatively low compared to today, Academy could include the cost of ticket fines in ticket prices. Although this was feasible from a business point of view, it is unfortunate because our customers are generally either lower-income people

deciding between buying a seat on our bus and staying home, or higher-income people choosing between riding our bus and driving into NYC. Every potential passenger who stays home or drives into NYC is a detriment to the city. If the rate of anti-idling summonses continues to climb, Academy will not be able to keep "baking in" the costs, and continued service may be at risk. At that point, the rational business choice might be to limit or stop service to New York City. This would lead to increased traffic congestion and emissions.

Academy's ridership has not fully recovered from the pandemic. The motor coach industry nationwide lost 83 percent of its business in 2020 compared to 2019; in the Northeast Corridor region, our ridership remains 50% below 2019 levels. Academy provided essential transportation services during the pandemic for emergency workers in NYC, incurring significant additional costs to install filtration systems, sanitation measures, enhanced bus cleaning and disinfecting efforts, and driver and passenger protection systems for all our buses, all while operating at a substantial loss. Academy absorbed these costs because it recognizes its vital role in the New York/New Jersey mass transportation system and understands its obligations to the public and our transportation partners.

Accordingly, Academy respectfully requests that the Commissioner grant a variance to the current idling restrictions to allow the delivery of ongoing passenger transportation services to New York City. Academy also respectfully requests that all pending summonses charging violations of the anti-idling law under the New York Administrative Code § 24-163 be held in abeyance during the review of this variance application, and that all related hearings be dismissed upon the granting of this variance.

Please direct any questions regarding this application to Mike Berardesco (mberardesco@academybus.com) or our attorney, Joseph Ferrara, Esq. (jferrara@academybus.com)

Thank you for considering this matter.

The undersigned affirms that to the best of my knowledge, information and belief all submitted information provided is true, accurate, and complete.”

Academy Express LLC and
Academy Lines LLC

By

Francis Tedesco, Manager