AMERICAN TRUCKING ASSOCIATIONS

Sustainability Task Force
Strategies for Further Reduction of the Trucking Industry's Carbon Footprint

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Executive Summary

The American Trucking Associations, Inc. (ATA) is the representative trade association for the U. S. trucking industry. In response to concerns over global warming, ATA has taken a proactive and aggressive stance on finding ways to further reduce the trucking industry's carbon footprint. Through implementation of five recommendations, the ATA estimates that the U.S. could reduce fuel consumption by as much as 86.1 billion gallons and reduce carbon dioxide (CO_2) emissions by as much as 904.7 million tons over a ten-year period.

These recommendations came out of ATA's Sustainability Task Force (Task Force), formed on June 12, 2007, with a charge to review the progress currently being made by the trucking industry in reducing its carbon footprint and to recommend further steps that can be taken. This Task Force held its first workshop on July 23 and 24, 2007, in order to provide guidance to ATA regarding policy positions or actions that the Association can take on cap-and-trade, carbon and fuels taxes, idling, fuel efficiency, larger combination vehicles, and equipment enhancements.

The Task Force made the following five recommendations to reduce CO_2 emissions and one additional recommendation to oppose a cap-and-trade approach on mobile sources:

1. **Speed Limits and Speed Governing**
   Enact a national speed limit not to exceed 65 miles per hour (mph) and govern truck speeds at no more than 68 miles per hour for new vehicles.

2. **Idling**
   Pursue a federal solution that reduces ***non-discretionary*** idling through highway infrastructure improvements and reduces ***discretionary*** idling through incentives for technology improvements.

3. **Fuel Efficiency**
   Encourage increased and effective fuel efficiency improvements by encouraging carrier and shipper participation in the U.S. Environmental Protection Agency's (EPA) SmartWay® Transport Partnership Program as an important strategy for reducing carbon.

4. **Carbon or Congestion Reduction Tax**
   Advocate for initiatives to improve highway infrastructure and reduce congestion as a preferred method of further reducing carbon emissions from the trucking industry. The optimal way to pay for the needed infrastructure improvements is through a fuels tax increase dedicated to paying for highway improvements that reduce congestion.

5. Truck Size and Weight
Advance ATA's current policies and positions on size and weight reforms as measures to reduce emissions of carbon and other pollutants, mitigate congestion, and conserve fuel.

6. Cap-and-Trade
Oppose the application of any cap-and-trade regulatory approach as unworkable for a diverse downstream fuel user such as the trucking industry.

Fuel Consumption and CO_2 Emission Reductions Achievable Over a Ten-Year Period

ATA Sustainability Task Force Recommendation	Reduction in Fuel Consumption (billions of gallons)	Reduction in CO_2 Emissions (millions of tons)*
Speed limit reduction **		
65 mph maximum for trucks	2.8	31.5
65 mph maximum for cars	8.7	84.7
Reduced discretionary idling	5.5	61.1
SmartWay® *(results achievable over a nine-year period)*	10.7	119.0
Carbon or congestion tax (non-discretionary idling reduction through elimination of congestion in all 437 urban areas)		
Trucks	4.1	45.2
Cars	27.7	268.5
Size and weight increases		
Expand LCV use ***	6.1	67.4
Increase gross maximum weight	20.5	227.3
Total Impact	**86.1**	**904.7**

* CO_2 emissions were calculated using 19.4 pounds/gallon and 22.2 pounds/gallon for gasoline and diesel fuel, respectively.

** More stringent enforcement efforts may result in further fuel savings and CO_2 reductions (an additional 14.3 billion gallons and 139.8 million tons, respectively).

*** Allowing more productive trucks to operate on additional corridors would result in further CO_2 reductions.

Prologue

The Critical Nature of the Trucking Industry

With as many as three-quarters of a million interstate motor carriers in the U.S.,[1] the trucking industry is the driving force behind the nation's economy. Trucking does the heavy lifting to move, at some point in the supply chain, nearly everything consumed in our modern society. Few Americans realize that trucks deliver nearly 70 percent of all freight tonnage[2] or that 80 percent of U.S. communities receive their goods exclusively by truck.[3] Even fewer are aware of the significant employment, personal income, and tax revenue generated by the motor carrier industry.

It takes nearly nine million people[4] to move approximately 11 billion tons of freight annually.[5] Trucking generates approximately $625 billion in revenue[6] and represents roughly five percent of U.S. Gross Domestic Product.[7] One out of every 13 people working in the private sector in the U.S. is employed in a trucking-related job, with these jobs ranging across the manufacturing, retail, public utility, construction, service, transportation, mining and agricultural sectors.[8] Of those employed in private-sector trucking-related jobs, 3.4 million are commercial drivers.[9]

The trucking industry is composed 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. According to the U.S. Department of Transportation, 91 percent of motor carriers have 20 or fewer trucks and are classified as small businesses.

ATA is the national trade association of the trucking industry and is comprised of motor carriers, state trucking associations and national trucking conferences created to promote and protect the interests of the trucking industry. Its membership includes more than 2,500 trucking companies and industry suppliers of equipment and services. Directly and through its affiliated organizations, ATA represents more than 37,000 companies and every type and class of motor carrier operation in the U.S., effectively representing the nation's entire trucking industry.

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[1] Motor Carrier Management Information System (MCMIS) Census File Documentation, Federal Motor Carrier Safety Administration, U.S. Department of Transportation.
[2] *U.S. Freight Transportation Forecast to ... 2017,* American Trucking Associations.
[3] American Trucking Associations.
[4] *American Trucking Trends* (2006) American Trucking Associations.
[5] *U.S. Freight Transportation Forecast to . . . 2017,* American Trucking Associations.
[6] *U.S. Freight Transportation Forecast to ... 2017,* American Trucking Associations.
[7] American Trucking Associations.
[8] Economics and Statistics Group, ATA; *Employment and Wages Annual Averages,* Bureau of Labor Statistics, U.S. Department of Labor.
[9] *Employment and Earnings - Household Data,* Bureau of Labor Statistics, U.S. Department of Labor.

The Trucking Industry's Commitment to a Clean Environment

Trucking is the first mode to widely use advanced diesel engine emission control systems. In 2002, the industry began buying new engines which incorporated exhaust gas recirculation (EGR) and other emission control technologies to reduce tailpipe emissions of nitrogen oxide (NOx) by 50 percent. Beginning in 2007, new diesel engines were required by law to incorporate diesel particulate filters (DPFs) to reduce tailpipe emissions of particulate matter (PM) by 90 percent. This new regulation will ultimately result in a 90 percent reduction in NOx emissions. To illustrate the significance of these reductions, particulate emissions from 60 trucks with today's cleanest burning diesel engines will equal the particulate emissions of a single new truck purchased 20 years ago.

To enable the use of these new emission reduction technologies, the trucking industry began using ultra-low sulfur diesel fuel (ULSD) in 2006. ULSD now represents the vast majority of the on-road diesel fuel purchased in the U.S. and is refined to near-zero sulfur levels (15 parts/million).

These latest efforts to improve air quality continue a nearly quarter-century trend of reducing truck emissions. In 2002 (the most current data available), on-road diesel engines contributed approximately one percent of the nation's total emissions of volatile organic compounds, carbon monoxide and sulfur dioxide, less than 1.5 percent of the nation's total emissions of fine particulate matter, and approximately 16 percent of the nation's total emissions of NOx.[10] On-road diesel trucks account for less than six percent of the nation's greenhouse gas (GHG) emissions.[11]

Nationally, on-road heavy-duty diesel trucks produce half as much fine particulates as off-road sources, including construction and farm equipment, locomotives, and marine vessels. When compared to the EPA's 2002 emissions inventory baseline, PM and NOx emissions from heavy-duty trucks will be reduced by more than 40 percent by 2010 and by more than 70 percent by 2020, due to stricter engine and diesel fuel standards.[12]

Climate Change

Gases that trap heat in the atmosphere are called greenhouse gases. It is widely believed that during the past century humans have increased the amount of GHG in the atmosphere. The added gases are enhancing the natural greenhouse effect and may be contributing to an increase in the average global temperature and related climate changes. This phenomenon is commonly known as global warming.

The four primary greenhouse gases emitted as a result of human activities are:

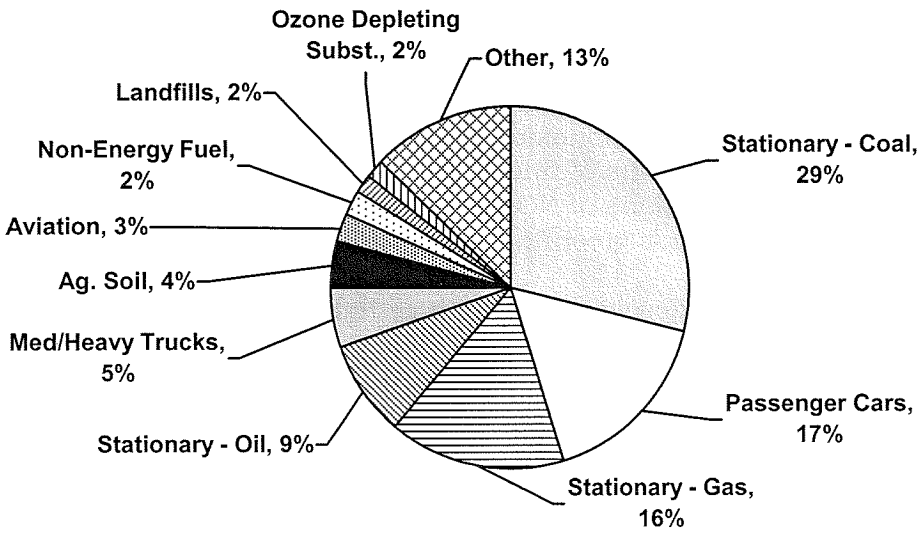
- CO_2 (created primarily by burning fossil fuels);
- Methane or CH_4 (largely from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills);

[10] EPA, 2005.
[11] EPA, 2006.
[12] FHWA, 2005.

- Nitrous oxide or N_2O (emitted during agricultural and industrial activities and also during combustion of fossil fuels and solid waste); and
- Fluorinated gases (ozone depleting substances)

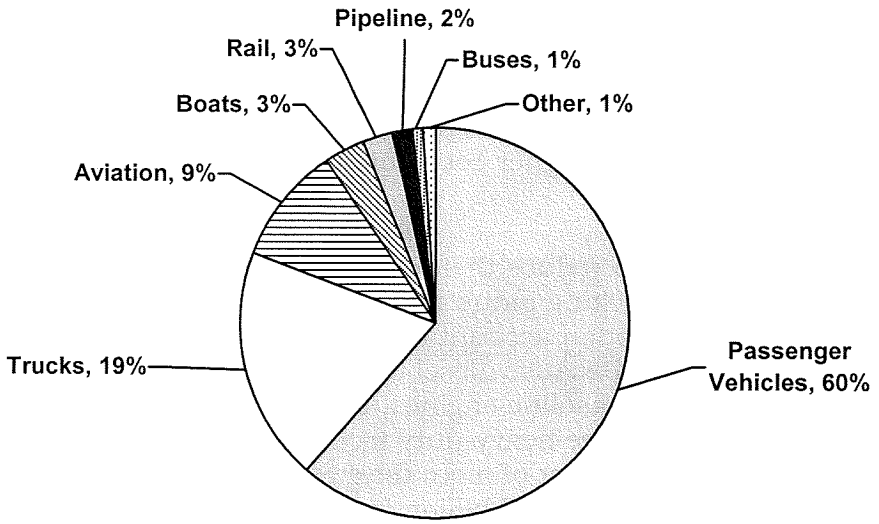
The predominant greenhouse gas is CO_2 and the U.S. is responsible for nearly 22 percent of the world's CO_2 emissions; 61 percent of the total U.S. greenhouse gases are attributed to three primary sources, according to the EPA. Medium and heavy trucks rank fifth on the list of the top ten sources of greenhouse gas emissions.

- Stationary combustion–coal (28.8 percent)
- Passenger vehicles, light duty trucks and motorcycles (16.5 percent)
- Stationary combustion–gas (15.7 percent)
- Stationary combustion–oil (8.6 percent)
- Medium and heavy-duty trucking (5.3 percent)



Top Ten Sources of U.S. GHG Emissions, 2005

Source: U.S. Environmental Protection Agency, *Draft U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2005*, Tables A-1 A-108, pp. A-3-4 & A-127-128 (February 2005).



U.S. GHG Emissions by Transportation Sources, 2005

Source: U.S. Environmental Protection Agency, *Draft U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2005*, Table A-108, pp. A-127-128 (February 2005).

In the case of *Massachusetts v. EPA*, 127 S.Ct. 1438, decided April 2, 2007, the U.S. Supreme Court held that the EPA has the authority to regulate greenhouse gases. In the meantime, states continue to develop their own individual greenhouse gas reduction programs, a number of bills have been introduced and are being debated in Congress, and hearings continue on Capitol Hill.

The two primary approaches to reducing greenhouse gas emissions under discussion are: cap-and-trade and carbon taxes. Under a cap-and-trade approach, the government or other designated authority sets a limit or cap on the amount of greenhouse gases that can be emitted. Companies or other groups that emit the greenhouse gas are given credits or allowances which represent the right to emit a specific amount. The total amount of credits cannot exceed the cap, limiting total emissions to that level. Companies that pollute beyond their allowances must buy credits from those who pollute less than their allowances. This transfer is referred to as a trade. In effect, the buyer of credits is being fined for polluting, while the seller is being rewarded for having reduced emissions. The more industries that need to buy credits, the higher the price of credits.

A carbon tax approach places a pollution tax on energy sources that emit greenhouse gases into the atmosphere. The purpose of a carbon tax is to reduce emissions of greenhouse gases and thereby slow global warming. It can be implemented by taxing the burning of fossil fuels (coal, petroleum products such as gasoline, diesel, aviation fuel, and natural gas) in proportion to their carbon content. Unlike a cap-and-trade program, little administrative oversight may be needed to levy such a tax. In addition to creating incentives for energy conservation, a carbon tax would put renewable fuels

and energy sources, such as wind, solar and geothermal, on a more competitive footing stimulating their growth.

How can greenhouse gas regulation impact trucking companies? Assuming the trucking sector is included in any such program, the industry can expect to pay higher fuel costs, higher utility bills, and higher costs for equipment as a result of increased energy input costs.

The most logical way for fleets to reduce their carbon output is to burn less fuel in relation to tons moved. The trucking industry has always focused on becoming more fuel efficient since fuel consumption accounts for up to 25 percent of many trucking companies' operating budgets. Because diesel engines are 20 percent to 40 percent more efficient than comparable gasoline engines, the trucking industry converted over to diesel nearly 40 years ago. Since heavy-duty trucks consumed more than 38 billion gallons of diesel fuel in 2006 at a cost of more than $103 billion and the trucking industry is projected to spend over $107 billion in 2007, market-based forces continue to drive companies to reduce fuel costs given the extremely competitive nature of the trucking business.

Gains in fuel efficiency can be achieved through a variety of measures including: reducing idling and truck speed limits; using more fuel efficient equipment such as aerodynamic packages and wide-based single tires; increasing gross vehicle weights and using longer combination vehicles; establishing fuel economy standards for heavy-duty trucks; and using more alternative fuels. While some of these measures will require capital expenditures, improving fuel efficiency, if done properly and with care, likely could have a return on investment.

It is uncertain at this time what the future holds for the passage and/or timing of federal greenhouse gas legislation or how the EPA will proceed following the U.S. Supreme Court's recent decision. One thing is certain – the issue of global warming has been elevated to the highest levels of concern among both elected officials and the citizens of this nation.

The Trucking Industry's Commitment to a Clean Environment, Fuel Efficiency and Reduced Carbon Emissions

Initiative	Description	Implementation Date	Results
Reduction of nitrogen oxides (NOx)	Exhaust gas recirculation technologies that reduce tailpipe emissions of NOx	October 2002	Reduced tailpipe emissions of NOx by 50 percent
Reduction of diesel particulate matter	Filter technologies that reduce tailpipe emissions of particulate matter	January 2007	Reduced tailpipe emission of particulate matter by 90 percent to near-zero levels
Introduction of clean diesel fuel	Ultra-low sulfur on-road diesel fuel with nearly no sulfur content (≤ 15 ppm sulfur)	October 2006	Reduced sulfur content to nearly zero and enabled use of advanced emissions control equipment
SmartWay® Transport Partnership Program	A partnership between the freight industry and the EPA that assists carriers in reducing fuel consumption and carbon emissions	2004	From 2004 through 2006, 449 million gallons of diesel were saved and CO_2 emissions were reduced by five million tons
Fuel saving/emissions reducing technologies (FSERTS)	A variety of technologies such as automatic tire inflation systems, wide-based single tires, diesel particulate filters, aerodynamic packages	Varying dates of availability	Increased usage throughout the trucking industry—an ATRI survey in the Baltimore, MD region indicated that between 3 and 14 percent of respondents were using various types of FSERTS
Idling reduction technologies	Alternate sources of energy for powering hotel-load devices such as cab air conditioning, heating, and electrical devices. These energy sources include auxiliary power units, direct-fired heaters, battery packs and automatic engine start/stop systems	Varying dates of availability	Not quantified
Speed governors	Set maximum speeds at which trucks can travel. ATA's pending petition before DOT seeks to mandate speed governors set at a maximum setting of 68 mph on newly-manufactured trucks	Speed governors have been available for several decades	Each 1 mph decrease in vehicle speed above 55 mph improves fuel efficiency of a heavy-duty truck by approximately 0.1 mpg

Initiative	Description	Implementation Date	Results
Biodiesel	Low percentage blends of biodiesel (≤ 5 percent) can reduce GHG emissions, but may create operational challenges in certain fleet applications	250 million gallons produced in 2006	Not quantified
Driver training	Instruction for drivers that covers topics such as vehicle speed, idling, shifting, acceleration, and braking techniques to maximize fuel efficiency	Varying dates of availability	Fuel economy resulting from driver technique can vary by as much as 35 percent
Cross-Border Programs	The Customs Modernization Act (1995) authorized the U.S. to change customs transactions from paper to electronic, and the Automated Commercial Environment/International Trade Data System (ACE/ITDS) was created. ATA and its members have worked closely with Customs and Border Protection on ACE, part of which is a streamlined, fully automated truck manifesting system that will eliminate paper. ATA has been working with Mexico and Canada to automate border transactions, and by 2008-2009, all three countries will have harmonized systems in place for customs and other regulatory agencies. These electronic systems reduce wait times by eliminating the need for border officers to examine paper	Implemented in 1995	Reduced processing time per truck at land-border crossings from more than 1.5 minutes to 30 seconds or less, on average, resulting in annual savings of 119 thousand gallons of diesel fuel and CO_2 emission reductions of 1,321 tons

Introduction

The ATA formed the Sustainability Task Force on June 12, 2007, with a charge to review the progress currently made by the trucking industry in reducing its carbon footprint and to recommend further steps that could be taken. The 26-member task force[13] is chaired by Tommy Hodges, Titan Transfer, Inc., and co-chaired by Marty Fletcher, U.S. Xpress Enterprises, Inc., and Mike Kelley, YRC Worldwide, Inc.

The Task Force held its first workshop on the evening of July 23 and all day July 24, 2007, in order to provide guidance to ATA regarding policy positions or actions that the Association should take on cap-and-trade, carbon and fuels taxes, idling, fuel efficiency, larger combination vehicles, and equipment enhancements. From these discussions, the Task Force adopted five recommendations and voted unanimously to adopt them. Additionally, in a sixth recommendation, members reaffirmed ATA's current policies and positions on size and weight reforms as measures to reduce emissions of carbon and other pollutants, mitigate congestion, and conserve fuel. Members also reaffirmed ATA's policy on energy conservation which states:

> Energy conservation should rely on an established fuel economy effort applicable to all users. The trucking industry supports voluntary fuel economy standards whereby the industry is encouraged to engineer and design improvements. The trucking industry opposes mandatory fuel economy standards.

Finally, Task Force members unanimously supported a motion to ratify ATA's existing policy opposing mandatory fuel economy standards for the trucking industry.

During the discussions, two clear themes emerged. First, trucking industry members do not believe that increased fuel costs brought about by a carbon tax or a cap-and-trade system will effectively lower fuel consumption, improve fuel efficiency, or reduce greenhouse gas emissions. However, these punitive measures will drastically increase freight costs which will be passed on to consumers in the form of higher product costs. Further, an increased tax burden or a cap-and-trade system will create an adversarial relationship between government and the trucking industry. More importantly, however, increased operational costs resulting from a carbon tax or cap-and-trade system will depress the trucking industry, exacerbating capacity shortages that already exist.

The trucking industry supports measures that will encourage self-improvement, investments in new and enhanced technology, and congestion relief. Measures such as a national maximum speed limit of 65 mph, voluntary participation in the EPA's SmartWay® Program, and collection of fuel taxes dedicated solely for congestion relief and other transportation infrastructure improvements will foster a positive partnership between government and the trucking industry. These types of solutions offer the trucking industry attractive and viable incentives for adopting them and do not require additional government regulation and enforcement.

[13] For a complete list of the Task Force members, see Appendix I.

Freight movement demands vary widely and trucks have many route patterns, from short stop-and-go routes to long-haul routes with many consecutive hours of driving. Loads vary widely as well, from relatively light loads of many retail goods—well below the 80,000 pound limit—to heavy loads of industrial and manufacturing resources. Wide-ranging temperature variations require tractor comfort features to enable drivers to get restful sleep. As a result, there is no one-size-fits-all solution to reducing fuel consumption and greenhouse gas emissions by the trucking industry. In reviewing the issues and debating solutions, committee members repeatedly stressed that the trucking industry must be provided with multiple options for reducing carbon output and greenhouse gas emissions rather than being saddled with a single across-the-board mandate. With guidance from programs like SmartWay®, carriers can select a combination of options tailored to the requirements of their individual fleets that will enable them to achieve the greatest reduction in carbon output with the least detrimental impact on their productivity and business costs.

Speed Limits and Speed Governing

Recommendation

Enact a national speed limit not to exceed 65 miles per hour and govern truck speeds at no more than 68 miles per hour for new vehicles.

Background

The rate of speed by which a truck travels is directly related to fuel consumption. In turn, fuel consumption is directly related to levels of air pollutants and greenhouse gas emissions and fuel costs. By operating at lower speeds, aerodynamic drag is reduced. On average, a truck traveling at 65 mph versus 75 mph will experience up to 27 percent improvement in fuel consumption.[14]

As a rule of thumb, for every one mph increase in speed there is a corresponding 0.14 mpg penalty in fuel consumption. For example, for a truck with a 6.5 miles per gallon (mpg) average at a 65 mph operating speed, fuel consumption will drop to 5.1 mpg when operating speed increases to 75 mph.[15]

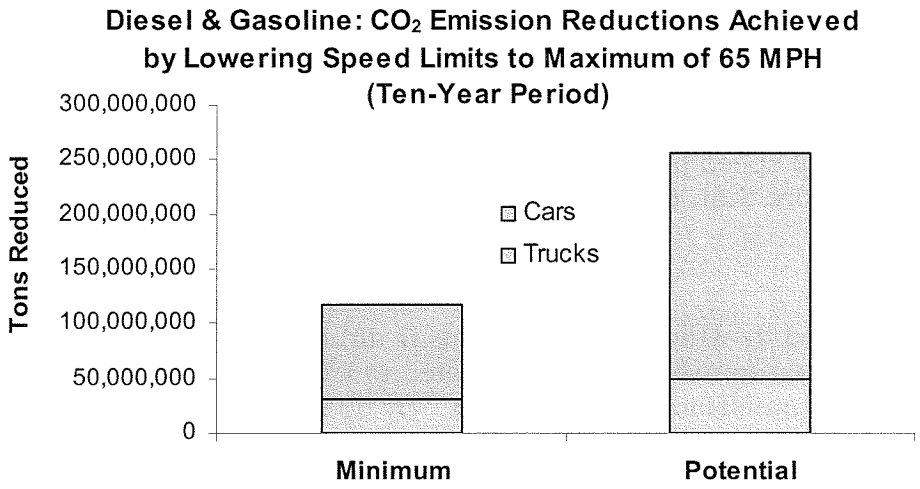
Carbon Footprint Reduction Analysis

Fuel Savings

- There are 14 states with maximum truck speed limits of 70 mph and 10 states with maximum truck speed limits of 75 mph. There are 32 states with maximum car speed limits of 70 mph or greater, including 13 states with a maximum limit of 75 mph.
- By lowering the maximum speed limit of cars and trucks to 65 mph in the states with speed limits higher than 65 mph, a significant amount of fuel can be saved, thus lowering the carbon footprint.
- According to an ATA analysis, over a ten-year period, establishing a maximum 65 mph national speed limit would save more than 2.8 billion gallons of diesel and reduce CO_2 emissions by 31.5 million tons. However, the potential to save is much greater. While lowering the speed limit reduces average vehicle speeds, this strategy is likely to be far more effective when combined with more effective enforcement efforts. As enforcement increases, average speeds are likely to be lower. Therefore, the potential exists for the industry to save up to 4.5 billion gallons of diesel and reduce CO_2 emissions by 49.6 million tons over ten years as speed limit compliance efforts and strategies are improved.

According to an ATA analysis, over a ten-year period, limiting cars to a maximum of 65 mph would save more than 8.7 billion gallons of gasoline and reduce CO_2 emissions by 84.7 million tons. Through better speed limit enforcement, autos could save up to 21.3 billion gallons of gasoline and reduce CO_2 emissions by 206.4 million tons over ten years.

[14] Technology & Maintenance Council of American Trucking Associations, Inc., TMC's Fuel Economy Digest, Alexandria, VA, ATA, 2006, Chart 3, page 23.
[15] Technology & Maintenance Council of American Trucking Associations, Inc., Alexandria, VA.



Source: American Trucking Associations, Inc.

Idling

Recommendation

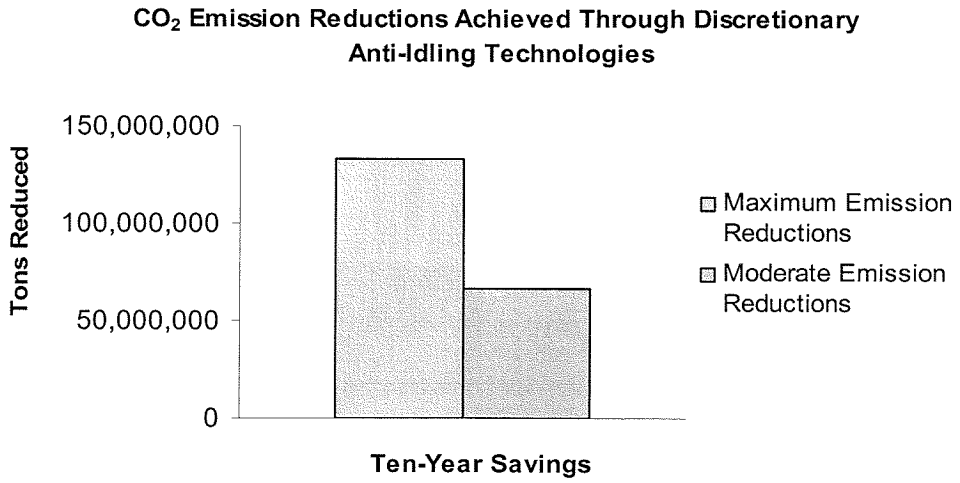
Pursue a federal solution that reduces *non-discretionary* idling through highway infrastructure improvements and reduces *discretionary* idling through incentives for technology improvements.

Background

The trucking industry can further reduce its carbon output and emissions by burning less fuel. One way to reduce fuel consumption and emissions is to reduce idling. Of the 38 billion gallons of diesel fuel consumed by the trucking industry in 2005, about 1.1 billion gallons (roughly three percent) of this total was consumed while trucks were idling. A truck's main engine can use as much as one gallon of fuel per hour while idling. Some idling alternatives use as little as half a gallon of fuel per hour or less. These alternatives provide power for heating, air conditioning and electrical devices in the cab. The power requirement for these devices is often referred to as hotel load. Technologies that enable idling reduction for long distance drivers while maintaining safe ambient conditions for drivers are continuously being developed and assessed. Options for reducing periods of extended engine idling include auxiliary power units, direct-fired heaters, battery packs, and automatic engine start/stop systems. Additional considerations include improving tractor insulation and glass reflectivity to reduce heat and cooling losses.

Impact on Reduction of the Carbon Footprint

According to the most recent EPA estimates, long-duration truck idling now emits 13.3 million tons of CO_2 annually. Given the numerous options currently available to fleets to minimize idling, the trucking industry has the potential to reduce associated CO_2 greenhouse gas emissions by 67 to 133 million tons over a ten-year period.



Sources: American Trucking Associations, Inc.; U.S. Environmental Protection Agency.

Fuel Efficiency

Recommendation

Encourage carrier and shipper participation in the EPA's SmartWay® Transport Partnership Program as an important strategy for reducing carbon.

Background

Fuel economy and fuel efficiency are terms that are often used interchangeably; however, they are separate and distinct concepts. For highway vehicles, fuel economy is defined as how much fuel a vehicle consumes to travel a specified distance (miles per gallon). Fuel efficiency represents the amount of fuel consumed by the entire vehicle fleet relative to the amount of cargo and the distance that cargo is transported.

With Congress giving increased attention to national energy independence and reducing greenhouse gases associated with global warming, consideration is now being given to expanding fuel economy standards to include medium and heavy-duty trucks. Language in some bills already introduced includes references to fuel economy feasibility factors including technological feasibility, economic practicability, the effect of other standards on fuel economy, and the need for the nation to conserve energy. ATA's current policy on fuel economy standards is as follows:

> Energy conservation should rely on an established fuel economy effort applicable to all users. The trucking industry supports voluntary fuel economy standards whereby the industry is encouraged to engineer and design improvements. The trucking industry opposes mandatory fuel economy standards.

Establishing fuel economy standards for automobiles and light-duty trucks is more practical than establishing similar standards for heavy-duty trucks. There currently is no recognized metric for measuring fuel economy from trucks. Even if such a metric were developed and implemented, fleets would face the unintended consequence of manufacturers producing limited types of vehicles with better fuel economy that would be ill-suited for the vast range of operational needs across the trucking industry.

SmartWay® (http://www.epa.gov/smartway/index.htm) is a collaborative partnership between the EPA and the freight industry. This partnership results in increased energy efficiency and significant reductions in greenhouse gases and air pollution. SmartWay® participants reduce fuel consumption and carbon emissions and save money. Additionally, SmartWay® works across transportation modes, addressing not only the trucking industry but also the rail industry.

The EPA and the U.S. Department of Energy (DOE) are working closely with the trucking industry to conserve fuel and reduce its GHG emissions. Since SmartWay® takes into account the many variables inherent in different carriers'

operations, it offers a way to disaggregate fuel efficiency statistics and show fuel efficiency rates that truly reflect individual carriers' operations.

Although the EPA does not audit a carrier's results, some carriers have customers concerned about their carbon and environmental footprint. SmartWay® allows participating carriers to use the SmartWay® logo, which helps carriers certify their environmental responsibility to customers.

There is no cost to participate in SmartWay®; however, there will be an administrative cost to track the carrier's fuel efficiency, develop a three-year plan, and monitor progress toward meeting the plan's goals. Carriers who do not meet their goals will be dropped from the program and may no longer use the SmartWay® logo.

Impact on Reduction of the Carbon Footprint

In February 2004, the freight industry and the EPA jointly unveiled SmartWay®, patterned after the highly-successful Energy Star Program developed by the EPA and the DOE. To date, more than 608 companies have joined SmartWay®, including 373 motor carriers, 12 shipper/carriers, 47 shippers, 57 logistics partners, three truckstops, 15 non-asset carriers, two dealer service centers, 10 rail carriers, and 89 affiliate members. These companies own or operate roughly 400,000 trucks, approximately five percent of all trucks operating in the industry.

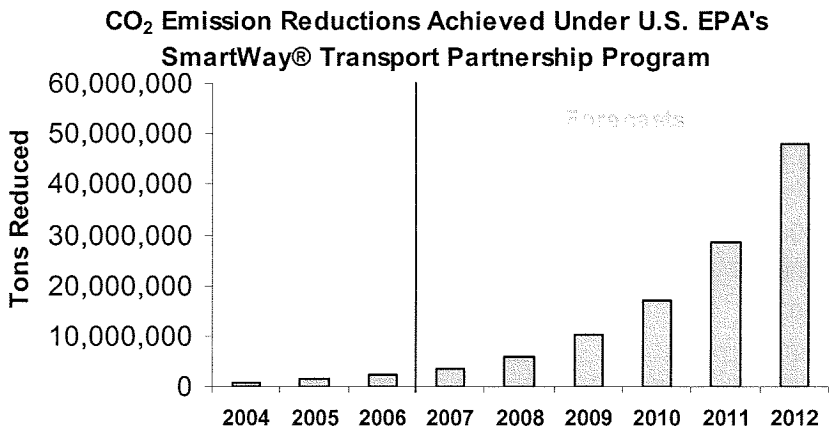
Trucking companies that sign up as SmartWay® partners must develop three-year plans outlining how they intend to reduce fuel consumption and corresponding greenhouse gas emissions. Greenhouse gas reduction plans are developed on a per-company basis. Individual companies, using the EPA's unique software calculator tool, can estimate and track how they are progressing in their annual commitments and reduction goals. Proactive measures companies may pursue to attain their emission reduction goals include the purchase and use of idling reduction devices, tractor and trailer aerodynamic equipment, energy efficient tires, and speed regulators, to name a few. Participants not only recognize increased profits in the way of fuel savings, but also are recognized as environmental stewards and leaders in the industry. With more and more shippers demanding green transport, membership in SmartWay® makes both environmental and financial sense.

One has to go no further than the trucking industry's greenhouse gas reductions both achieved and forecasted under SmartWay® to validate the success of this voluntary approach. In 2012, the EPA predicts SmartWay® participants will reduce their annual greenhouse gas emissions by 48 million tons of CO_2 equivalent. Put another way, greenhouse gas reductions by SmartWay® partners in 2012 are projected to equal 11 percent of CO_2 equivalents generated by the trucking industry in 2005. SmartWay® partners are also currently saving 600 million gallons of fuel per year. This remarkable forecast is a testament to the fact that SmartWay® is one voluntary greenhouse gas program that not only works, but exceeds expectations.

CO_2 Emission Reductions Achieved from Freight Industry Under U.S. EPA's SmartWay® Transport Partnership Program

	Actual Results		Annual Goals	
Year	Gallons Diesel Saved	CO_2 Saved (Tons)	Gallons Diesel Saved	CO_2 Saved (Tons)
2004	75,849,820	841,933	86,486,486	960,000
2005	151,699,550	1,683,865	118,918,919	1,320,000
2006	221,583,784	2,459,580	198,702,543	2,205,598
2007			332,013,618	3,685,351
2008			554,764,126	6,157,882
2009			926,959,675	10,289,252
2010			1,548,864,101	17,192,392
2011			2,588,009,024	28,726,900
2012			4,324,324,324	48,000,000
Total CO_2 Saved	449,133,153	4,985,378	10,679,042,816	118,537,375

Source: U.S. Environmental Protection Agency.



Source: U.S. Environmental Protection Agency.

Carbon or Congestion Reduction Tax

Recommendation

Advocate for initiatives to improve highway infrastructure and reduce congestion as a preferred method of reducing carbon emissions from the trucking industry. The optimal way to pay for the infrastructure improvements is through a fuels tax increase dedicated to paying for highway improvements that reduce congestion.

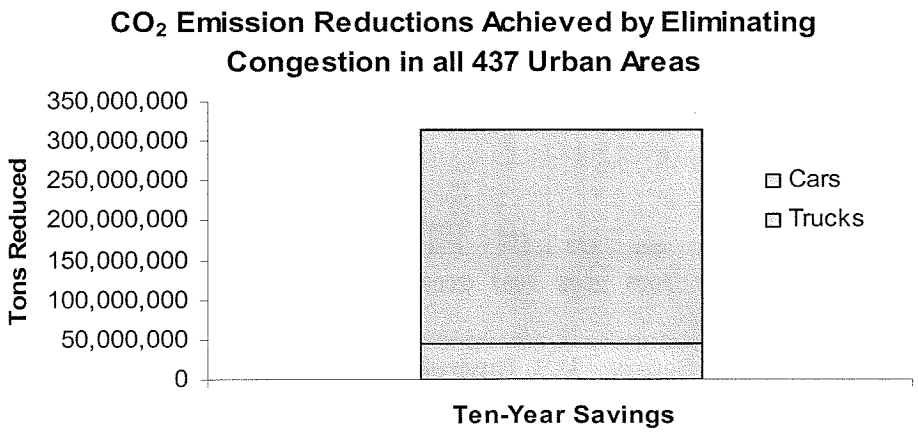
Background

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.

Impact on Reduction of the Carbon Footprint

Fuel Savings

- According to a Texas Transportation Institute study, if there were no congestion in all 437 urban areas, the trucking industry and cars would save 2.9 billion gallons of fuel annually.
- ATA estimates, based on fuel burn rates in stop-and-go traffic and the percentage of truck miles in urban traffic, that the trucking industry would save 4.1 billion gallons of fuel and reduce CO_2 emissions by 45.2 million tons over a ten-year period if congestion in all 437 urban areas were eliminated.
- ATA also estimates that cars would save 27.7 billion gallons of fuel and reduce CO_2 emissions by 268.5 million tons over a ten-year period if congestion in all 437 urban areas were eliminated.



Sources: American Trucking Associations, Inc.; *Urban Mobility Report*, Texas Transportation Institute (2007).

Truck Size and Weight

Recommendation

Advance ATA's current policies and positions on size and weight reforms as measures to reduce emissions of carbon and other pollutants, mitigate congestion, and conserve fuel.

Background

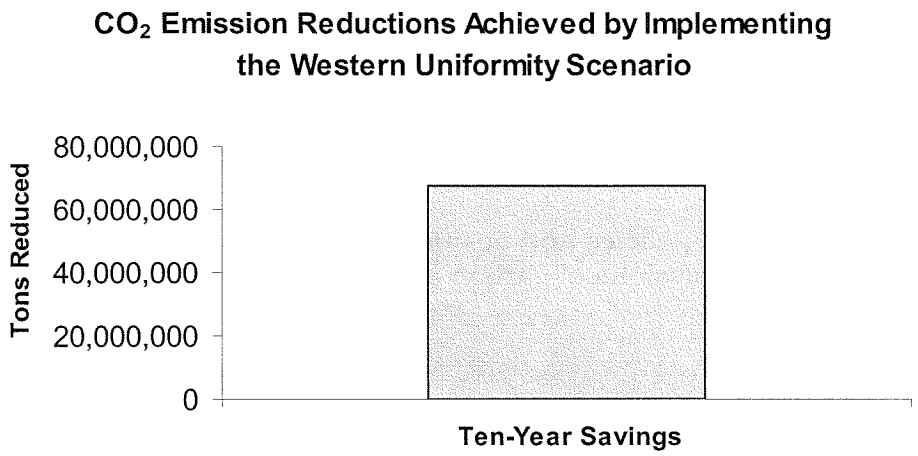
Increasing the total size and weight allowed per tractor trailer combination can also improve fuel efficiency. According to the Federal Highway Administration (FHWA), allowing heavier vehicles would decrease truck vehicle miles traveled (VMT) by 11 percent, therefore using less total fuel. VMT reductions would also result from increased use of longer combination vehicles (LCVs). Both strategies would reduce the number of trucks on the road, resulting in less congestion and additional fuel savings for both trucks and cars.

The American Transportation Research Institute (ATRI) found that more weight results in more fuel consumed; however, in theory, increased weight would reduce the number of trucks in use and, therefore, reduce the ton-per-mile fuel consumption. A large body of research shows that size and weight increases can significantly reduce the trucking industry's carbon footprint.

Impact on Reduction of the Carbon Footprint

Western LCV Expansion

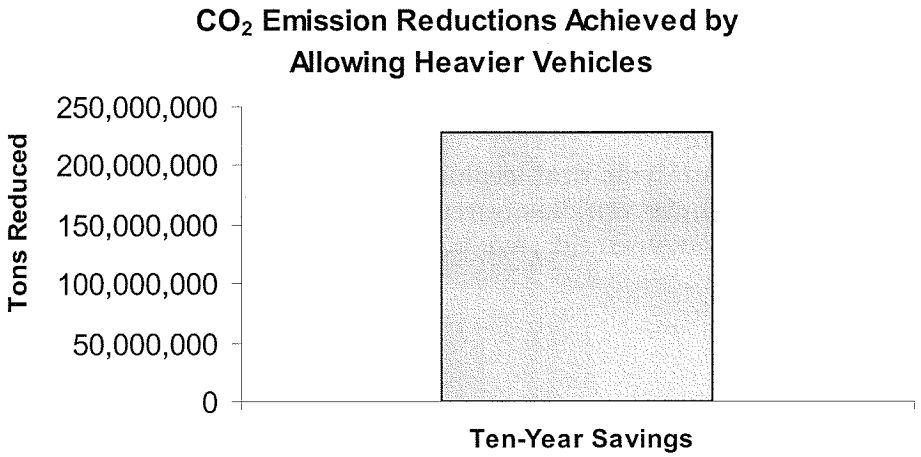
Based on a U.S. DOT analysis that explored the effects of expanded LCV use in western states where these vehicles currently operate, ATA estimates that, over a ten-year period, this policy would save 6.1 billion gallons of diesel or 67.4 million tons of CO_2.



Sources: American Trucking Associations, Inc.; U.S. Department of Transportation.

Nationwide Operation of Heavier Vehicles

Based on a U.S. DOT analysis which explored the impacts of allowing nationwide operation of single trailer trucks with a maximum gross weight of 97,000 pounds, and heavier double 33-foot trailers, ATA estimates that, over a ten-year period, this policy would save more than 20.5 billion gallons of diesel or 227.3 million tons of CO_2.



Sources: American Trucking Associations, Inc.; U.S. Department of Transportation.

Cap-and-Trade

Recommendation

Oppose the application of any cap-and-trade regulatory approach to mobile sources.

Background

Emissions trading or cap-and-trade is an administrative approach used to control pollution by providing economic incentives for achieving reductions in emissions. In such a plan, a central authority (usually a government agency) sets a limit or cap on the amount of a pollutant that can be emitted. Companies or other groups that emit the pollutant are given credits or allowances which represent the right to emit a specific amount. The total amount of credits cannot exceed the cap, limiting total emissions to that level. Companies that pollute beyond their allowances must buy credits from those who pollute less than their allowances. This transfer is referred to as a trade. In effect, the buyer is being fined for excessive emissions while the seller is being rewarded for having reduced emissions. Market forces operate to ensure that emissions will be reduced in an efficient manner.

Entities, such as the Chicago Climate Exchange, will likely be called upon to establish a carbon trading program if a cap-and-trade program is adopted. Under such a program, any company that produces excess reductions will either sell them to another company in need of additional carbon offsets or bank them for future use. Supply and demand of available credits will dictate their market trading costs. The emissions bank will collect a transactional fee for both buying and selling such credits.

Emissions trading markets can be easier to enforce because the government overseeing the market does not need to regulate specific practices of each pollution source. However, monitoring (or estimating) actual emissions is still required, which can be costly.

ATA opposes a cap-and-trade regulatory approach as a means to reduce carbon from mobile sources. With more than 750,000 interstate motor carriers across the country, establishing company-specific carbon caps would be impractical from an administrative standpoint. Given that 91percent of motor carriers (interstate and intrastate) own 20 or fewer trucks and are classified as small businesses, establishing a cap-and-trade program would be particularly unduly burdensome and costly for these companies. In moving the nation's freight, trucking helps maintain the strength of the nation's economy and well-being. As demand for consumer goods increases, so does the need to transport them. Trucking companies should not be constricted in their ability to meet the needs of the American people. A cap-and-trade approach is, therefore, more appropriate for stationary sources since their emissions are more easily quantified, carbon baselines are easier to establish, and record gathering and verification is more easily accomplished.

Impact on Reduction of the Carbon Footprint

Establishing allowances and an accounting system for greenhouse gas emissions for the trucking industry would be exceptionally difficult if not impossible. Cap-and-trade is better suited for larger stationary sources that can more easily conduct greenhouse gas inventories and reporting. There are more than three-quarters of a million trucking companies operating in the United States. Of this number, 91 percent have 20 or fewer trucks and are designated as small businesses. Designing a complex cap-and trade program specific to trucking, as well as any ensuing inventorying, reporting, and auditing requirements, would create an administrative nightmare for government, the industry, and many small businesses.

Since fuel is the second largest cost for many trucking companies, comprising up to 25 percent of annual operating budgets, the industry is exceptionally cognizant of the amount of fuel it consumes. As the nation's population and demand for consumer goods continues to increase, so will the need for transporting additional products. This demand will, in turn, require more trucks and more vehicle miles traveled. Even with fuel efficiency improvements in the trucking sector, it will be exceptionally difficult to achieve carbon reduction goals similar in scope to those that may be achieved from stationary sources. Society will always demand that goods be delivered just-in-time. To fulfill this obligation, the trucking industry would find itself in a position to conduct more trading than capping under a cap-and-trade approach with additional costs of industry allowances purchased being directly passed along to consumers in the form of higher prices.

Conclusion

Decreasing fuel use is the most effective means to reduce the trucking industry's greenhouse gas footprint. From a business sense, trucking companies attempt to minimize the amount of fuel they consume since fuel use is the industry's second largest operating expense. In an industry with extremely thin profit margins and escalating fuel costs, minimizing fuel consumption will always be a major consideration with any trucking company. While the industry has made remarkable environmental progress at tremendous economic costs over the years in its development and introduction of the world's cleanest fuels and engines, the clear focus of the federal government had always been on improving air quality and not on reducing carbon output. But climate change has evolved past the discussion stage and is now at the action stage. ATA firmly believes that advancing the recommendations presented in this report will significantly reduce the carbon footprint of the trucking industry while still keeping the nation's freight moving.

APPENDIX I - SUSTAINABILITY TASK FORCE MEMBERSHIP ROSTER

Name	Title	Company	City/State
G. Tommy Hodges	Chair	Titan Transfer, Inc.	Shelbyville, TN
Marty Fletcher	Vice Chair	US Xpress Enterprises, Inc.	Tunnel Hill, GA
Mike Kelley	Vice Chair	YRC Worldwide Inc.	Overland Park, KS
Dave Berry	Member	Swift Transportation Co., Inc.	Phoenix, AZ
Tim Blubaugh	Member	Freightliner LLC	Portland, OR
Mike Card	Member	Combined Transport, Inc.	Central Point, OR
Anthony Cook	Member	Intl. Truck & Engine Corp.	Fort Wayne, IN
Rodney Ehrlich	Member	Wabash National Corp.	Lafayette, IN
Terry Goff	Member	Caterpillar, Inc.	Washington, DC
Mark Goodwin	Member	UPS Freight	Richmond, VA
D. Walter Hanson III	Member	Petroleum Transport, Inc.	Belle, WV
John Hausladen	Member	Minnesota Trucking Assn.	Roseville, MN
Michael Jeffress	Member	Maverick Transportation, LLC	Little Rock, AR
Jeff Jones	Member	Cummins Inc.	Columbus, IN
Kerry Kelly	Member	Waste Management, Inc.	Washington, DC
Ray Kuntz	Member	Watkins and Shepard Trkg.	Helena, MT
Jed Mandel	Member	Engine Manuf. Association	Chicago, IL
J. Lavon Morton	Member	Arkansas Best Corp.	Fort Smith, AR
Randy Mullett	Member	Con-way Inc.	Washington, DC
James O'Neal	Member	O & S Trucking, Inc.	Springfield, MO
Donald Osterberg	Member	Schneider National, Inc.	Green Bay, WI
Ronald Szapacs	Member	Air Products & Chem., Inc.	Allentown, PA
Tim Tindall	Member	Detroit Diesel	Detroit, MI
Daniel Umphress	Member	FedEx Freight	Harrison, AR
Shorty Whittington	Member	Grammer Industries, Inc.	Grammer, IN
Tim Yatsko	Member	Wal-Mart Transportation, LLC	Bentonville, AR
Skip Yeakel	Member	Volvo Trucks N.A.	Greensboro, NC