Before the
Senate Committee on Environment and Public Works

Statement of Barbara Windsor
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on behalf of the
American Trucking Associations, Inc. (ATA)

Legislative Hearing on S. 1733, Clean Energy Jobs and American Power Act

October 29, 2009

Mr. Chairman and Members of the Committee:

Thank you for the opportunity to present testimony on *S. 1733 the Clean Energy Jobs and American Power Act.* My name is Barbara Windsor, and I am the President of Hahn Transportation, a trucking company headquartered in New Market, Maryland. My family built and grew this business over the past 75 years and today we operate more than 100 trucks and employ over 150 individuals. As a trucking company, we are dependent on a plentiful supply of affordable diesel fuel. In fact, our company purchases approximately 2,600 gallons of diesel fuel daily to ensure that our trucks are able to deliver freight to our customers.

Today, I appear before you representing not just my company, but also the American Trucking Associations (ATA). I am proud to serve as ATA's First Vice Chairman. ATA is the national trade association of the trucking industry. Through its affiliated state trucking associations, affiliated conferences and other organizations, ATA represents more than 37,000 trucking companies throughout the United States.

The trucking industry is the backbone of this nation's economy - accounting for more than 80% of the nation's freight bill and employing nearly 9 million Americans in trucking-related jobs. The trucking industry delivers virtually all of the consumer goods in the United States. We are an extremely competitive industry comprised largely of small businesses. Roughly 96% of all interstate motor carriers operate 20 or fewer trucks.

I. Overview of the Trucking Industry

With more than 600,000 interstate motor carriers in the U.S., the trucking industry is the driving force behind the nation's economy. Trucks haul nearly every consumer good – food, clothing, medicine, appliances, and fuel are all transported by trucks at some point in the supply chain. As the trucking industry's costs increase, the price of all of these essential products also must rise. Few Americans realize that trucks deliver nearly 70 percent of all freight tonnage or that 80 percent of the nation's communities receive their goods exclusively by truck. Even fewer are aware of the significant employment, personal income, and tax revenue generated by the motor carrier industry.

Nearly 9 million people employed in the trucking industry move approximately 11 billion tons of freight annually across the nation. Trucking annually generates $660 billion in revenues and represents roughly 5 percent of our nation's Gross Domestic Product. One out of every 13 people working in the private sector in the U.S. is employed in a trucking-related job ranging across the manufacturing, retail, public utility, construction, service, transportation, mining, and agricultural sectors. Of those employed in private-sector trucking-related jobs, 3.5 million are truck drivers.

The trucking industry consists of both large national enterprises as well as a host of small businesses, all of whom operate in extremely competitive business environments with narrow profit margins. Roughly 96 percent of motor carriers have 20 or fewer trucks and are considered small businesses.

A. Environmental Improvements in the Trucking Industry

The trucking industry is proud of our investments to improve our nation's air quality that has resulted in near-zero emissions for both nitrogen oxide (NOx) and particulate matter (PM). The 2010 model year marks the third generation of EPA diesel engine emission reductions over the last seven years. This year alone, every 60 new trucks purchased will equal emissions of PM from 6 trucks purchased just three years ago and of a single new truck purchased 20 years ago. Today's trucks also began the first half of what ultimately will be an additional 90 percent reduction in NOx emissions.

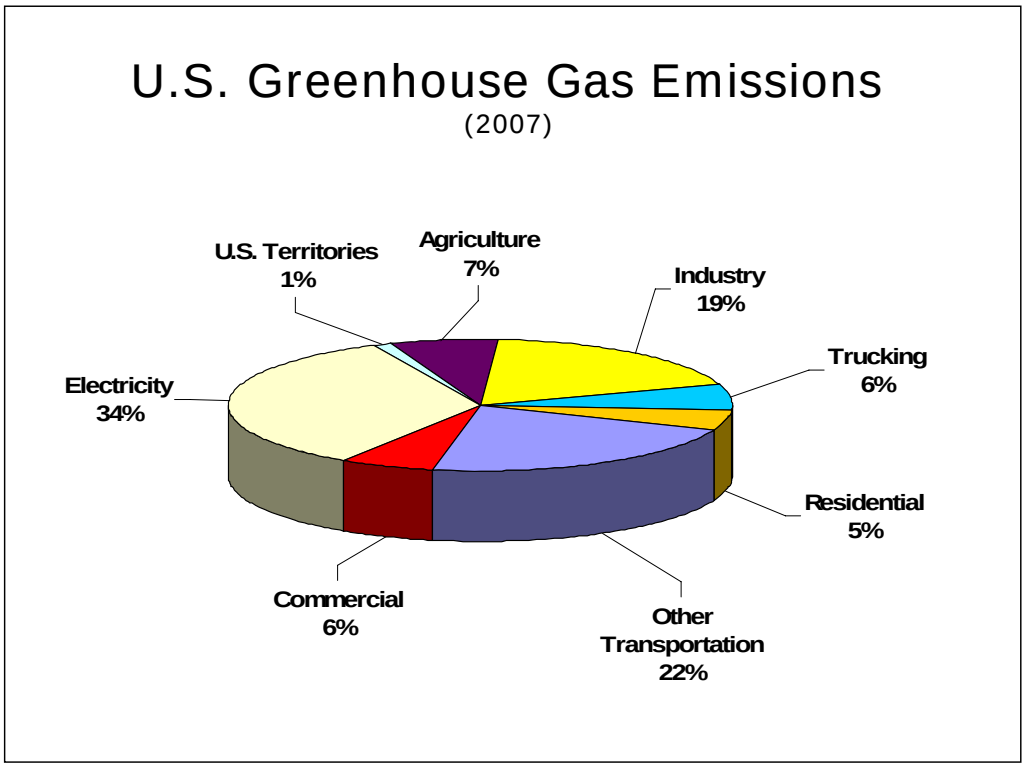
However, addressing these emissions reduced our fuel economy by as much as 8-12 percent over the last seven years; thereby increasing carbon emissions by requiring us to burn more fuel. If we can reverse this trend and increase fuel economy, GHG emissions will be reduced.

The new technology for NOx and PM reductions also comes with significant financial costs. For instance, in the case of the diesel engine emission standards imposed in 2002, engine costs increased by $3,000 to $5,000. EPA's 2007 diesel engine standards added another $8,000 to $10,000 per truck. Standards set to take effect in 2010 will again increase new engine costs by an additional $6,000 to $10,000. While industry strongly supports these emission objectives, it should not be lost that these gains come at substantial costs to our trucking fleets.

B. Trucking Industry's Carbon Footprint

Ultra low sulfur diesel fuel plays a critical role in the trucking industry. Diesel fuel's high energy content is necessary to transport widely diversified loads under extreme operating conditions and achieve reasonable fuel economy. Diesel fuel is the main source of carbon emissions from our industry equating to 22.2 pounds of CO_2 equivalent per gallon of fuel at the point of combustion and 27.1 pounds of CO_2 equivalent when accounting for its lifecycle emissions.

While the transportation sector emits 28 percent of all U.S. GHG's, trucking contributes ***less*** than 6 percent of total U.S. carbon emissions.[1]



ATA strongly supports efforts to reduce GHG emissions and to make this country more energy independent. The question that must be answered is "what is the best way to control GHG emissions in an industry that does not consume diesel fuel and emit carbon on a discretionary basis?" We address this issue in more detail below, describing why a cap and trade system is inappropriate for controlling carbon emissions from commercial trucks and then discussing alternative carbon control mechanisms.

[1] Source: U.S. EPA's *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2007* (April 15, 2009).

II. Trucking Industry Concerns Over an Economy-Wide Cap and Trade System

Unfortunately, an economy-wide cap and trade system will increase the price and volatility of the diesel fuel the trucking industry depends upon, while failing to significantly reduce carbon emissions from our industry. We explain each of these impacts below:

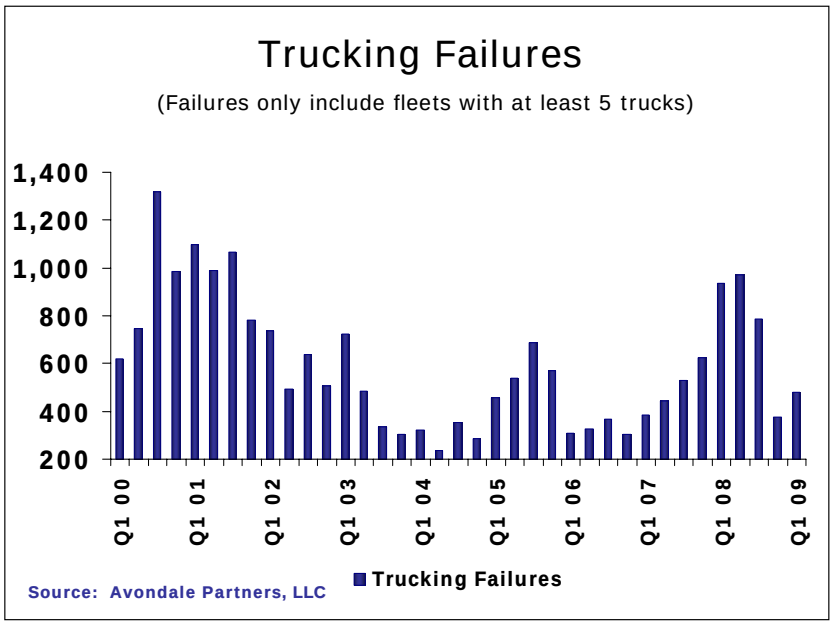
A. Increased Fuel Costs

Diesel fuel is the lifeblood of the trucking industry. In 2008 trucking consumed over 39 billion gallons of diesel fuel. This means that a one-cent increase in the average price of diesel costs the trucking industry an additional $390 million in fuel expenses. Fleets spent an astonishing $151 billion on fuel in 2008, a $36 billion increase from 2007 and more than double the amount spent in 2004.

An economy-wide cap and trade system requires refineries to purchase carbon allowances to cover their direct refinery emissions, and additional allowances to cover the amount of carbon produced by the downstream combustion of the fuels they produce. The costs associated with obtaining these carbon allowances will be passed on the fuel consumers in the form of higher prices. A major petroleum supplier to the trucking industry has advised that diesel fuel costs could rise by up to 88 cents.

The trucking industry is one of the most competitive in the nation, with most companies operating on razor thin margins of 2 - 4 percent. Due to the intense competition within the industry, many trucking companies have difficulty passing cost increases on to their customers. This explains why many trucking companies are reporting that as fuel prices increase, profits are greatly suppressed, if they are making a profit at all.

Fuel price increases take their toll on the trucking industry. With the downturn in the economy and soft demand for freight transportation services, trucking companies are struggling to survive. In 2007, 2008 and 2009, nearly 6,000 trucking companies with at least 5 trucks failed. Additionally, thousands of independent operators, drivers, and employees have lost their jobs.



A large number of companies that operate fewer than 5 trucks have also turned in their keys. These hardships surprise few in the industry, but may surprise those less familiar with the nature of freight movement.

Cap and trade will not only increase the price of diesel fuel, it also will increase the volatility of diesel prices, as a fluctuating carbon price is added to an already volatile fuel price. Volatile fuel prices make it very difficult for trucking companies to accurately predict their future expenses as they sign freight delivery contracts. Even those trucking companies that have established a fuel surcharge program designed to pass-on diesel fuel price increases will suffer from the time lag between daily fuel price changes and the periodic surcharge adjustments built in to shipping contracts.

We are concerned with the support of various investment banks for a cap and trade system, as these Wall Street firms would derive significant profits from volatility in the energy futures markets and the development of a new carbon derivatives market. ATA believes that it is critical to enact commodities trading reforms prior to the creation of new physical and derivative carbon markets. ATA has been a vocal advocate for greater government oversight of markets that impact our industry in order curb excessive speculation. The dramatic surge in fuel prices last summer taught our industry a valuable lesson about the impact of excessive speculation in the energy commodities markets. Carbon markets have the potential to add yet another layer of expense and volatility to the cost of diesel fuel – a cost increase that can very easily devastate trucking company operations.

It is clear that the cap and trade proposal will increase the cost of diesel fuel and increase its price volatility. Each of these effects will harm the trucking industry and American consumers.

B. Cap and Trade Will Not Reduce Trucking's Carbon Emissions

Perhaps the most troubling aspect of the cap and trade approach is that notwithstanding the additional money that consumers will have to spend on diesel fuel, the approach will not significantly reduce carbon emissions from the trucking industry.

The reason that the proposed cap and trade legislation will not reduce carbon emissions in the trucking industry is rooted in the fact that trucking is not a discretionary consumer of fuel. Proponents of an economy-wide cap and trade system believe that by increasing the price of fuel, consumers will reduce their consumption of gasoline. This rationale does not translate well to the trucking industry, which is a *non-discretionary* consumer of diesel fuel.

The trucking industry consumes approximately 39 billion gallons of diesel fuel to deliver virtually all of the nation's consumer goods. This will continue to be the case for the foreseeable future, even if the price of diesel fuel is dramatically increased by cap and trade, as the trucking industry does not have any viable near-term alternatives to diesel. While various proponents of alternative fuels cite to natural gas and biodiesel as potential alternatives to petroleum-based diesel, for the reasons set forth below these alternative fuels are not currently viable alternatives for the trucking industry.

Natural Gas

ATA supports the voluntary use of natural gas as a lower-carbon alternative fuel. Liquefied natural gas (LNG) may reduce carbon emissions by 15 to 25 percent, depending upon the source of the natural gas and the efficiency of the natural gas liquefaction facility.

LNG is not a viable alternative for most long-haul trucking operations. LNG could be an acceptable fuel solution for certain short-haul applications within an industry as diverse as trucking; however, there are significant hurdles to overcome, before natural gas can begin to be used as a substitute for diesel fuel.

The cost of a natural gas truck is prohibitively expensive. Natural gas trucks typically cost $40,000 - $75,000 more than a comparable diesel truck. In addition, natural gas trucks weigh more than their diesel counterparts, which impact the amount of freight that a natural gas trucks can legally carry. As a petroleum hauler, a 500 to 1,000 pound weight penalty translates directly to a reduction of 70 to 140 gallons of fuel that the truck can legally deliver to local gas stations. This 10 percent reduction in payload capacity would require me to operate more trucks to deliver the same amount of fuel I deliver today – dramatically increasing the cost of delivery and eroding much of the carbon reduction benefits that would be derived from using natural gas.

The most significant hurdle to the use of LNG is the lack of a competitive refueling infrastructure. LNG trucks must be refueled at specialized stations that are configured for the specific truck. Running out of gas on the side of the road is a significant challenge as LNG mobile refueling is not an option and the truck would have to be towed to the refueling station. A fast-fill LNG station can cost almost a million

dollars to build, which stands as a significant barrier to the development of a competitive refueling infrastructure.

Biodiesel

ATA supports the voluntary use of high quality biodiesel in low percentage blends that meet the ASTM-International diesel fuel standard (ASTM D975). Biodiesel is an alternative fuel that can help reduce our dependence on foreign sources of petroleum; however, biodiesel is not a viable low carbon replacement for diesel fuel.

a. Biodiesel - Questionable Carbon Footprint

Our first concern with biodiesel is the uncertainty surrounding its carbon footprint. While EPA has not yet finalized its Renewable Fuel Standard rulemaking, it is clear from the notice of proposed rulemaking that the lifecycle carbon emissions associated with biodiesel are too high for it to qualify as a low carbon alternative. Even if indirect carbon emissions are ignored, the amount of biodiesel that would have to be blended into petroleum-based fuel to obtain meaningful carbon reductions would require the use of biodiesel in high-percentage blends that would no longer meet ASTM on-road diesel fuel standards.

b. Biodiesel - Operational Challenges

Last year, ASTM-International approved a modification to the on-road diesel fuel standard that will facilitate the use of biodiesel in blends up to five percent (B5). Motor carriers have made enormous investments in heavy duty diesel engines. These engines were designed and built to run on diesel fuel that meets the ASTM D975 fuel specification. Indeed, engine manufacturers require the use of fuel meeting this ASTM D975 standard in order to preserve warranty claims. High percentage blends of biodiesel will not meet the fuel standard that the diesel engines were designed to run on and may create significant operational challenges for end users.

High-percentage blends of biodiesel gel at a higher ambient temperature than petroleum-based diesel and may cause trucks to become stranded in cold weather. Anti-gelling products, heating systems for fuel tanks and blending with No. 1 diesel fuel have been used to prevent gelling, but each of these options adds to operating costs. High-percentage biodiesel blends also can cause a variety of costly engine problems, and are therefore not recommended for use by engine manufacturers. Even if new trucks were designed to accept high percentage blends of biodiesel, the long lifespan of a diesel engine makes high percentage biodiesel blends an unacceptable alternative for the millions of trucks that comprise the existing fleet.

Another operational challenge presented by biodiesel is that it behaves as a solvent and may dislodge sediment that naturally accumulates in truck fuel systems, requiring an unanticipated fuel filter change in advance of regularly scheduled maintenance. This could be a significant issue and cost for over-the-road trucks, which often travel far from their base of operations.

c. **Biodiesel is Expensive**

Biodiesel derived from soy oil is significantly more expensive than petroleum derived diesel fuel. The example provided below demonstrates the difference between the wholesale cost of biodiesel and the wholesale price of ULSD.

The Economics of Biodiesel [2]

Feedstock Costs:	$ 2.99
Soy Oil (7.3 lbs./gal.) @ 38 cents +.03 cents for transport:	
Production Costs:	
Methanol (12%-20% by volume)	$ .10 - .20
Catalyst	$ .10 - .12
Electricity	$ .01
Natural Gas (boiler - heat)	$ .08 - .10
Labor and Overhead	$ .05 - .10
Maintenance	$ .03 - .05
Insurance & Tax	$ .03 - .05
Depreciation	$ .05 - .10
Total Production Costs	**$ 3.44 - $3.72**
Federal Tax Credit (expires 2009)	$ -1.00/ gallon
Wholesale biodiesel (w/o transport)	**$ 2.44 - $2.72 / gallon**

On October 23, 2009, the wholesale price of ULSD was $2.10 per gallon.[3] Even with the $1.00 per gallon federal blending credit applicable to biodiesel, the renewable fuel was still significantly more expensive than the average price of ULSD. Moreover, there is no guarantee that Congress will extend the biodiesel blending credit, which will expire at the end of 2009 unless renewed. If Congress does not act to extend this tax credit, then the cost of biodiesel could be almost double the cost of ULSD.

The price comparison of biodiesel to ULSD shown above is not an anomaly as the price of soybean oil has varied directly with the price of crude oil. Even during the record high diesel prices during the summer of 2008, biodiesel remained more expensive than ULSD.

In addition to the significant cost differential between biodiesel and ULSD, high percentage blends of biodiesel have a lower energy value, requiring more fuel to be purchased to perform an equivalent amount of work.

[2] Sources: *The Wall Street Journal* (October 23, 2009); and American Trucking Associations.
[3] *The Wall Street Journal* (October 23, 2009).

C. Cap and Trade should not Apply to Transportation Fuels

Should Congress move forward with a cap and trade carbon control system, oil refinery carbon caps should apply only to the refinery's direct carbon emissions and not to the downstream combustion of the products they produce (i.e., gasoline, diesel, jet fuel). Applying a carbon cap to the carbon produced from combusting mobile source fuels is an inefficient way to regulate this emission source and does not distinguish between gasoline whose consumption may be reduced through price incentives and diesel fuel consumed by trucking companies that do not consume diesel on a discretionary basis. Similarly, issuing additional no-cost allowances to refineries to help shield the trucking industry and other non-discretionary consumers of diesel from fuel price increases may not work if refineries choose to use those allowances to subsidize the price of their discretionary products, such as gasoline.

The remainder of our testimony will address other means of reducing carbon emissions from mobile sources, such as the trucking industry.

III. Alternatives for Reducing Carbon Emissions from the Trucking Industry

Trucking is not an industry that chooses to remain on the sideline awaiting new mandates. This is especially true with climate change legislation. That is why ATA undertook a full analysis of our industry and its operations and began its efforts to develop its greenhouse gas reduction plan beginning in 2006 before serious climate debates in Congress even began. The ATA effort took into account the unique nature of the trucking industry and identifies opportunities to reduce its carbon footprint without restricting the delivery of the nation's goods.

The fruits of our industry's efforts culminated in May of 2008 when ATA formally unveiled its sustainability plan entitled *Strategies for Reducing the Trucking Industry's Carbon Footprint*. ATA's bold sustainability program will have an immediate impact on the environment, reducing fuel consumption by 86 billion gallons and reducing the carbon footprint of all vehicles by nearly a billion tons over the next ten years. Our plan can achieve real results with far less cost and disruption to our industry sector than under a cap-and-trade scenario. To view ATA's plan, go to http://www.trucksdeliver.org/pdfs/Campaign_Executive_Summary.pdf.

The recommendations set out solutions for our industry that are achievable today to reduce greenhouse gases. The six key recommendations set out in the report are as follows:

A. Enact a National 65 mph Speed Limit and Govern New Truck Speeds to 65 mph for Trucks Manufactured After 1992

A truck traveling at 75 mph consumes 27 percent more fuel than one going at 65 mph. Bringing speed limits for trucks down to 65 mph would save 2.8 billion gallons of diesel fuel in 10 years and reduce CO_2 emissions by 31.5 million tons. Automobile consumption of gasoline would drop by 8.7 billion gallons, with an accompanying drop in CO_2 emissions of 84.7 million tons. More aggressive enforcement would further reduce fuel consumed and carbon produced.

B. Decrease Idling

Truck drivers idle their trucks out of necessity. The Department of Transportation's Federal Motor Carrier Safety Administration *Hours-of-Service* regulations require mandatory rest periods. As the driver rests in the truck's sleeper compartment, he/she will often need to cool or heat the cab to rest comfortably. In extremely cold weather, truck drivers also will idle their engines to prevent the engine block from freezing. Argonne National Laboratory estimates that the average long-haul truck idles for 1,830 hours per year. With hundreds of thousands of these trucks on the road, idling has a significant impact on fuel consumption and the environment. The U.S. Environmental Protection Agency (EPA) estimates that idling trucks consume approximately 1.1 billion gallons of diesel fuel annually.

Idling in congested traffic, or running the engine to keep the driver warm or cool while resting, annually consumes an estimated 1.1 billion gallons of diesel fuel. Reducing so-called discretionary idling (for truck cab heating, and cooling) can be targeted with new technologies that reduce fuel consumption. Options currently available to fleets to minimize discretionary idling have the potential to reduce CO_2 emissions by an estimated 61.1 million tons over the next ten years

C. Reduce Highway Congestion through Highway Infrastructure Improvements

Americans waste a tremendous amount of fuel sitting in traffic. According to the most recent report on congestion from the Texas Transportation Institute, in 2005, drivers in metropolitan areas wasted 4.2 billion hours sitting in traffic. These congestion delays consumed 2.9 billion gallons of fuel. ATA estimates that if congestion in these areas was ended, 32.2 million tons of carbon would be eliminated and, over a 10-year period, nearly 32 billion gallons of fuel would be saved, reducing carbon emissions by 314 million tons.

ATA recommends that Congress invest in a new congestion reduction program to eliminate major traffic bottlenecks identified in all 437 urban areas across the country, with a specific focus on those that have the greatest impact on truck traffic. Congestion relief offers one of the most viable strategies for reducing carbon emissions. ATA recommends a 20-year plan for addressing congestion. During the first five years, the focus would be on fixing critical highway bottlenecks. During the next five to 15 years, traffic flow in critical freight corridors would be improved through highway capacity

expansion. Beyond that, the focus would be on creating truck-only corridors which would enable carriers to run more productive vehicles. These improvements are possible only with dedicated revenue generated by an increased federal fuel tax.

D. Increase Fuel Efficiency through EPA's SmartWay Program

In February 2004, the freight industry and EPA jointly unveiled the SmartWay Transport Partnership, a collaborative voluntary greenhouse gas reduction program designed to increase the energy efficiency and energy security of our country while significantly reducing air pollution in the process. The program's mantra is "fuel not burned equates to emissions not had." Patterned after the highly-successful Energy Star program developed by EPA and DOE, SmartWay creates strong market-based incentives that challenge companies shipping products and freight operations to improve their environmental performance and improve their fuel efficiencies. To become a partner a fleet must commit to reduce fuel consumption through the use of EPA-verified equipment, additives, or programs.

Since its launch in 2004, the SmartWay program has grown to include over 2,000 partners and saved 14 million metric tons of CO_2 , 1.4 billion gallons of fuel, and $3.5 billion in fuel costs – the equivalent of taking 3.1 million cars off the road.

SmartWay encompasses the whole freight industry - shippers, truckers, rail carriers, even dealer service centers and truck stops. Program partners reduced fuel consumption in 2008 by over 500 million gallons and SmartWay will help the trucking industry will reduce its CO_2emissions by nearly 300 million tons in 2012. SmartWay is one voluntary greenhouse gas program that not only works, but exceeds expectations.

E. Promote the Use of More Productive Truck Combinations

By reducing the number of trucks needed to move the nation's freight, the trucking industry can lower its fuel consumption and produce significant environmental benefits. More productive equipment - where it is consistent with highway and bridge design and maintenance of safety standards - is an additional tool that should be available to states. ATA estimates that allowing nationwide operation of higher productivity vehicles by increasing single tractor trailer maximum gross vehicle weights to 97,000 pounds and use of heavier double 33-foot trailers would save more than 20.5 billion gallons of diesel fuel and reduce carbon emissions by over 227 million tons over a 10-year period.

A recent study by the American Transportation Research Institute found that use of these vehicles could reduce fuel consumption by 39%, with similar reductions in criteria and greenhouse gas emissions. Increased truck productivity has a proven track record of reducing vehicle miles traveled and fuel consumption on highways such as the New York Thruway, Massachusetts Turnpike, Florida Turnpike, and on roads throughout the Western United States. These examples of responsible governance could be replicated by other states if they are given the necessary flexibility under federal law.

F. Support National Fuel Economy Standards for Medium- and Heavy-Duty Trucks

ATA supports increasing fuel economy standards for commercial medium- and heavy-duty trucks that are technologically and economically feasible, do not compromise truck performance, and provide manufacturers sufficient stability and lead time for production. Given that fuel economy in the industry has remained flat over the last quarter century and fuel now is the largest operating expense for many fleets, it is more critical than ever to ensure small and large fleets alike are able to continue to deliver the nation's goods. ATA is working closely with the U.S. Department of Transportation and the National Academy of Sciences as they work to evaluate fuel economy, fuel efficiency, and the establish associated standards for medium- and heavy-duty trucks as directed under the Energy Information and Security Act of 2007.

Beyond the six aforementioned recommendations and in closing, ATA requests Congress to consider funding research and development in the areas of new engine technologies, aerodynamics, low-carbon fuels, fuel additives, lubricity, tires, batteries, hybrids, anti-idling equipment, insulation, and rolling resistance specific to operations of line-haul trucks. Technology advancements have been stalled for many years and an infusion of funding and will is critical to realize the next generation of more efficient and lower carbon-emitting trucks.

IV. Carbon Taxes on Transportation Fuels

Controlling carbon emissions by taxing those emissions is premised upon the rationale that by increasing the cost of carbon emissions (*e.g.*, fuel consumption) an economic incentive is created to reduce emissions. Carbon taxes can be an efficient economic mechanism to reduce carbon emissions. While it may be difficult to establish the appropriate tax rate that will guarantee a specific carbon reduction, this is not an insurmountable problem.

Carbon taxes on transportation fuels will increase the price of fuel, but will not increase the volatility of fuel prices, as the price of transportation fuels would not be impacted by a carbon derivative market. From the trucking industry's perspective, carbon taxes are a tangible fixed expense that can be quantified and fully or partially passed on to consumers of trucking services.

For a carbon tax to be supported by the trucking industry, the revenue derived from the tax must be allocated to the Highway Trust Fund. Placing this revenue into the Highway Trust Fund has the advantage of further reducing carbon emissions from mobile sources, as these funds could be directed toward projects that mitigate congestion. Revenue from carbon taxes on diesel fuel should be fully dedicated to addressing major bottlenecks on significant highway freight routes. According to the Federal Highway Administration, the nation's worst highway freight bottlenecks caused 226 million hours of truck delays in 2006 alone[4]. The congestion caused by bottlenecks produces

[4] Cambridge Systematics for the Federal Highway Administration, *Estimated Cost of Freight Involved in Freight Bottlenecks*, Nov. 2008.

unproductive fuel use at a significant environmental and financial cost. The level of carbon tax placed on on-road diesel fuel should not exceed the rate necessary to generate the revenue needed to fund highway freight improvements.

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ATA and Hahn Transportation appreciate the opportunity to offer the trucking industry's testimony before this Committee and I look forward to answering any of your questions. Thank you.