TRANSPORTATION INFRASTRUCTURE

STATUS

The 112th Congress has been struggling with a long term reauthorization bill.

ANALYSIS

Small businesses remain concerned about their ability to get products, services and employees to, from and around markets. Whether it delivering products from ports, making sales calls or service calls, small businesses are dependent on an efficient system.

“Florists really have to run their businesses today thinking about rush hour,” says Peter Moran, executive director of the Society of American Florists. “As rush hour stretches out, it makes it harder to make things work. More and more florists are keeping just-in-time inventories. A big order often means calling the distributor. If that order comes later in the day, the florist may have to turn the business down because he can’t get the flowers in and still make the delivery. Delivery is what this business is all about.”

Growing traffic congestion is tough on businesses that make deliveries as a key part of doing business. But all companies depend on deliveries. And almost all businesses today, large and small, rely on some form of just-in-time (JIT) delivery as a way to control inventory costs. JIT needs predictable and dependable delivery to work. Traffic congestion threatens to turn just-in-time savings into jammed-in-traffic costs, especially for smaller businesses with limited people that cannot adopt other solutions, like late night delivery cycles. Congestion also makes it harder on businesses that have to deliver their people to several different locations during the day, businesses like service organizations and sales rep firms.

“If you lose one call out of four or five in the day because of congestion, it not only diminishes the sales commissions of the agent, but it hurts the company represented and their sales,” says the Manufacturers Agents National Association. “It’s a real challenge to be a sales person today!”

Traffic congestion, unlike the gift that keeps on giving, is the grinder that keeps on taking—chewing up time and money in an ever-widening wave:

• In Atlanta, a pet product distributor finds it hard to make 12 daily stops today compared to as many as 20 stops 10 years ago.

• In Los Angeles, a plumbing company puts an extra technician on the truck to service emergency calls for key accounts not because the work demands the help, but to be able to use expressway diamond lanes (for vehicles with two or more passengers) during heavy traffic periods.

• In Phoenix, a florist won't take across-town orders for delivery after 3 p.m. because it usually costs more to get the flowers there than the order is worth.

• In Chicago, a heating and air conditioning service company sometimes spends as much time getting to a schedule of daily calls as it takes to make the on-site repairs.

• In New York City, a trucking carrier adds a $75 charge for "Congestion Pay" to each load that goes into the city.

• In Seattle, an hourly landscape crew of 10 waits for a delivery of live planting materials that is an hour-and-a-half late due to heavy traffic.

IMPACT ON SMALL BUSINESSES

Traffic congestion negatively impacts small businesses in two significant ways:

• Employees tend to be paid by the hour—traffic congestion that generates lost time directly by sitting in traffic, or indirectly by waiting for product or materials stuck in traffic means higher costs.

• Many small businesses, especially service related businesses, are paid by the job, the trip, or the call—traffic congestion that reduces the number of jobs, trips or calls means lower income.

"We're very concerned about traffic congestion," says a moving industry spokesman. "We're able to pass along added fuel costs, but it is hard to pass on added windshield time. It's unpredictable—one time it's 20 minutes, the next time it's two hours. It doesn't matter if you're paid by the hour or by the job—added windshield time costs you money either in more out-of-pocket dollars for the time or in lower dollars coming in because of fewer jobs."

Businesses that face potentially higher costs and lower income struggle to survive. But when this convergence is caused by circumstances beyond their control, and traffic congestion is beyond the control of any one business, the struggle becomes more difficult. Add the unexpected—delays caused by bad weather, accidents, construction and maintenance work—and the difficult approaches the insurmountable.

"It's getting worse," says Hal Hannibal, an owner of Bailey Plumbing in Los Angeles. "Anytime there's an accident, you get stuck and miss appointments. We charge a flat rate for travel time.

If it takes longer than the time included in our charge, we eat that cost. I'm sure it's really costing us now. But we also have to compete for the work!"

Then there are the hidden costs of contending with the fallout from congestion-related problems—scheduling, routing, late deliveries, missed appointments, unhappy customers and frustrated employees. Because small business owners have limited time, time spent dealing with these issues takes time away from planning and growing the business. These time drains may be the most significant cost of all for small businesses.

The overall impact of traffic congestion is well documented. Two well-regarded sources of this documentation are the Texas Transportation Institute (TTI) of The Texas A&M University System and the U. S. Census Bureau.

"The problem can be stated simply—congestion has grown everywhere in areas of all sizes," says the 2004 "Urban Mobility Report" from TTI. "Congestion occurs during longer portions of the day and delays more travelers and goods than ever before. There are ways to address congestion problems, but there are not enough solutions being implemented to keep pace with the growing travel demands."

The numbers on congestion in the 85 urban areas studied by TTI are staggering (and growing):

• 3.5 billion hours of delay in 2002 (up from 0.7 billion hours in 1982).

• 5.7 billion gallons of fuel wasted in 2002 (up from 1.2 billion in 1982).

• A $63.2 billion cost of congestion in 2002 (up from $14.2 billion in 1982).

Recently released data in the American Community Survey from the U. S. Census Bureau say we spend, on average, more time commuting each year—100 hours—than most of us get in vacation time—80 hours. As a nation, our average daily one-way commute took 24.3 minutes in 2003, an increase of almost 10 percent from 1990.

The reasons behind these increasingly longer commute times and growing congestion also are fairly straightforward. Since 1980, population in the United States has increased by about 24 percent. The number of licensed drivers grew at better than 30 percent. But growth in registered vehicles was nearly 40 percent over the same period.

More drivers, more vehicles and more miles traveled on about the same highway capacity have led to more congestion.

What is not very clear is the true impact of traffic congestion on smaller businesses. Precious little hard research data exist to document real costs. But if you ask those who represent small business interests, they can give you real life examples.

"The nursery and floral (plant) industry is the third largest cash crop in the agriculture sector," says Robert Dolibois, executive vice president of the American Nursery and Landscape

Association. “It’s virtually all domestic. Nursery stock from production nurseries has to be handled in a short (seasonal) timeframe. Much of this stock is headed into large metro areas. Hourly work limits on drivers and traffic congestion impairs the ability to deliver perishable product to multiple locations in a timely fashion.

“On the landscape side, it’s a fee-for-service business that is conducted during daylight hours,” continues Dolibois. “Weather can knock out time. Rising traffic congestion steals time. That makes it really hard when you’re paying hourly wages.”

One of the only pertinent pieces of research on the subject is the 2001 study on Economic Implications of Congestion from the National Cooperative Highway Research Program. That study says traffic congestion raises business costs and reduces productivity in a number of areas:

• Increased employee travel time and reduced productive working hours.

• Increased scheduling and logistics costs.

• Reduced just-in-time inventory savings.

• Reduced ability to benefit from market scale economics.

The research included case studies of delivery costs in Chicago and Philadelphia and found that customers would switch suppliers if congestion caused delivery costs to rise, which would tend to hurt smaller businesses with only one or two locations.

“If we’re going to maintain a cost of goods that is reasonable—and that’s an important part of business—then we need a reliable transportation system,” says Steven T. King, executive director of the Pet Industry Distributors Association. “You certainly hear that maintenance of highways and bridges seems to have fallen behind, not to mention new roads to relieve congestion in high-growth areas.”

“I don’t know what the best solution is,” says Greg Judge of Southeast Pet, a distributor with 11 trucks serving Atlanta and seven states out of Austell, GA. “I just know that traffic congestion is dramatically increasing the cost of doing business.”

Some of the fundamental components of coping with congestion are perhaps best summarized in TTI’s current mobility report, which calls for a balanced approach that includes:

• More capacity—the growth in travel demand must be met by more road and transportation projects.

• More efficient operation and use of current infrastructure.

• Better management of demand.

• Better land use planning and development patterns.

“We need to recognize a key factor as the American economy continues to shift to a service-based economy,” says Dolibois. “What happens when you can’t deliver services in a timely fashion at a reasonable cost? What does that mean to our economic future?”

We need to protect our economic future and the mobility on which it depends. Action, and the funding to make it happen, has to start at the Federal level.

“There are some things the government is better at than private industry,” says Miller. “One of those happens to be highways, with right of way issues and the whole complex nature of building them. We need to make more Federal funds available to repair highways and focus on easing congestion to improve our ability to get around.”

THE INFRASTRUCTRE

According to the U.S. Department of Transportation, the U.S. transportation infrastructure network includes:

- 4,048,525 million center-line miles of public roadways and bridges, including 46,934 miles of Interstate highway
- 603,250 bridges
- 171,500 miles of track operated by freight railroads
- More than 13,700 civil and joint-use airports
- 12,000 miles of inland and inter-coastal commercial waterways
- 8,100 miles of subway and urban rail commuter track

THE INDUSTRY

According to U.S. Census Bureau data, there are more than 1,316,974 individual business establishments and public agencies directly involved, at least partially, in transportation infrastructure design, construction or management activities in the United States. They include:

- 19,438 highway and bridge contractor firms that employ the equivalent of 330,981 men and women full-time
- 794,122 general construction firms whose transportation work supports the equivalent of 276,349 full-time jobs
- 349,491 design and engineering firms whose transportation work supports the equivalent of 40,199 full-time jobs
- 1,615 asphalt manufacturing firms whose transportation project sales support the equivalent of 6,450 full-time jobs
- 6,100 aggregate and materials firms whose transportation market sales support the equivalent of 15,878 full-time jobs
- 8,732 cement and concrete firms whose transportation project sales support the equivalent of 16,874 full-time jobs.
- 132,733 construction equipment manufacturing, sales, rental and maintenance firms whose transportation market sales support the equivalent of 16, 874 full-time jobs, and

- 1,593 traffic safety and control device manufacturers or distributors whose transportation market sales support the equivalent of 3,014 fulltime jobs.

There are slightly more than 839,000 Americans employed full-time by federal, state or local transportation agencies. There is at least one state-level transportation agency in all 50 states and a local government transportation agency in most of the nation’s 3,100 counties and several hundred larger cities and metropolitan areas. At the federal level, the U.S. Department of Transportation has nearly 57,000 employees.

FUNDING

According to data from the U.S. Department of Transportation's 2008 "Report to Congress on the Conditions and Performance of the Nation's Highways, Bridges and Transit," all levels of government should currently be investing $139 billion per year in highway improvements just to maintain current physical and performance conditions on the nation's highways and bridges. This would grow to $150 billion by 2015 if highway construction costs grow at the same rate as the overall inflation rate.

Traditionally, the federal highway program has financed about 43 percent of all highway improvements while state and local governments have financed the rest. This means the federal highway program should currently be investing about $72 billion in highways, including administrative and research costs. In Fiscal Year 2010, federal highway investment totaled $41.8 billion, or $30 billion less than the federal share needed to maintain current conditions.

The current level of federal investment in transit, just over $10 billion per year, comes much closer to the amount needed to maintain current transit systems and equipment. The 2008 Conditions and Performance Report, however, does not try to estimate needed investment in new transit systems. It therefore probably underestimates the amount governments should be investing in transit.

In addition to the regular annual investment in highways and transit, the Economic Recovery & Reinvestment Act of 2009 provided a one-time injection of $27.5 billion of federal funds for quick-start highway improvements to help stimulate the economy and $8.4 billion for transit. These investments helped address the shortfall in highway and transit investment but much more is still needed.

VIEW POINTS

There are not many arguments against investing and updating the highway infrastructure, however there is opposition to an increase in the federal gas tax. Some environmental groups oppose more road construction because they believe more roads lead to more congestion and more sprawl.

Anti-tax advocates and some trucking and shipping organizations have argued that raising taxes on gas will increase the cost of shipping goods and put truck drivers out of work. These organizations have also attempted to repeal the gas tax and will most certainly fight against any efforts to increase it. Furthermore, they have argued that government needs to spend its current resources more wisely than going back to the well again and raising taxes. Environmentalists want to increase the gas tax but only to discourage people from traveling, not to invest in infrastructure. They also would mandate that the money go to transit only or other alternatives such as bike paths, and wetland restoration.

Proponents offer these observations:

- Without changes to current policy, the revenues raised by all levels of government for capital investment will only be about one-third ($66.6 billion) of the $200 billion the U.S. Department of Transportation (USDOT) believes necessary to maintain and improve the nation's highways and transit systems.
- The estimated cumulative gap between federal revenues for transportation and the investment needs of the system are $400 billion from 2010 to 2015.
- Traffic congestion cost Americans living in the nation's 437 urban areas $87.2 billion per year in lost time, wasted motor fuel and vehicle wear and tear.
- On average, urban commuters experience the equivalent of one work week (40 hours) per year stuck in rush hour traffic. In total, Americans spend 4 billion hours per year stuck in traffic.
- From 1980 to 2006, the vehicle miles traveled (VMT) in the U.S. by automobiles increased 97 percent; VMT by trucks increased 106 percent. Meanwhile, road capacity, as measured by the number of highway lane miles added to the system grew just 4.4 percent.
- Over half of the miles on the federal-aid highway system are in less than good condition and more than 25 percent of the nation's bridges are structurally deficient or functionally obsolete.
- Roughly one-quarter of the nation's bus and rail assets are in marginal or poor condition.
- Real highway spending per miles traveled in the U.S. has fallen by nearly 50 percent since the federal Highway Trust Fund was established in 1956.13 Total combined highway and transit spending as a share of GDP has fallen by about 25 percent in the same time period to 1.5 percent of GDP today
- The federal gas tax, which finances highway and transit capital investments and is not adjusted annually for inflation, has lost 33 percent of its purchasing power since last raised in 1993

OUTLOOK

Improving the state of our nation's infrastructure to move our products and services to the market is a long term priority for SBLC.