

“Goods Movement on our Nation’s Highways”

**Testimony before the Committee on Environment and Public Works,
U.S. Senate**

**By Charles Potts, CEO, Heritage Construction and Materials, and
Senior Vice Chairman, American Road and Transportation Builders
Association**

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Madam Chairman, Senator Inhofe and members of the Committee, thank you very much for inviting me to testify this morning on “Goods Movement on our Nation’s Highways.” I am Charles Potts, CEO of Heritage Construction and Materials of Indianapolis, Indiana, and the 2008 Senior Vice Chairman of the American Road and Transportation Builders Association.

As a construction contractor and business owner, it is critically important to me to be able to obtain construction materials from my suppliers and get them to my construction sites on a timely basis. If that doesn’t happen, work doesn’t get done on schedule and productivity goes down. I may be involved in highway construction, but my dependence on highways to transport the materials I need in my business is no different from millions of other businesses in virtually every industry in the American economy.

Importance of Highways to the Nation’s Economy

The U.S. economy is a vast network of businesses that produce goods and services for America’s 115 million households, for export to foreign countries or for use by other businesses. The tie that binds these businesses to their customers, suppliers and workers is the U.S. highway system.

Each year, U.S. manufacturing firms, mining companies and wholesalers ship more than \$8 trillion dollars worth of products through the nation’s transportation system. When shipments of farm products, construction materials, retail firms and exports to other countries are included, the total comes to more than \$11 trillion.

A few products, primarily bulk products like coal and ores, can be carried efficiently by rail or barge. High value products needing time-sensitive delivery can be carried by air.

But by far the largest fraction of shipments is carried on the nation’s highways by commercial motor vehicles. For the vast majority of businesses, truck transportation provides the most flexible, efficient and cost-effective way of delivering products to customers.

A survey of manufacturing, mining and wholesale commodity flows conducted by the U.S. Bureau of the Census in 2002 found that three-quarters of the \$8.4 trillion of shipments by these three sectors of the U.S. economy were carried exclusively by truck along the nation's highways. Of the \$2.2 trillion not carried exclusively by trucks, truck transportation still played an important role as part of multimodal shipments that also involved rail, water or air transportation. In fact, only \$800 billion, or one tenth, of all shipments did not involve truck transportation.

Other surveys, including the Federal Highway Administration's Freight Analysis Framework data, show a similar dependence on the nation's highways to ship the freight and products that allow our economy to grow and prosper.

The importance of the nation's highways to the growth and performance of the national economy has been recognized by policymakers for almost a century. The first legislation authorizing the federal government to invest in highways was enacted by Congress in 1916. In 1956, Congress created the Dwight D. Eisenhower System of Interstate and Defense Highways and established the Highway Trust Fund to finance a nationwide highway system designed to serve the national economy. The transportation efficiencies brought about by these decisions were a major contributor to the post-war growth of the U.S. economy. Recent innovations like the adoption by U.S. firms of just-in-time delivery have continued to cut transportation costs and improve productivity.

Impact of Highway Congestion on Freight Transportation

In recent years, however, the performance of our nation's highway system has deteriorated due to inadequate investment. Most of the concern has focused on the growing amount of time commuters and travelers spend driving in congested conditions and the resulting cost of wasted time and fuel. But congestion also has a negative effect on the nation's economy by impeding the flow of freight, which raises transportation costs and reduces productivity of the nation's businesses.

A study prepared recently for the Federal Highway Administration found that bottlenecks on the nation's highway system—caused by congested intersections, poor highway operations, inadequate capacity and poor alignments—impose 243 million hours of delay on truck shipments with the direct costs of the delays totaling \$7.8 billion per year. As the study found:

Freight bottlenecks are a problem today because they delay large numbers of truck freight shipments.... Higher transportation prices and lower reliability can mean increased supply costs for manufacturers, higher import prices, and a need for businesses to hold more expensive inventory to prevent stock outs. The effect on individual shipments and transactions is usually modest, but over time the costs can add up to a higher cost of doing business for firms, a higher cost of living for consumers, and a less productive and competitive economy.(P.1-1)

A major part of the problem is that the capacity of our nation's highway system has failed to keep pace with the volume of traffic. Since 1982, the number of miles traveled by all

vehicles on the nation's highways has almost doubled, but capacity has grown only 6.5 percent. As a result, the average amount of time spent by highway users, including trucks in congested conditions, has almost tripled.

The growing volume of truck traffic is part of the problem. Between 1987 and 2002, the number of trucks on the nation's highways increased almost 50 percent from 3.6 million to 5.4 million, while the number of miles traveled rose more than 60 percent. The biggest increases in both numbers and vehicle miles traveled were registered by the largest trucks, which are capable of transporting 80,000 pounds of freight or more.

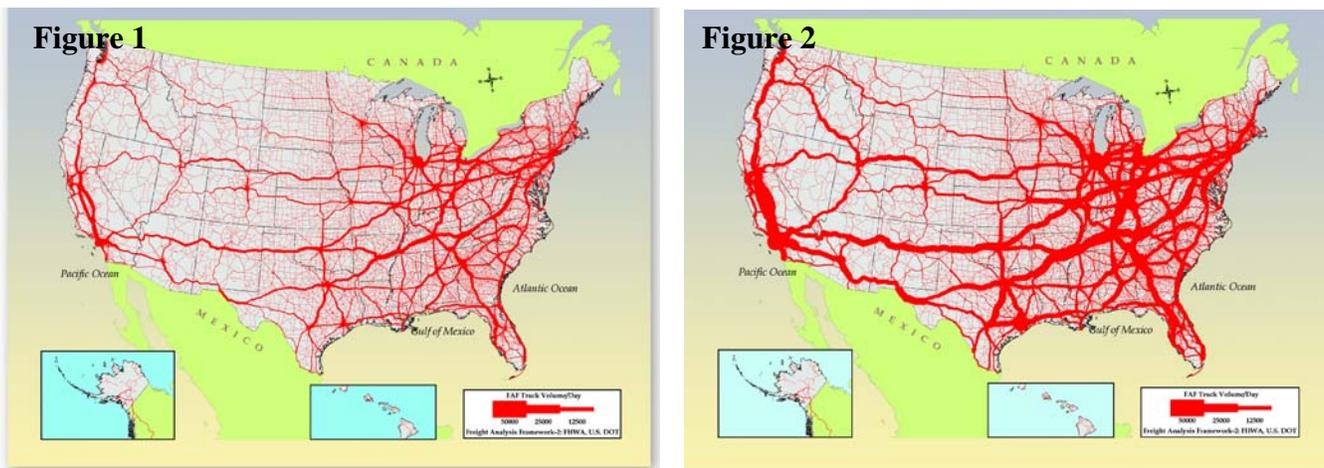
Future Growth Projections for Freight

As we look into the future, it is virtually certain the situation will get worse.

The main economic concern is that truck traffic is projected to double by 2035. According to the Federal Highway Administration, the volume of truck-borne freight will increase from 11.5 billion tons in 2002 to 22.8 billion tons by 2035. Trucking is projected to be the fastest growing mode of freight shipments except for air freight, which even with the growth will take only a fraction of one percent of the total volume. The value of truck shipments is projected to triple, from \$8.8 trillion in 2002 to \$23.8 billion in 2035, emphasizing the critical importance of highway transportation to the nation's economy.

The pressure this would put on the nation's highway infrastructure is shown in Figures 1 and 2. Figure 1 illustrates the volume of long-haul truck traffic along major U.S. highways in 2002. Figure 2 shows projected truck traffic along the same routes in 2035. North-south routes in the east and west and east-west routes along the midsection of the country all show truck traffic doubling or worse.

Estimated Average Daily Long-Haul Truck Traffic, 2002 and 2035



Source: Federal Highway Administration, Freight Analysis Framework

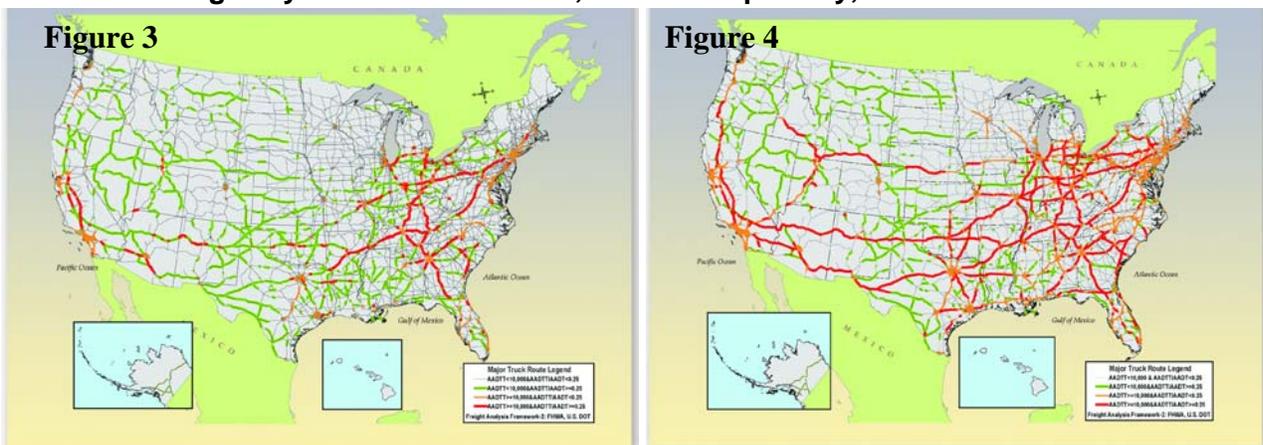
According to FHWA, there are many miles of road in the United States where trucks make up one-quarter of the total traffic or more. More than 4,000 miles of these roads carry heavy truck traffic, defined as more than 10,000 trucks per day. Some examples include:

- I-5 from California to Washington State, where truck traffic averages 10,000 per day and can hit over 35,000 trucks on some segments;
- I-70 from Missouri to Ohio where average volume exceeds 11,000 trucks per day and maxes at 26,000; and
- I-95 from Washington, DC to Florida, where truck traffic averages 10,000 per day with segments at 31,000.
- Segments of I-10, which runs from California to Florida, can carry more than 55,000 trucks per day while segments of I-15, from California to Utah, can see truck traffic of more than 60,000 per day.

On thousands of additional miles, trucks comprise more than one-quarter of the traffic but the number of trucks per day is less than 10,000. Figure 3 shows that highways where trucks are one-quarter or more of the traffic exist all across the country, including many rural areas.

By 2035, FHWA anticipates trucks will be one-quarter or more of the traffic on 14,000 miles where the number of trucks average 10,000 per day, an increase of almost 230 percent. As Figure 4 shows, this would include almost all of I-10, almost all of I-40 and much of I-80, in addition to current heavy truck routes. Under these projections, highways all up and down the East and West Coasts would be congested with truck traffic. The average number of trucks would grow to 20,000 per day on almost all of I-10, to 27,000 per day on I-15, and to 31,000 per day on I-95—double to triple the current volume. Virtually every state would have some freight highway with heavy truck traffic.

Highways With More than 10,000 Trucks per Day, 2002 and 2035

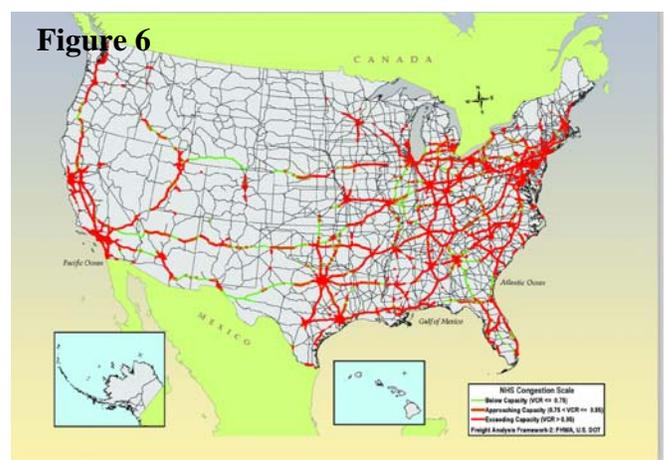
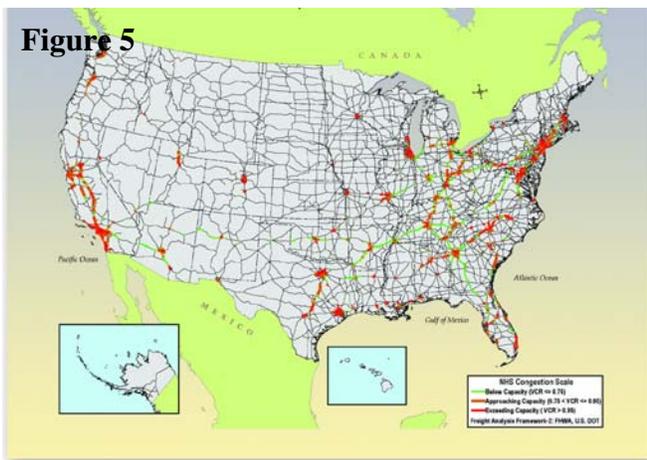


Source: Federal Highway Administration, Freight Analysis Framework

And as time goes on, the nation’s freight will spend much more time in congested highway conditions than today. Currently, recurrent congestion slows or stops traffic on over 6,300 miles of highways that carry more than 10,000 trucks per day as shown in Figure 5. By 2035, a projected 28,100 miles of major truck routes will experience recurrent congestion that slows or stops traffic, shown in Figure 6. According to FHWA:

- Of the 550 miles of urban segments on I-5, more than 65 percent currently experience heavy congestion; by 2035, that will grow to 95 percent. Congestion on non-urban segments will grow from 31 percent to 85 percent.
- On I-10, 53 percent of urban segments currently experience heavy congestion; by 2035, 96 percent will be congested. Congestion on non-urban segments will spread from four percent to 45 percent.
- On I-70, 97 percent of urban segments will be congested by 2035 compared to 53 percent today. Congestion on non-urban segments will grow from 16 percent to over 87 percent.
- And on I-95, congestion on urban segments will grow from 60 percent currently to virtually 100 percent, while congestion on non-urban segments will increase from 26 percent to 55 percent.

Peak Period Congestion on Major Truck Routes, 2002 and 2035



Source: Federal Highway Administration, Freight Analysis Framework

Transportation Infrastructure and Global Competitiveness

When American citizens and elected officials think about the nation’s transportation challenges, the common focus is on congestion, public safety, and overall quality of life. These outcomes alone warrant dramatic upgrades to the nation’s highway, transit and rail networks. What is often overlooked, however, is the role effective transportation systems play in a country’s competitiveness in the global marketplace. Transportation networks

are the circulatory system of an economy and can enable, or impede, domestic and international commerce through the efficiency of freight transportation. This undeniable fact is clearly recognized by some of the U.S. major trading partners and competitors:

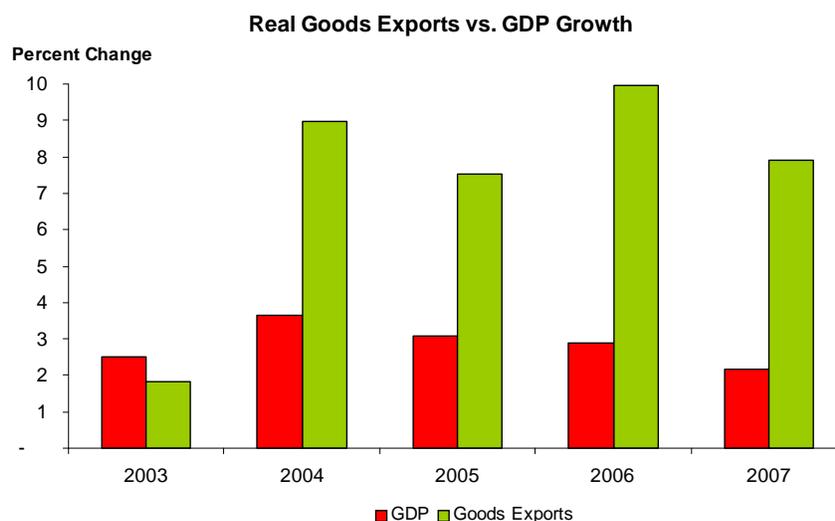
- In 2004, China announced the initiation of a 52,000 mile expansion of its National Transportation Highway System. It should be noted that in 2001, China’s investment in highway infrastructure was 2.5 percent of the nation’s gross domestic product (GDP). By comparison, U.S. highway investment in 2004 represented 0.65 percent of GDP.
- India has launched a \$50 billion upgrade for its 40,000 miles of expressways.
- The European Union (EU) in 2005 identified “30 Priority Axes”—critical transnational transportation improvement projects slated for \$300 billion in improvements. The EU also has set goals of expanding its highway capacity by almost 3,000 miles and rail network by nearly 8,000 miles by 2020.

These countries have made commitments to improving their surface transportation systems because they recognize the direct correlation between economic strength and the effectiveness of national infrastructure networks.

Freight Infrastructure and Exports

Keeping the U.S. competitive in the world economy will require that we also invest in the nation’s transportation infrastructure network. During the past four years, the growth of U.S. exports has far outpaced our domestic economic growth, as measured by the Gross Domestic Product. Without this strong showing from the export sector, the recent U.S. economic struggles would have been exacerbated and potentially increased the threat of a recession. Since 2004, the value of U.S. exports has increased an average of about nine percent per year compared to about three percent annual growth of the overall economy, as shown in Figure 7.

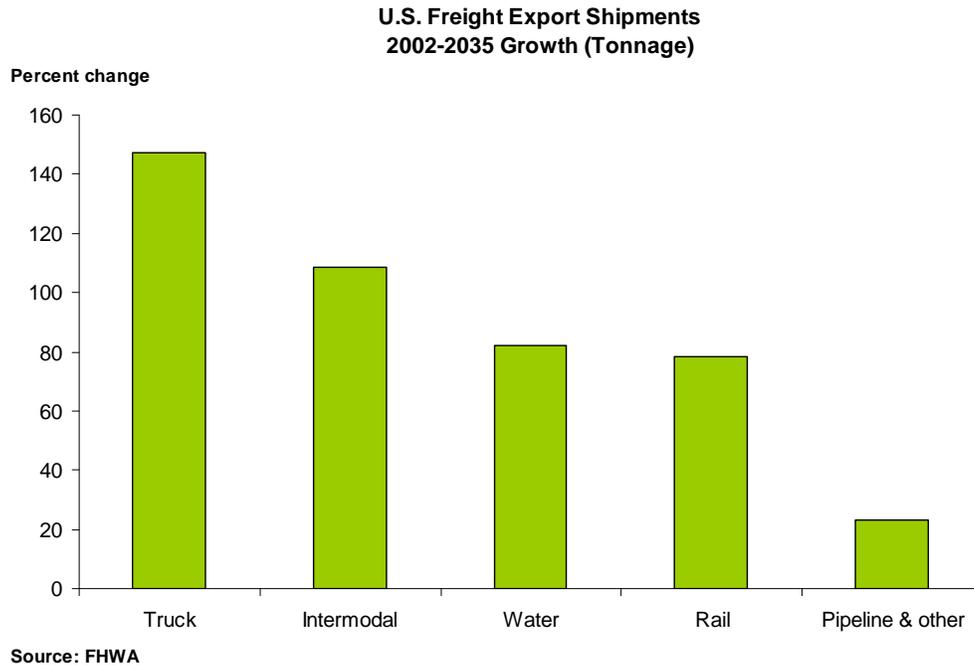
Figure 7



Source: Bureau of Economic Analysis

The Federal Highway Administration forecasts that freight export shipments will increase 112 percent between 2002 and 2035. Truck and intermodal shipments accounted for 81 percent of total export shipments in 2002. This share will grow to 83 percent in 2035, with truck and intermodal export shipments growing 147 and 109 percent, respectively, in that period, as shown in Figure 8.

Figure 8



Exports are of critical importance to the U.S. economy. What is often overlooked, however, is the fact that exports are reliant on an efficient transportation infrastructure network. Quite simply, products cannot be sold overseas without being transported to an international departure point. Consequently, an integrated and well-funded national freight program is necessary for the U.S. to remain competitive and support its domestic economy.

Importance of Highways to Economic Prosperity of the States

Despite the clear importance of the nation's highway system to the growth and prosperity of the nation's economy, some are suggesting the federal government should turn responsibility for highway investment to state and local governments. With the Interstate Highway System at maturity, they argue, there is no further productive role for the federal government in setting highway investment policies or financing highway improvements. Under this line of thinking, state and local governments, which know their highway investment needs better than the federal government, should decide appropriate investment levels and carry out highway improvements.

One factor contributing to this attack on the federal highway program is that little information exists on the extent to which each state's economic prosperity depends on the transportation services provided by highways in other states. No state exists in an economic vacuum. The economic prosperity of each state depends heavily on the ability of its local businesses to access markets and customers around the country. That access is provided primarily by highways. Even if a state were to do an outstanding job of building and maintaining its own highways, that effort would support only a small fraction of the state's overall economic activity. The state's economy would still be vulnerable to highway investment decisions made by policymakers in other states.

This is a particularly important concern for long-haul traffic to distant markets. If road improvements were financed solely or primarily by locally-generated taxes, state departments of transportation (DOTs) would be responsible to invest funds in ways that benefit local taxpayers. DOTs would have little or no incentive to build or maintain roads for freight traffic passing through the state. The nation's highway system would become balkanized and no longer support a national economy.

The importance of a nationwide freight system to the economic prosperity of each state is illustrated by the data in Tables 1 and 2. Table 1 shows, for 2002, the total value of products shipped by manufacturers, mining companies and wholesalers that originated in each state, split between shipments carried exclusively by truck and shipments carried by other modes, including intermodal shipments. Nationwide, almost 75 percent of all freight is shipped solely by truck over the nation's highways. For some states, like North and South Carolina, the fraction is much higher—almost 90 percent. In only one state, Wyoming, which is a large producer of coal, do trucks carry less than half of freight shipments.

Even more illustrative of the need for a nationwide highway system are the data in Table 2. This table breaks down truck shipments into three groups -- shipments that remain entirely within each state, short-haul shipments to adjacent states and long-haul shipments that go through one or more states before reaching their destination. As the table shows, only 44 percent of the value of truck shipments remains within the originating state. Another 20 percent represents short-haul shipments that originate in one state to destinations in adjacent states. The remaining 36 percent are long-haul shipments that go completely through one or more states before reaching their final destinations. For some states, like Kansas, Maine, Nebraska, Mississippi, New Jersey and South Carolina, long-haul shipments represent more than half of all truck-borne shipments originating within the state. For many large states, like Illinois, Missouri and Ohio, as much as 40 percent of truck shipments are long-haul across one or more states.

The economic prosperity of the states would thus be highly vulnerable to devolution of highway responsibilities to state and local governments.

This vulnerability will persist well into the future. According to projections by the Federal Highway Administration, the total value of freight shipments is expected to grow to \$29.6 trillion in 2035. Of this total, \$21.7 trillion is expected to be shipped solely via

truck, accounting for 73 percent of all freight shipments. Nearly \$10.4 trillion in truck shipments, almost half, will go to out of state destinations, of which \$6.0 trillion is projected to go to out of state destinations that are not neighboring states.

These data clearly demonstrate the dependence of shippers in one state on the highway network in other states. Correspondingly, this information also conclusively proves an efficient national system for the movement of freight is necessary.

Comprehensive Approach Needed

There is currently no national program or dedicated funding source to facilitate the efficient and secure movement of freight and the scope of this challenge is beyond the ability of an individual state or local planning authority to address. While several programs relate to this challenge, such as SAFETEA-LU's trade corridor and projects of regional and national significance programs, they do not provide the comprehensive approach necessary to deliver a national freight movement system that will allow the U.S. to retain and improve its global competitiveness.

The flaw of a piece-meal approach to solving this nation's freight challenges is illustrated by the Bush Administration's Corridors of the Future effort. The purpose of the project, which was announced September 10, 2007, is to "develop innovative national and regional approaches to reduce congestion and improve the efficiency of freight delivery." The effort, however, was limited to six routes—all Interstate highways—with announced funding far below the amounts that will be needed to alleviate congestion on these corridors:

- The I-5 corridor, a 1,350-mile Interstate highway traversing the entire length of California, Oregon and Washington, received an award of \$15 million that is to focus largely on the Columbia River Bridge between Oregon and Washington despite the fact that 65 percent of the urban mileage on this highway is already experiencing heavy congestion.
- The I-95 corridor from Washington, D.C., to Florida is scheduled to receive a total of just under \$22 million for projects developed by five states including widening much of the highway to eight lanes. In addition, nearly all of the bridges in the corridor will need widening or total replacement.
- The I-10 corridor, a 2,600 mile highway from California to Florida with more than half of the 700 miles in urban areas highly congested, was granted a total of \$8.8 million for two projects to widen the roadway in Arizona and Louisiana.
- The other three corridors—I-15 from California to Utah, I-69 from Texas to Michigan, and I-70 from Missouri to Ohio—all received similarly small and uncoordinated amounts despite heavy and growing congestion on many segments.

Table 1. Importance of Truck Transportation to State Economic Prosperity
(Millions of dollars)

State	Total value of products shipped	Products shipped by truck		Products shipped by other modes	
		Value	Percent of total	Value	Percent of total
Alabama	\$127,727	\$101,595	79.5%	\$26,132	20.5%
Alaska	\$8,032	\$4,620	57.5%	\$3,412	42.5%
Arizona	\$111,273	\$73,237	65.8%	\$38,036	34.2%
Arkansas	\$91,967	\$78,165	85.0%	\$13,802	15.0%
California	\$923,669	\$625,530	67.7%	\$298,139	32.3%
Colorado	\$93,184	\$64,155	68.8%	\$29,029	31.2%
Connecticut	\$82,477	\$61,768	74.9%	\$20,709	25.1%
Delaware	\$20,348	\$14,481	71.2%	\$5,867	28.8%
District of Columbia	\$3,707	\$3,576	96.5%	\$131	3.5%
Florida	\$296,989	\$226,639	76.3%	\$70,350	23.7%
Georgia	\$270,703	\$224,029	82.8%	\$46,674	17.2%
Hawaii	\$13,480	\$7,484	55.5%	\$5,996	44.5%
Idaho	\$28,471	\$19,094	67.1%	\$9,377	32.9%
Illinois	\$442,130	\$328,191	74.2%	\$113,939	25.8%
Indiana	\$291,458	\$225,612	77.4%	\$65,846	22.6%
Iowa	\$115,396	\$92,849	80.5%	\$22,547	19.5%
Kansas	\$95,285	\$69,645	73.1%	\$25,640	26.9%
Kentucky	\$189,390	\$157,473	83.1%	\$31,917	16.9%
Louisiana	\$139,843	\$55,481	39.7%	\$84,362	60.3%
Maine	\$32,355	\$25,307	78.2%	\$7,048	21.8%
Maryland	\$121,356	\$104,030	85.7%	\$17,326	14.3%
Massachusetts	\$200,813	\$145,408	72.4%	\$55,405	27.6%
Michigan	\$388,571	\$303,640	78.1%	\$84,931	21.9%
Minnesota	\$166,430	\$114,842	69.0%	\$51,588	31.0%
Mississippi	\$94,897	\$82,103	86.5%	\$12,794	13.5%
Missouri	\$185,392	\$134,904	72.8%	\$50,488	27.2%
Montana	\$12,447	\$8,281	66.5%	\$4,166	33.5%
Nebraska	\$61,797	\$49,569	80.2%	\$12,228	19.8%
Nevada	\$40,756	\$27,748	68.1%	\$13,008	31.9%
New Hampshire	\$31,191	\$19,541	62.6%	\$11,650	37.4%
New Jersey	\$286,580	\$210,095	73.3%	\$76,485	26.7%
New Mexico	\$14,907	\$11,118	74.6%	\$3,789	25.4%
New York	\$318,775	\$231,714	72.7%	\$87,061	27.3%
North Carolina	\$293,604	\$264,443	90.1%	\$29,161	9.9%
North Dakota	\$18,921	\$13,126	69.4%	\$5,795	30.6%
Ohio	\$494,278	\$377,110	76.3%	\$117,168	23.7%
Oklahoma	\$77,576	\$60,450	77.9%	\$17,126	22.1%
Oregon	\$102,600	\$73,655	71.8%	\$28,945	28.2%
Pennsylvania	\$354,399	\$287,156	81.0%	\$67,243	19.0%
Rhode Island	\$21,035	\$14,475	68.8%	\$6,560	31.2%
South Carolina	\$143,194	\$126,452	88.3%	\$16,742	11.7%
South Dakota	\$26,430	\$15,634	59.2%	\$10,796	40.8%
Tennessee	\$286,576	\$229,373	80.0%	\$57,203	20.0%
Texas	\$589,064	\$379,531	64.4%	\$209,533	35.6%
Utah	\$61,515	\$45,233	73.5%	\$16,282	26.5%
Vermont	\$16,238	\$12,571	77.4%	\$3,667	22.6%
Virginia	\$164,557	\$137,943	83.8%	\$26,614	16.2%
Washington	\$177,395	\$89,594	50.5%	\$87,801	49.5%
West Virginia	\$38,479	\$28,536	74.2%	\$9,943	25.8%
Wisconsin	\$217,451	\$172,120	79.2%	\$45,331	20.8%
Wyoming	\$12,106	\$5,675	46.9%	\$6,431	53.1%
US total	\$8,397,214	\$6,235,001	74.3%	\$2,162,213	25.7%

Source: U.S. Census Bureau. 2002 Commodity Flow Survey

Table 2. Value of Products Shipped by Truck Within State and to Other States
(Millions of dollars)

State	Total value of products shipped by truck	Shipped within the state			Shipped to other states		
		Value	Percent of total	Short-haul to adjacent states	Percent of total	Long-haul through one or more states	Percent of total
Alabama	\$101,595	\$35,672	35.1%	\$27,502	27.1%	\$38,421	37.8%
Alaska	\$4,620	\$4,545	98.4%	\$0	0.0%	\$75	1.6%
Arizona	\$73,237	\$44,662	61.0%	\$15,290	20.9%	\$13,285	18.1%
Arkansas	\$78,165	\$19,812	25.3%	\$24,722	31.6%	\$33,631	43.0%
California	\$625,530	\$426,436	68.2%	\$34,653	5.5%	\$164,441	26.3%
Colorado	\$64,155	\$35,778	55.8%	\$8,584	13.4%	\$19,793	30.9%
Connecticut	\$61,768	\$18,420	29.8%	\$17,869	28.9%	\$25,479	41.2%
Delaware	\$14,481	\$2,977	20.6%	\$5,399	37.3%	\$6,105	42.2%
District of Columbia	\$3,576	\$534	14.9%	\$837	23.4%	\$2,205	61.7%
Florida	\$226,639	\$168,216	74.2%	\$12,588	5.6%	\$45,835	20.2%
Georgia	\$224,029	\$89,104	39.8%	\$68,628	30.6%	\$66,297	29.6%
Hawaii	\$7,484	\$7,484	100.0%	\$0	0.0%	\$0	0.0%
Idaho	\$19,094	\$8,635	45.2%	\$3,970	20.8%	\$6,489	34.0%
Illinois	\$328,191	\$137,488	41.9%	\$57,155	17.4%	\$133,548	40.7%
Indiana	\$225,612	\$65,035	28.8%	\$75,472	33.5%	\$85,105	37.7%
Iowa	\$92,849	\$26,617	28.7%	\$24,638	26.5%	\$41,594	44.8%
Kansas	\$69,645	\$21,745	31.2%	\$13,728	19.7%	\$34,172	49.1%
Kentucky	\$157,473	\$37,716	24.0%	\$44,308	28.1%	\$75,449	47.9%
Louisiana	\$55,481	\$29,579	53.3%	\$9,506	17.1%	\$16,396	29.6%
Maine	\$25,307	\$9,154	36.2%	\$2,219	8.8%	\$13,934	55.1%
Maryland	\$104,030	\$39,580	38.0%	\$32,515	31.3%	\$31,935	30.7%
Massachusetts	\$145,408	\$49,175	33.8%	\$26,110	18.0%	\$70,123	48.2%
Michigan	\$303,640	\$170,521	56.2%	\$39,669	13.1%	\$93,450	30.8%
Minnesota	\$114,842	\$54,836	47.7%	\$15,610	13.6%	\$44,396	38.7%
Mississippi	\$82,103	\$17,961	21.9%	\$15,782	19.2%	\$48,360	58.9%
Missouri	\$134,904	\$51,224	38.0%	\$31,878	23.6%	\$51,802	38.4%
Montana	\$8,281	\$5,716	69.0%	\$1,077	13.0%	\$1,488	18.0%
Nebraska	\$49,569	\$16,881	34.1%	\$8,644	17.4%	\$24,044	48.5%
Nevada	\$27,748	\$10,810	39.0%	\$9,943	35.8%	\$6,995	25.2%
New Hampshire	\$19,541	\$4,284	21.9%	\$5,647	28.9%	\$9,610	49.2%
New Jersey	\$210,095	\$63,662	30.3%	\$41,506	19.8%	\$104,927	49.9%
New Mexico	\$11,118	\$5,975	53.7%	\$2,596	23.3%	\$2,547	22.9%
New York	\$231,714	\$103,270	44.6%	\$45,183	19.5%	\$83,261	35.9%
North Carolina	\$264,443	\$106,428	40.2%	\$53,715	20.3%	\$104,300	39.4%
North Dakota	\$13,126	\$6,902	52.6%	\$2,931	22.3%	\$3,293	25.1%
Ohio	\$377,110	\$133,607	35.4%	\$99,469	26.4%	\$144,034	38.2%
Oklahoma	\$60,450	\$20,624	34.1%	\$23,191	38.4%	\$16,635	27.5%
Oregon	\$73,655	\$35,233	47.8%	\$26,960	36.6%	\$11,462	15.6%
Pennsylvania	\$287,156	\$101,969	35.5%	\$82,213	28.6%	\$102,974	35.9%
Rhode Island	\$14,475	\$2,883	19.9%	\$4,108	28.4%	\$7,484	51.7%
South Carolina	\$126,452	\$37,045	29.3%	\$27,304	21.6%	\$62,103	49.1%
South Dakota	\$15,634	\$6,246	40.0%	\$3,883	24.8%	\$5,505	35.2%
Tennessee	\$229,373	\$49,775	21.7%	\$59,888	26.1%	\$119,710	52.2%
Texas	\$379,531	\$255,435	67.3%	\$33,840	8.9%	\$90,256	23.8%
Utah	\$45,233	\$20,747	45.9%	\$8,266	18.3%	\$16,220	35.9%
Vermont	\$12,571	\$3,930	31.3%	\$4,894	38.9%	\$3,747	29.8%
Virginia	\$137,943	\$64,531	46.8%	\$26,498	19.2%	\$46,914	34.0%
Washington	\$89,594	\$58,735	65.6%	\$10,317	11.5%	\$20,542	22.9%
West Virginia	\$28,536	\$7,409	26.0%	\$10,700	37.5%	\$10,427	36.5%
Wisconsin	\$172,120	\$67,297	39.1%	\$43,954	25.5%	\$60,869	35.4%
Wyoming	\$5,675	\$3,698	65.2%	\$1,125	19.8%	\$852	15.0%
US total	\$6,235,001	\$2,765,998	44.4%	\$1,246,483	20.0%	\$2,222,520	35.6%

Source: U.S. Census Bureau. 2002 Commodity Flow Survey

U.S. Transportation Network: A New Vision

Recognizing this is a situation that can no longer be left unaddressed, ARTBA is proposing a new 25-year federal initiative focused exclusively on developing the surface transportation capacity necessary to facilitate the secure and efficient movement of freight. The “Critical Commerce Corridors” (3C) program would be funded outside the federal motor fuels excises by new freight-related user fees and potentially other mechanisms with resulting revenues statutorily “fire-walled” for use only on “3C” projects. At the same time, the federal government must significantly increase its long-term financial commitment to the core highway and transit programs through the motor fuel excise to ensure improved regional mobility and safety for all citizens.

This complementary approach to transportation policy would enable a holistic surface transportation network to be developed that attempts to truly address varied mobility and economic challenges.

A consistent theme, if not goal, in the last three federal surface transportation program reauthorization bills has been to provide increased flexibility to states in use of their federal highway funding. The argument that state and local authorities know best the unique transportation challenges and needs of their area and constituents and should thus have control in directing the application of federal highway funds can be powerful.

It needs to be recognized, however, that this growing shift toward “flexible federal funds”—and earmarks—over the past 15-18 years has created a serious obstacle to meeting emerging national transportation infrastructure needs and objectives through the federal program.

For example, several new programs were established in the past two surface transportation bills that seek to address truly national transportation objectives (i.e., the “Projects of Regional and National Significance Program,” and the border and corridor programs). These attempts at providing a federal leadership role, however, were significantly under funded and diluted by the perennial fight over highway funding formula returns.

Sometimes meeting national needs means allowing a federal role that uses funds collected from the citizenry as necessary to meet national objectives. While much of the current federal highway and public transportation programs are, and should remain, regionally focused and controlled, federal surface transportation program funds must not be considered entitlements. History has demonstrated it is entirely appropriate for the federal government to direct resources toward growing needs that are clearly in the national interest.

The Interstate Highway System would never have been built if each state alone had to pay for the segments running through it. The massive reconstruction and rehabilitation of the Interstate currently needed—and the construction and maintenance of the “Next Generation” expansion of the U.S. surface transportation system that is necessary to keep

America competitive during this century—may never be done without out enhanced federal direction.

Defining 3C

The first step in the implementation of 3C is defining the system itself. By its nature, a network that enables the efficient and secure movement of freight will extend beyond the borders of any one state or region and have a national scope. As such, the federal government, and specifically the U.S. DOT, should have the lead responsibility for coordinating the process that defines the 3C system.

Key Stakeholders

To be truly effective, however, the 3C initiative cannot be a top down direction from the federal government. It must have input and support from a wide variety of public and private stakeholders. Among the groups that must be intricately involved in identifying 3C are state departments of transportation, metropolitan planning organizations, the trucking and logistics industries, major port operators, representatives of international and domestic shippers, and the freight rail industry. Each of these sectors is either an owner or a major user of the nation's current surface transportation network.

The U.S. DOT should coordinate a process that brings these groups together to define a national freight transportation system that is developed regionally through the four geographic membership regions of the American Association of State Highway and Transportation Officials. A regionally-developed system would ensure the distinct freight challenges facing different parts of the country are uniquely addressed. This type of process would also facilitate the multi-state planning necessary to efficiently move freight while ensuring regional efforts are consistent with a national strategy.

The federal government and other relevant stakeholders have advanced technology and data available about the movement of U.S. domestic and international movement of freight.

These empirical resources should be harnessed to identify the priority segments of the U.S. surface transportation network for freight movement and where choke points currently, or are projected to, exist. The objective of this collaborative public-private process is to produce a comprehensive assessment of nation's current surface transportation freight network and what this system must become to provide the predictability and reliability necessary to ensure future U.S. global competitiveness.

Potential Components

The types of segments that would be potentially eligible for inclusion in the 3C network include: designated trade corridors; international gateways; access routes to major ports and airports; roadways that carry, or are projected to carry, over-the-road truck traffic significantly in excess of their design specifications; the Interstate Highway System;

intermodal connectors; and highway truck congestion points as identified by FHWA's 2005 bottleneck report. It is important to note, however, the system should not be limited to existing facilities, but also identify where new capacity is warranted.

Once the 3C system is identified, the stakeholders—particularly the U.S. DOT, state departments of transportation, and metropolitan planning organizations—should evaluate the cost of developing its various components. A cost assessment is necessary to provide both a realistic guide for future investments and an assessment of the amount of revenue that must be generated over the next 25 years. Generating a cost evaluation concurrent with the identification of 3C will help ensure the efficiency of the process and facilitate stakeholder support of the network that is being developed.

3C Financing

The utilization of user fees to finance surface transportation improvements has proven to be a reliable and equitable method to support the nation's highway and transit infrastructure network. User fees, by their nature, ensure the individuals or groups who derive the benefit from a service or product are responsible for its cost.

Currently, a series of highway user fees generate revenues that are deposited in the Highway Trust Fund to support the federal highway and public transportation programs. The most prominent of these is the federal excise tax on motor fuels which yields almost 90 percent of Highway Trust Fund revenues. There are also taxes on commercial trucks, tires, and heavy use vehicles. This structure should continue to provide the financial foundation for the core federal highway and transit programs. These user fees, however, must be increased to better enable these programs to meet their defined mission.

The user fee concept is also well suited to support 3C. A new freight-based user fee structure—perhaps including a dedicated increase in the federal diesel excise—should be developed to support a new national strategy to ensure the efficient and secure movement of freight. This is entirely consistent with the user fee concept, as those deriving the primary benefit from the predictability and reliability of 3C—shippers—would pay for its development and upkeep.

New Freight-Based User Fees

As part of the 3C system identification process involving appropriate stakeholder groups, the U.S. Secretary of Transportation should initiate a dialogue with private sector participants about appropriate methods to finance the system they are identifying. Again utilizing a public-private dialogue to develop a recommended financing structure would ensure the freight-based user fee mechanism is equitable, efficient, and will generate enough revenues over a 25-year period to cover the costs identified for 3C. The Secretary should strive to develop financing recommendations that are true user fees. Complying with the technical requirements of a true user fee would ensure that those paying for 3C are its primary beneficiaries.

It should be emphasized that the financing structure for 3C would likely require the creation of a composite structure consisting of several different freight-based user fees. It is unlikely one fee could generate the revenues necessary or be applied fairly among various freight stakeholders. Such fees could include:

- a bill of lading tax;
- weight-mileage based user fee;
- a federal freight transaction fee paid by businesses moving freight by truck;
- national freight transfer station entrance/use fees;
- federal customs fees;
- additional federal user fees;
- tolls where appropriate and consistent with the 3C system development process; or
- a mileage tax on truck travel in or on the 3C system.

The chart on page 58 demonstrates the value of annual U.S. freight shipments and the potential revenue generating opportunities that exist from an appropriately structured freight-based user fee system.

User fees collected on the shipment of freight would transcend the element of the financing model for the core highway program that creates a geographic focus on where revenues are generated and disbursed. An effective freight-based user fee should reflect the systemic benefits of the movement of freight in and out of the U.S. These benefits do not start and stop at the borders of an individual state.

Accordingly, the implementation of this type of financing structure would complement 3C's requirement for a national freight movement system.

Public-private partnerships and debt financing could also play roles in supporting the 3C program. These financing mechanisms are well suited to high cost projects that carry heavy traffic flow—two consistent elements of freight capacity enhancement projects.

Protection of New User Fees

Finally, to ensure the integrity of both the core federal surface transportation and 3C programs, and their financing sources, a statutory “fire-wall” should be created between these two revenue streams. This would guarantee that no one aspect of the new comprehensive structure of the federal surface transportation program is being diluted to benefit a separate component. Creating a clear separation between these revenues would also further ensure system users they will receive the benefits of the program they are financially supporting.

Administration

While 3C must be a federally-led initiative, it must also be administered in partnership with state departments of transportation as they are the primary owners of the nation's roadway

network. After identifying the segments that constitute the 3C system, the federal government should specify the types of eligible projects available for 3C funds. Consistent with the goal of facilitating the secure and efficient movement of freight, the types of activities that should be eligible for 3C funds would include:

- Capacity enhancements
- Lane widening
- Bridges and tunnels
- Bottleneck relief
- Technology applications and upgrades
- System reconstruction
- Vertical integration
- Freight exchange centers (public private partnerships)
- Managed and truck-only lanes

The development of a freight transportation network also has the potential to provide numerous ancillary benefits, particularly in the area of public safety. The separation of commercial and personal traffic through managed or truck-only lanes will improve both the predictability and reliability of travel and the level of safety for both forms of transport. Furthermore, the natural environment would be enhanced by reducing emissions generated from heavily-congested roadways. The 3C proposal offers much more than solely improving the security and efficiency of freight movement.

Freight Rail

While both highways and rail are integral to the movement of freight, rail lines are privately owned and highway infrastructure is the responsibility of the public sector. Freight rail inclusion in the 3C program is desirable, but should be contingent upon the creation and imposition of a user or beneficiary fee structure for freight rail shipments that would generate revenues commensurate with the benefits received from integrating freight rail into this system. Federal tax subsidies could potentially be used to leverage such revenues by supporting private investment in rail infrastructure that benefits the public as part of 3C. Similarly, pipelines, electric utilities and other infrastructure networks should be integrated into 3C based on their willingness to financially support the program.

Performance

The national and systemic scope of 3C requires clear leadership from the federal government in the development of an integrated system focused on freight movement. In the current federal highway and transit program, the leadership responsibility is primarily centered in state and regional transportation authorities. While states and localities must be active partners in the development and financing of 3C, increased federal oversight and direction is necessary. As 3C users will be asked to financially support this network with the promise that it will yield improved reliability and efficiency in the movement of goods and services, these users must be provided concrete assurances the benefits will be delivered.

The federal government's role in the administration of 3C should be to ensure the integrity of the system's infrastructure is developed and maintained in a manner that yields a level of service classification of no less than "C." Roadways with a level of service of "C" are described by FHWA as "in stable flow zone, but most drivers are restricted in the freedom to select their own speed." This type of minimal requirement—which the federal government should assure—is provided on projects receiving 3C funds, and also offers system users with tangible evidence of the potential return on their investment.

This commitment to a specified level of service in conjunction with the identification of the 3C system would also provide the general public with a clear and specific vision of what the program would deliver. Consistent with this goal, a major tenet of 3C should be the distribution of funds based on merit and a definitive policy against earmarking funds for projects that do not meet the criteria described above should be established.

Project Delivery and Environmental Commitment

It should be recognized the delivery of the benefits promised by the 3C proposal requires more than defining a system and providing a source of revenues. It is essential that in the administration of 3C the federal government seek to ensure the timely delivery of projects to earn the necessary support from the public and the general business community. The amount of time it takes to complete surface transportation improvements is unacceptable and could be an impediment to delivering the benefits of 3C.

Recent legislation, along with other ARTBA recommendations, would provide the tools to ensure these projects are completed in a time sensitive manner while adhering to all existing environmental protections. To further this goal, 3C projects should utilize best practices in environmental design and construction techniques. Furthermore, 3C should demonstrate the surface transportation community's commitment to environmental stewardship by attempting to deliver projects and programs that improve not only transportation, but when reasonable and affordable, the natural environment as well.

Implementation Timeline

It is imperative for the 2009 reauthorization of the federal highway and transit programs to include a specific implementation schedule for 3C. The growth of domestic and international freight movement demands immediate federal action. The parameters for administering the 3C should be included in the 2009 reauthorization measure to demonstrate the federal commitment to this initiative. The remainder of the implementation of the program should follow the model established in 1991's Intermodal Surface Transportation Efficiency Act (ISTEA) for the National Highway System, where Congress directs the U.S. Secretary of Transportation to develop a system for its review and subsequent approval.

The U.S. Secretary of Transportation should be required to bring together a group of public and private stakeholders to identify the components of the 3C system within 18 months after the enactment of the 2009 reauthorization bill. This process should also include a cost assessment for adding new segments or upgrading existing facilities. At the same time these groups are working to identify the 3C network and its costs, a dialogue should be initiated about equitable freight-based user fees that could be imposed to finance the system.

After development of a proposed 3C system is completed, within the specified time frame, the Secretary of Transportation should present the plan to Congress for approval. A package of freight-based user fees, and any other necessary financing mechanisms, that would cover the identified costs of the system over a 25-year period should be submitted no later than 24 months after enactment of the bill. Congress should be required to approve legislation creating the 3C financing system within 36 months of enactment of the 2009 reauthorization bill.

While the vast benefits of 3C and its financing structure should be motivation enough to facilitate quick action on these measures, a specific penalty should be imposed to force compliance with these deadlines. One such action would be the withholding of funds for activities within the federal-aid highway program that have a role in the movement of freight (such as the Trade Corridor, Border Infrastructure, and Projects of Regional and National Significance Programs).

As this process moves forward, it is likely there will be an intervening period between when a 3C System financing mechanism is enacted and when the actual 3C System is developed. To ensure the public and elected officials see immediate benefits from the 3C program, any revenues generated in advance of the system being defined should be dedicated to either Interstate Highway System enhancements or alleviation of FHWA-identified commercial trucking bottlenecks. This interim strategy will ensure freight-related infrastructure improvements can be made while the 3C system development process is underway.

Transition Strategy

As 3C is being identified and a transition strategy is developed, there will likely be areas of potential overlap between the core federal highway program and the 3C system. Participants in the U.S. DOT-led public-private stakeholder outreach process should give consideration to which components of the core highway program are more appropriately carried out by 3C.

For example, the Interstate Highway System is a logical candidate for inclusion in the 3C network as it is the backbone of the nation's transportation network.

Consistent with the independent financing mechanisms proposed for the 3C and core programs, HTF revenues currently allocated to Interstate Maintenance (IM) might be redistributed to other core highway and transit programs, with IM being financed, along with Interstate Highway System capacity expansions, through the new 3C revenue-

raising mechanisms. This could provide substantial additional revenue for the remaining core programs.

Alternatively, Congress could decide to keep IM responsibilities and its current funding stream as part of the restructured core program and fund only Interstate Highway System capacity expansion and high-cost, major reconstruction projects through the 3C and its financing mechanisms. This same type of transition could occur for other parts of the core highway program deemed to be more appropriate for the 3C system, such as the trade corridor, border infrastructure, projects of regional and national significance programs, and portions of the National Highway System Program that are dedicated to freight movement.

If this type of practice were followed, a hybrid method of distributing 3C funds would likely develop. Funds for improving the Interstate Highway System would logically continue to be dispersed to the states by formula. Funds for current freight-related discretionary and other 3C activities would be distributed based on merit and a project's consistency with 3C goals.

Conclusion

The result of the 3C Program would be a national strategy for dealing with the growing challenge of efficiently and securely moving freight. This is a challenge that is about more than congestion, bottlenecks and delayed deliveries. It is about securing America's place in the global competitive market. The 3C proposal combined with upgrading and expanding the core highway and public transportation programs would provide a holistic federal strategy to ensuring the U.S. surface transportation system provides the predictability and reliability the U.S. and world economies demand.

Madam Chairman, other member of the Committee, our nation's surface transportation infrastructure network is at a crossroads. We are facing major transportation challenges in the short- and long-term. Existing financing mechanisms are failing to keep pace with growing demands not because they represent an outdated or ineffective model, but because of purely political externalities. The hard reality remains that, no matter how it is structured, a solution to the nation's surface transportation challenges must include additional investment. Transportation infrastructure improvements cost money and the longer they are delayed, the more they will ultimately cost.

The nation's transportation challenges, however, are not insurmountable. We must utilize all available options to meet these needs and the federal government must play a leadership role, not only in promoting alternatives, but in delivering tangible resources and direction to meet the nation's surface transportation needs.

Madam Chairman and members of the Committee, I appreciate the opportunity to testify this morning and would be happy to answer any questions you may have.