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THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA

Quality People. Quality Projects.

Testimony of

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on behalf of
The Associated General Contractors of America

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Energy Independence and Global Warming

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The Associated General Contractors of America (AGC) is the largest and oldest national construction trade association in the United States. AGC represents more than 33,000 firms, including 7,500 of America's leading general contractors, and over 12,500 specialty-contracting firms. More than 13,000 service providers and suppliers are associated with AGC through a nationwide network of chapters. Visit the AGC Web site at www.agc.org.

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Mr. Chairman and Members of the Select Committee thank you for the opportunity to present testimony on "Constructing a Green Transportation Policy: Transit Modes and Infrastructure." I am Don Weaver, Weaver-Bailey Contractors, El Paso, Arkansas representing the Associated General Contractors of America. This year I am serving as the Chair of AGC's Highway and Transportation Division. AGC is the oldest construction association in the country representing contractors that build all forms of infrastructure, including: highways, bridges, transit systems, railways, airport terminals and runways, water and wastewater treatment facilities, underground utilities, public buildings, multi-family housing, office buildings, military facilities, water resource projects, energy production and conservation, and the many other structures that are the backbone of the US economy and provide and ensure US Citizens' quality of life.

Construction is the delivery system for a cleaner, healthier and safer environment. As important as providing the needed infrastructure improvements, is the way in which these improvements are made. The industry has a long history of developing construction techniques and practices that enhance our environment and AGC and its member firms continue to develop environmentally responsible construction methods. The federal government can assist in these practices by offering appropriate incentives but it is important that we learn from the lessons of the past and not try to mandate one –size- fits all solutions.

Create Incentives to Employ Recycling and Other Green Construction Practices

AGC is committed to facilitating our members' efforts to recycle or reuse construction and demolition debris. AGC works with the Environmental Protection Agency (EPA) to ensure that contractors have the resources they need to recycle construction and demolition debris, where feasible and practicable. There are opportunities for materials recycling or reuse in transportation and other construction activities, and incentives should be created to encourage and expand the use of recycled products.

In many cases, recycling of this debris is cost-effective and energy efficient. Recycling and reuse of construction and demolition debris would decrease the amount of waste sent to landfills, may reduce transportation costs, lower energy use and thereby reduce related Green House Gas (GHG) emissions. In addition, recycling and reuse practices promote conservation of virgin materials. Energy is expended and GHGs are released during the manufacturing and transportation of construction materials. When materials are reused or recycled, the associated emissions that would have occurred during virgin material manufacturing are avoided.
My own company, Weaver-Bailey Contractors has recycled over 500,000 Square Yards of concrete pavement into 276,000 tons of aggregate base course on three major projects over the past five years. This reusable material was utilized on three jobs which saved 18,400 loads of material from being hauled to the job site from up to thirty miles away, which in turn saved approximately 100,000 gallons of diesel fuel, lowering the emissions attributable to the job. When Weaver-Bailey constructed the $63-million Interstate 40 project, the largest job in Arkansas history, hardly anything went into the landfills. Completed in 2006, the three-year project expanded the highway from four to six lanes and built three new overpasses. Incentives would encourage and expand the use of recycled products.

Similarly, recycled asphalt pavement (RAP) allows contractors to add milled asphalt to new mixes, lowering the asphalt cement content of the new material, saving oil, lowering costs and reducing GHG emissions. Every ton of asphalt recycled from construction results in the elimination of 0.03 tons of CO2 emissions. An estimated 139 million tons/year of asphalt are

recycled in the United States, resulting in 4.2 million tons of CO2 emissions avoided. Fuel usage and emissions again are reduced because of the decrease in transportation for putting new material in place. However, some states are reluctant to use recycled asphalt pavements. Again incentives should be created to further expand the use of this easily recycled material.

Soil Modification is another green construction technique that states should be given incentives to further encourage its use. In many construction situations on-site soils are not acceptable as base material, requiring the material to be dug up and replaced. Instead of removing the old material and digging up new material to replace it, a variety of additives can be used to modify it. This saves fuel and reduces emissions by eliminating the need to haul off the unsuitable material and to haul in the replacement material. Soil modification also keeps contractors from having to open up disposal areas for the stripped materials and borrow pits for the suitable materials, thereby limiting the impact on the land. This practice also helps keep dump trucks off of the roads, lowering emissions and wear and tear on the existing roads. Fly ash - a by-product of coal fired generating plants - is often used in the soil modification process. Use of Fly ash in this way provides a safe method of disposal for this waste this product thereby producing additional environmental benefits.

AGC recommends that Congress encourage the use of local materials when appropriate, available and that meet design requirements. Urging agencies to use materials from the area where the construction is taking place saves fuel and lowers emissions because transport distances are reduced and fuel is conserved.

Equipment/Fuel Strategies for Reducing the Construction Industry's Carbon Footprint

According to EPA, the transportation sector is responsible for approximately one-quarter of total domestic GHG emissions. More than half of these "transportation-related" GHG emissions come from the consumption of gasoline. "Non-road sources" accounts for just 16 percent of all U.S. transportation related GHG emissions – and that category includes not just construction equipment, but also aircraft, boats, ships, rail, and pipelines. Accordingly, the impact of off road construction equipment has a negligible impact on GHG emissions.

With diesel's superior engine efficiency and the fuel's higher energy content, diesel equipment can do the same amount of work while burning less fuel than their gasoline counterparts, typically resulting in a notable reduction in GHG emissions. What is more, many construction professionals are voluntarily taking steps to decrease their fuel consumption – through reduced equipment idling, equipment maintenance, and operator training – which further reduces energy consumption and GHG emissions. Some contractors are even opting to use alternative low-carbon fuels (like biodiesel and ethanol) that may significantly reduce GHG and other emissions when compared to petroleum diesel.

It is important to note, the construction industry, residential and nonresidential building as well as transportation-related, is not itself a significant source of GHG emissions. Construction is a large industry (between 700-750,000 firms) with hundreds of thousands of small companies emitting small amounts of GHG emissions. According to EPA estimates, equipment used in construction generates only 0.86 percent of total U.S. GHG emissions, due to the combustion of fossil fuel. (U.S. EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2004*, EPA 430-R-06-002, Annex Table A-104, April 2006) A recent draft report from EPA estimates the combined emissions of construction equipment and energy use to be 1.89 percent of U.S.

GHG emissions. Without itself being a large contributor of GHG emissions, contractors are an essential partner in the Nation's efforts to reduce GHG emissions related to existing and future buildings and transportation-related infrastructure.

AGC collaborated with EPA's Sector Strategies Program and the Office of Transportation and Air Quality (OTAQ) back in 2007 to document the costs and benefits of using lower-cost equipment operating practices – such as reduced idling, improved preventive maintenance and operator training – finding that these strategies will produce both business and environmental benefits. Subsequently, AGC provided industry input and direction on a second EPA report that focuses solely on the potential for these same strategies to reduce GHG emissions. (See *Cleaner Diesels: Low Cost Ways to Reduce Emissions from Construction Equipment* – March 2007 and *Potential for Reducing Greenhouse Gas Emissions in the Construction Sector* – Feb. 2009 online at http://www.epa.gov/sectors/construction.)

In addition, installing diesel particulate filters on diesel engines can reduce diesel particulate and black carbon emissions. National experts have identified black carbon emissions second only to carbon dioxide (CO2) in causing global warming, and may have as much as 60 percent of the global warming effect of CO2. Black carbon adds 2-3 orders of magnitude more energy to the climate system than an equivalent mass of CO2. (*Testimony for the Hearing on Black Carbon and Climate Change. House Committee on Oversight and Government Reform. US House of Representatives, October 18, 2007.)* Unlike CO2 which remains in the atmosphere for several decades, black carbon remains in the atmosphere for ten days to two weeks. As a result, contractors can see immediate climate protection benefits when they employ diesel emission reduction practices (i.e., "retrofit" technologies). Similarly, the process of replacing an older diesel engine with a newer one (i.e., "repowering") can improve a machine's fuel economy and reduce its overall emissions.

However, for the construction industry, the costs of retrofitting equipment are prohibitive, and financial assistance is therefore needed to facilitate such an initiative. AGC urges Congress to provide financial and technical assistance to construction equipment owners and operators, encouraging these firms to install emissions control technologies on their diesel engines. AGC worked closely with Senator Jim Inhofe and then Senator Hillary Clinton to craft Section 1808 of SAFETEA-LU, which allows states (and other recipients of federal-aid highway funding) to use CMAQ funds to pay for the retrofit of off-road diesel equipment needed to construct projects funded under Title 23 of the United States Code. AGC encourages more states and local recipients to use CMAQ funds to assist contractors in retro-fitting, repowering or replacing off-road equipment.

AGC also played a key role in the development and passage of the Diesel Emissions Reduction Act ("DERA"), which became part of the Energy Policy Act of 2005. As the bill was originally written, it did not ensure that qualified private fleets could apply for the public funds set aside for retrofitting equipment. Today, AGC continues to urge Congress for full funding of EPA's new Diesel Emissions Reduction Program, which was created under DERA. Unfortunately, DERA funds cannot be used in states where there is a mandate for contractors to reduce emissions from their off road vehicles. This is shortsighted and reverts to the old command and control method of implementing national goals. AGC believes that a collaborative approach will produce better results.

AGC opposes government mandates to modify equipment already in use, or to replace such equipment (via either regulation or contractual requirement). Such "retroactive" requirements place the financial burden of a largely public benefit exclusively on private contractors. They also have the potential to render a company's fleet prematurely obsolete, and wipe out much of its net worth. Such dramatic action deprives a company of its ability to bond or bid work, or to borrow money. All have a very negative impact on the construction industry, and particularly the small and often minority businesses that dominate this key industry.

AGC recommends the creation of a federal investment tax credit to provide a financial incentive for contractors to replace their existing diesel powered equipment. Implementing a targeted investment tax credit would encourage contractors to upgrade their equipment to the current engine technology, i.e. a credit for retiring Tier 0 equipment and upgrading to Tier 3 or higher when available. This higher tiered equipment will operate more efficiently and thereby require less fuel. In addition, new equipment would help in reducing diesel particulate and black carbon emissions.

In addition to the environmental benefits from replacing old equipment there would be also be an economic benefit as well. With the downturn in the construction market, contractors are purchasing less equipment both because the current work load is reduced and future market is uncertain. US construction equipment manufacturers have been forced to lay-off a significant number of workers being of the decrease in new equipment purchases. While the recently enacted American Recovery and Reinvestment Act provides significant infrastructure investment, it will not create the type of long term market opportunities until there is full economic recovery which would encourage contractors to invest significant amounts in new equipment. A tax credit would offer a new enticement for equipment investment.

Stormwater Management Requirements Must Be Adjustable to Site Conditions

In accordance with all applicable federal, state and local laws, construction contractors currently implement erosion and sediment controls on their project sites. However, the exact controls that are used in each instance depend on a number of factors, including site location and characteristics, rainfall expectations, timing/length of project, project details, market demand, contractual obligations, etc. AGC maintains that the flexibility to select Best Management Practices (BMPs) to fit the conditions of the site is critical to any effective stormwater management program. A site-specific, control-measure approach is known and understood by the regulated community, it is cost-effective, and it promotes the use of innovative technologies on construction sites.

AGC has urged EPA to continue to build upon the significant environmental progress made to date by ensuring that all construction sites follow the principles/practices that are recognized and accepted as "effective" erosion and sediment controls. AGC has urged EPA to strengthen education and enforcement of BMP-based stormwater permitting programs and not to burden state regulators, construction firms, and the public with rigid and inflexible new requirements. EPA has proposed the use of numeric effluent limits for stromwater runoff from construction sites that could go so far as to set a strict and extremely low compliance limit on the amount of sediment that may lawfully be present from stormwater runoff. Construction site operators would need to monitor their site runoff and use active chemical treatment and filtration systems (ATS) at considerable expense. AGC believes these standards would create excessive and unreasonable burdens and not produce the desired result. New erosion control techniques using

local, available materials are being used. These include creative use of hay bales, rock ditch checks and solid sod to slow the water runoff. AGC urges Congress to provide incentives for developing new and improved erosion and sediment control BMPs that are practical, consistent with existing state and local permit requirements, and proven effective in protecting water quality.

Green Worker Training Grants

The Energy Independence and Security Act of 2007 included a provision, known as the Green Jobs Act that establishes a grant program in the Department of Labor for energy and renewable energy worker training programs. The Green Jobs Act limits the training grant funding to only entities that coordinate with labor organizations. AGC is supportive of the creation of such a grant program as part of an effort to create an efficient and renewable energy skilled workforce. However, it is our belief that the opportunity to qualify for such grants should be open to all contractors, both union and open shop, that have accredited training programs. AGC is hoping to see this program open to all construction workers prior to any grant funding being made available.

Reduce Congestion

Construction is needed to solve transportation problems. Adding transit and highway capacity will help to reduce emissions from cars that are running inefficiently because they are stuck in traffic. A transportation system that runs smoothly is the cleanest most energy efficient way for people to conduct their daily lives. AGC would also like to point out that construction can assist in reducing GHG emissions by improving the transportation system so that it operates efficiently. One of the leading causes of GHGs is not transportation itself, but congestion. In 2004, a study of the nation's most severely congested highways highlighted the fact that significant reductions in emissions require a reduction in vehicle time traveled, not vehicle miles traveled. The study concluded that modest improvements to traffic flow at 233 bottlenecks would reduce carbon dioxide emissions by as much as 77 percent and conserve more than 40 billion gallons of fuel over a 20-year period.

Restricting transportation improvements that significantly reduce congestion would impair our country's ability to cut both harmful emissions and save billions of gallons in wasted motor fuel caused by traffic congestion. As the debate over how to address climate change continues, Congress should adhere to the following principles:

- Future legislation should recognize the progress of the transportation sector in achieving cleaner air and take into account future reductions from current regulations not yet fully implemented, such as measures concerning heavy-duty engine emissions and fuel standards.
- Increased federal highway investment is necessary to reduce congestion throughout the transportation network. Similarly, efforts to further divert needed highway revenues from transportation improvements should be opposed.
- Legislative or regulatory strategies that force more areas of the nation into "nonattainment" status are self-defeating in terms of battling a growing congestion problem. Nonattainment designations should be focused on prioritizing congestion elimination, not putting federal transportation funding at risk.

In conclusion, AGC believes that efforts to further the use of construction techniques and practices that have a positive environmental impact should be encouraged. AGC cautions against creating mandates that attempt to impose specific construction practices. Mandates of this type have been tried in the past and have resulted in abject failure. AGC believes that a collaborative approach will produce better results for achieving National goals. Opportunities will be available when surface transportation reauthorization legislation is considered later this year. AGC is evaluating proposals presented thus far, including the "Clean, Low-Emission, Affordable, New Transportation Efficiency Act." We look forward to working with this committee in furthering our shared objectives of improving transportation while enhancing the environment.