

Statement of

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*Manufacturing in the USA: Paving the Road to Job  
Creation*

United States Congress

Joint Economic Committee

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Mr. Chairman, Congressman Brady, and Members of the Committee:

It is an honor for me to appear before this committee on behalf of the American Society of Civil Engineers (ASCE)<sup>1</sup> to discuss the link between our nation’s infrastructure and the strength of its manufacturing sector.

ASCE commends the Joint Economic Committee for holding a hearing today on how surface transportation investment is a key factor for continued economic recovery and job creation. The Society is pleased to present to the Committee our views on investing in the nation’s infrastructure and the critical link to U.S manufacturing. An agenda that fosters economic growth and job creation through policies that strengthen U.S. manufacturing and infrastructure will allow the nation to remain competitive in the Twenty-First Century.

### **Infrastructure Receives a Grade of “D”**

ASCE’s *2009 Report Card for America’s Infrastructure* graded the nation’s infrastructure a “D” based on 15 categories (the same overall grade as ASCE’s 2005 Report Card). The report also concluded that the nation needs to invest approximately \$2.2 trillion from 2009 – 2014 to bring our nation’s infrastructure to a state of good repair. This number, adjusted for a three percent rate of inflation, represents capital spending at all levels of government and includes current expenditures. Even with current and planned investments from federal, state, and local governments from 2009 - 2014, the “gap” between the overall need and actual spending will exceed \$1 trillion by the end of the five-year period.

In the *Report Card*, the nation’s surface transportation system included roads receiving a grade of “D-,” bridges receiving a grade of “C,” and transit receiving a grade of “D”. With nearly one-third of roads in poor or mediocre condition, a quarter of the nation’s bridges either structurally deficient or functionally obsolete, and transit use increasing to its highest levels in 50 years, the nation’s surface transportation system is in a state of critical decline. Additionally, to bring just these three surface transportation categories up to an acceptable condition would require a five-year investment of \$1.2 trillion, according to ASCE estimates. If the nation continues to underinvest in infrastructure and ignores this backlog until systems fail, we will incur even greater costs.

While Congress is in the process of developing a comprehensive multi-year surface transportation authorization bill, and as President Obama emphasizes the infrastructure investment needs for the nation, our roads, bridges, and transit systems continue on in a state of decline. According to the Congressional Budget Office, the total of all federal spending for infrastructure has steadily declined over the past 30 years. The results of years of under investment can be seen in traffic and airport congestion, unsafe bridges and dams, deteriorating roads, and aging drinking water and wastewater infrastructure.

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<sup>1</sup> ASCE was founded in 1852 and is the country's oldest national civil engineering organization. It represents more than 140,000 civil engineers individually in private practice, government, industry, and academia who are dedicated to the advancement of the science and profession of civil engineering. ASCE is a non-profit educational and professional society organized under Part 1.501(c) (3) of the Internal Revenue Code.

### **Infrastructure Investment = Jobs**

Money invested in essential public works can create jobs, provide for economic growth, and ensure public safety through a modern, well-engineered national infrastructure. The nation's transportation infrastructure system has an annual output of \$120 billion in construction work and contributes \$244 billion in total economic activity to the nation's gross domestic product (GDP).

In addition to the overarching economic benefits, the Federal Highway Administration estimates that every \$1 billion invested in the nation's highways supports 27,823 jobs, including 9,537 on-site construction jobs, 4,324 jobs in supplier industries, and 13,962 jobs throughout the rest of the economy.

Standard and Poor's has stated that highway investment has been shown to stimulate the economy more than any other fiscal policy, with each invested dollar in highway construction generating \$1.80 toward the gross domestic product in the short term, while Cambridge Systematics estimates that every dollar taxpayers invest in public transportation generates \$6 in economic returns.

The transportation industry's experience with the American Recovery and Reinvestment Act of 2009 illustrated the strong job creation impact of dedicated transportation investment, with the \$48 billion for transportation improvements in the legislation supporting tens of thousands of jobs in engineering, construction, and supporting industries.

### **Infrastructure Investment = A Healthy Economy**

The job-creation potential of infrastructure investment is only one contributing factor of the interaction between surface transportation and the nation's ability to compete in the global marketplace. Equally important are the benefits to a region's long term growth and productivity. A significant challenge to this economic growth is increased congestion, which contributes to the deterioration of the nation's infrastructure. Therefore, the importance of freight movement and the impact of congestion on the nation's economy must be emphasized.

ASCE is concerned with the increasing deterioration of America's infrastructure, reduced investment for the preservation and enhancement of our quality of life, and the threatened decline of U.S. competitiveness in the global marketplace. In response, ASCE has not only issued multiple *Report Cards* on the condition of infrastructure, but has also sought to advance policy solutions that provide for a clean and safe quality of life, as well as fuel economic growth.

While taken for granted by most Americans, our infrastructure is the foundation on which the national economy depends. As the economy grows, we cannot only think in terms of repairing what we have, but of creating a modernized transportation system that addresses long-term needs. The current system was originally built in the 1950's and 1960's at a time when the country had different transportation needs and a smaller population. With an expanding population and a larger economy, the nation needs a transportation system that can keep pace.

Unfortunately, due to the rapid growth of the country, highway and freight capacity failed to keep up.

In July 2011, ASCE released an economic study that measures the potential impacts to the economy in 2020 and 2040 if the nation maintains current levels of surface transportation investments. The report is the first in a series of four reports that will focus on the correlation between the nation's infrastructure and the economy. Subsequent reports will detail the economic correlation to the nation's drinking and waste water systems, energy grid, and ports and airports.

The first study, *Failure to Act: the Economic Impact of Current Investment Trends in Surface Transportation Infrastructure*, found that if investments in surface transportation are not made in conjunction with significant policy reforms, families will have a lower standard of living, businesses will be paying more and producing less, and our nation will lose ground in a global economy.

The nation's deteriorating surface transportation will cost the American economy more than 876,000 jobs, and suppress the growth of the country's GDP by \$897 billion in 2020. The study results estimate that more than 100,900 manufacturing jobs will be lost by 2020. Ultimately, Americans will also get paid less. While the economy will lose jobs overall, those who are able to find work will find their paychecks cut because of the ripple effects that will occur through the economy. In contrast, a study from the Alliance for American Manufacturing shows that roughly 18,000 new manufacturing jobs are created for every \$1 billion in new infrastructure spending. These manufacturing jobs would be created in fabricated metals, concrete and cement, glass-rubber-plastics, steel, and wood product industries. Furthermore, the Alliance for American Manufacturing study shows that using American-made materials for these infrastructure projects yields a total of 77,000 additional jobs, based on a projected investment of \$148 billion a year (including \$93 billion of public investment).

### **International Competitiveness**

*Failure to Act* also shows that failing infrastructure will drive the cost of doing business up by adding \$430 billion to transportation costs in the next decade. Firms will spend more to ship goods, and the raw materials they buy will cost more due to increased transportation costs. Productivity costs will also fall, with businesses underperforming by \$240 billion over the next decade; this in turn will drive up the costs of goods. As a result, U.S. exports will fall by \$28 billion, including 79 of 93 tradable commodities. Ten sectors of the U.S. economy account for more than half of this unprecedented loss in export value – among them key manufacturing sectors like machinery, medical devices, and communications equipment. On the contrary, most of America's major economic competitors in Europe and Asia have already invested in and are reaping the benefits of improved competitiveness from their infrastructure systems.

To illustrate further the correlation between transportation and a strong national economy, the U.S. Chamber of Commerce in late 2010 released a transportation performance index that examines the overall contribution to economic growth from a well-performing transportation infrastructure. The index displays a decline in the nation's economic competitiveness due to a continued lack of investment in surface transportation systems on all levels. However, the results

also indicate that a commitment to raising the performance of transportation infrastructure would provide long-term value for the U.S. economy.

At this juncture, even Treasury Secretary Tim Geithner is underscoring the importance of investing in our nation's infrastructure and the value of export promotion for the competitiveness of U.S. businesses. On a recent trip to a North Carolina manufacturing plant, Secretary Geithner drew parallels between investment in infrastructure, jobs creation, and growth of the domestic manufacturing sector.

While efforts such as the American Recovery and Reinvestment Act of 2009 have provided some short term relief to a struggling engineering and construction sector, a sustained economic recovery, will remain difficult without a new multi-year surface transportation bill.

### **Five Key Solutions**

As part of ASCE's 2009 *Report Card for America's Infrastructure*, ASCE identified five Key Solutions that illustrate an ambitious plan to maintain and improve the nation's infrastructure:

- Increase federal leadership in infrastructure;
- Promote sustainability and resilience;
- Develop federal, regional, and state infrastructure plans;
- Address life cycle costs and ongoing maintenance; and
- Increase and improve infrastructure investment from all stakeholders.

During infrastructure roundtables in both Washington, DC and throughout the country, several themes were identified including the need for a clear national infrastructure vision, the need for a better informed public, and the need for performance-based data that can target investments which reward good performance. By addressing these issues intelligently with smart infrastructure investments, we can develop a safer and more economically competitive nation.

In the transportation sector specifically, ASCE supports the following actions:

- Establish a new process at the federal and state levels that includes performance metrics and implementation strategies for transportation projects to ensure that they achieve national objectives and deliver value to the American public.
- Enact a multi-year surface transportation authorization bill with dedicated and reliable revenue sources upon which long-term public and private sector investment commitments can confidently be made.
- Adopt a sustainable user-fee approach as the financial foundation of our nation's transportation program, and look to innovative financing programs such as Public-Private Partnerships, Build America Bonds, expansion of the Transportation Infrastructure Finance and Innovation Act, and an infrastructure bank to augment the federal investment. ASCE supports a variety of revenue streams including an increase in the motor fuels tax and eventually transitioning to a vehicle miles traveled system.
- Develop strategies to expedite the current regulatory process at the local, state, and federal levels to move critical projects through quickly and filter out ill-conceived projects, to ensure that performance metrics are met.

## **Modest Investment Needed**

*Failure to Act* estimates that in order to bring the nation's surface transportation up to good levels, or a grade of B, policymakers must invest approximately \$1.7 trillion in the nation's highway systems between now and 2020. The U.S. is currently on track to spend a portion of that, a projected \$877 billion, during the same timeframe. This infrastructure funding gap equals \$846 billion over 9, years or \$94 billion per year, from all levels of government.

Small investments in infrastructure, equal to about 60 percent of what Americans spend on fast food each year would:

- Protect 1.1 million jobs
- Save Americans nearly 2 billion hours in travel time each year
- Deliver an average of \$1,068 to each family; and
- Protect \$2,600 in GDP for every man, woman, and child in the United States.

Surface transportation infrastructure is a critical engine of the nation's economy. It is the thread which knits the country together. To compete in the global economy, improve our quality of life and raise our standard of living, we must successfully rebuild America's public infrastructure.

ASCE looks forward to working with Congress as it develops legislation which will bring the nation's infrastructure into the Twenty-First Century. As shown in ASCE's surface transportation economic study, the nation's economic health is dependent on a strong infrastructure system. By updating, maintaining, and building our roads, bridges, and transit systems, the nation can create jobs in both the public and private sector, while fostering and growing manufacturing in the United States. Therefore, the first step toward a modernized transportation system must include passing a multi-year surface transportation authorization, at or above current levels of investment. The nation's economic health will continue to be linked to its infrastructure strength, which means the time to act is now.