STATEMENT OF
ROY KIENITZ
UNDER SECRETARY FOR POLICY
U.S. DEPARTMENT OF TRANSPORTATION

BEFORE THE

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS
UNITED STATES SENATE

*Investing in Infrastructure:*
*Creating Jobs and Growing the Economy*

SEPTEMBER 21, 2010

Chairman Dodd, Ranking Member Shelby, and Members of the Committee:

Thank you for inviting me to appear before you today to discuss how investing in transportation infrastructure can create jobs and grow the economy.

It's particularly appropriate that the Committee has titled the hearing Creating Jobs *and* Growing the Economy, because transportation infrastructure investment has both effects, and the two effects are closely related but separate. Infrastructure investment creates jobs by creating work opportunities in construction and related industries. These jobs are temporary – lasting from less than a year for simple projects to several years for complex projects. After the project is complete, it creates – if it is well-designed and well-chosen – decreases in cost and increases in productivity that will spark economic growth. Our goal at the Department of Transportation is to make sure that both objectives – the short-term goal of creating jobs and the long-term goal of growing the economy – are achieved in our infrastructure investments.

The President's Infrastructure Investment Proposal

Two weeks ago, the President laid out a bold vision for renewing and expanding our transportation infrastructure – in a plan that combines a long-term vision for the future with new investments today. It is time to authorize a new six-year program for transportation infrastructure investment, and the President has called for a 6-year authorization that would help restore job growth and economic prosperity today while reducing our long-term infrastructure deficit. To accomplish this, the program will need a robust level of funding, higher than our current baseline, and, with the current state of the economy in mind, the Administration proposes that $50 billion – a significant share of the new investments – be frontloaded in the first year.

Some of the tangible accomplishments of the President's plan over the next six years will include rebuilding 150,000 miles of roads; constructing and maintaining 4,000 miles of rail; and rehabilitating or reconstructing 150 miles of runway.

More generally, our new surface transportation program needs to be part of a long-term framework that reforms the infrastructure investment process and expands our levels of investment so that we can build a truly world-class transportation system. We need to streamline, modernize, and prioritize our transportation investments, consolidate our dozens of programs into a coherent program structure that reflects national needs, and foster a culture of competition and performance that will drive investments that will produce better transportation outcomes and more livable communities for the American people.

This program must have a number of key elements. We need to continue the commitment by the President and the Congress to expand our high-speed rail program. As the Secretary has traveled around the country meeting with people in outreach sessions on our surface transportation program, a recurring theme is that people want high-speed rail. They don't want to have to wait in crowded airports or drive for hours on congested highways to get where they want to go. They want another choice. They want high-speed passenger rail.

We need to make achieving a state of good repair in our transportation infrastructure a national priority. Our highways, our bridges, our transit systems, our waterways, our ports, and our railroads have in some cases been allowed to deteriorate to the point that they are not safe, are not reliable, and don't provide an adequate level of performance for the American people. As we repair and rehabilitate our infrastructure, we can build in new safety features and new technology that will improve our transportation system's performance, so that, in every mode, we have a truly 21st Century transportation system.

We need to make livable communities a central part of our transportation program. That means we need to invest in better transit – in both urban and rural communities – to give people the transportation choices they want. We need to give people the option of walking or bicycling on short trips without putting their lives at risk by walking or bicycling in the street. We need to give people more fuel-efficient options to get where they want to go, and allow people easier access to jobs and housing.

We also need to take advantage of the technological breakthroughs of the past 20 years in Intelligent Transportation Systems. Advanced technology can multiply the effectiveness of our investments, so that we get more safety, more congestion relief, and more performance from each dollar of our investments than we could with conventional technology. We have spent billions of dollars on developing new technology; now we need to deploy it to reap the returns on our research and development investment.

The reauthorization proposal needs to address our key priorities, and that means that it needs an appropriate division of responsibility between the federal government, states, and local governments. Each state and metropolitan area has transportation needs, and federal assistance should help them meet those needs and grow their economies while also addressing national priorities. While formula programs can provide basic financial support to states and localities to maintain and expand their transportation infrastructure, there are some national goals that the federal government is uniquely suited to address. The federal government should address critical freight transportation problems that affect our national economic competitiveness and the prosperity of communities all across the country. The federal government should focus on the nationwide environmental sustainability challenges that affect the environmental quality of the world that we pass on to our children and grandchildren. Competitive federal programs would allow the federal government to direct funds toward projects that can have the best regional and national impacts on our economy, our environment, and our other critical national goals. For too long, these critical national needs have been falling through the cracks of our stovepiped transportation programs. We need a truly national transportation program to address national needs.

Moreover, competitive programs can promote an environment where projects competing with one another for support are forced to demonstrate how they can be more effective in advancing our performance measures and strategic goals. As projects that are most cost-effective, most innovative, and based on the best analysis show that they can win additional financial support, the entire culture of transportation infrastructure investment is pushed toward a more data-driven, outcome-oriented framework.

The Secretary has proposed five national transportation goals as part of the Department's Strategic Plan – Economic Competitiveness, Safety, State of Good Repair, Livability, and Environmental Sustainability. If we want to achieve these goals, we need to be able to direct our transportation funds toward whichever mode of transportation – or combination of modes of transportation – can most effectively achieve those goals. So we need to step away from the traditional stovepiped approach to transportation funding. An Infrastructure Bank provides an important opportunity to compete projects in a way that breaks away from these stovepipes.

Finally, we need to make sure that the process of deciding which projects to invest in is based on the best analysis possible. If we want to use transportation infrastructure to grow the economy, we need to use economic analysis to find out which projects will have the greatest impact on economic growth. In order to achieve and maintain a state of good repair for the Nation's transportation infrastructure, we need to use asset management systems to develop a complete inventory of our transportation assets and analyze what stream of maintenance, repairs, and rehabilitation will maintain a state of good repair over the life-cycle of the infrastructure at the lowest possible cost. If we have specific goals that we are trying to achieve, we need to use economic analysis to determine which projects will achieve those goals in the most cost-effective way possible.

The surface transportation program also needs to take advantage of all the financing options available to us. Some parts of the transportation system can generate a revenue stream that can pay for the project without tax revenues. For these projects, the government may need to advance the money up-front, at least in part, but then the taxpayer can be paid back from the revenue stream that the project generates.

So we need a financing institution that can provide a range of financing options – grants for projects that by their nature cannot generate revenue, and loans and loan guarantees for projects that can pay for their construction costs (or part of their construction costs) out of a revenue stream. In short, we need the Infrastructure Bank that the President has proposed.

The Infrastructure Bank can be designed to embody all of the key elements I have described. It can avoid the excessive stovepiping of funds into narrow categorical programs. It can be focused on directing its investments toward achieving the strategic goals that the Congress designates. It can be provided with a professional staff that can focus its attention on meeting national and regional transportation needs. It can have a broad modal scope, so that it can invest funds in whichever mode of transportation – land, water, or air – is most suited to achieving our strategic goals. It can apply the tools of economic analysis to select projects that can be demonstrated to have the greatest possible impact on those goals. It can foster an environment of competition and innovation that will encourage the best projects to be funded. And it can offer the combination of financing options – grants, loans, and loan guarantees – that will allow it to leverage public funds and get the best results from our limited budgetary resources.

We recognize that these proposals represent a major change in how we have envisioned our transportation program in the past. But we pledge to work with the Congress to design this program and to figure out the best way to pay for it.

<u>Creating Jobs</u>

The President's new plan will build on what we have already accomplished in the American Recovery and Reinvestment Act. That Act embodies these twin goals in its title – short-term job opportunities to achieve recovery, and long-term economic growth based on reinvestment.

We are making good progress on using our Recovery Act investments to create jobs. As you know, the measurement of the jobs created under the Recovery Act is subject to two different sections of the Act, each of which calls for a slightly different measure of the number of jobs created. Section 1201 of the Act (which applies only to the Department of Transportation) calls for DOT to measure the number of "job-years" created by the Act. A "job-year" is one person working for one year. So if a project keeps 100 people working for 2 years, it creates 200 job-years. Section 1512 of the Act is less clear – it asks us simply to measure the number of "jobs." This has been interpreted as meaning the number of full-time-equivalent jobs that have been created by the Act. Returning to our example, if 100 people are employed for 2 years on a project, then the full-time-equivalent number of jobs is 100. So it is easy to see that the varying statutory language in the two sections of the Act can result in two different measures of the number of jobs created.

But the important point is that jobs have been created, by either measure. Our measure of the number of job-years created has risen steadily as more projects have been started and completed. In our first report on job-years created, as of April 30, 2009, the program had just started, and only a few projects had broken ground. We recorded only 130 job-years. In our second report, as of July 31, 2009, we had begun to make a real impact, with 15,000 job-years created. In our third report, as of January 31 of this year, we were up to 95,000 job-years. As of September 10, we estimate that we had created over 208,000 job-years.

The number of full-time-equivalent (FTE) jobs, by contrast, is higher during the peak construction season in the summer, and then falls during the off-peak period in the winter. Unlike job-years, FTE jobs can't be added from one time period to another – they are a snapshot of the number of people working the equivalent of full-time at any one point in time. So our first report, for the period through September 30, 2009, showed an average of 46,000 people employed full-time between when the Act was signed on February 17th and the end of September. In our second report, for the period through December 31, 2009, FTE employment had fallen to 40,000 employees, because projects were shutting down for the winter. The numbers for the first quarter of 2010 showed an even lower estimate, 34,000 employees, because two of these three months were winter months. The most recent estimate, for the second quarter of 2010, showed FTE jobs bouncing back up to 62,000 as spring and early summer weather made it possible for construction projects to get started again, especially in the northern states. Moreover, in creating jobs we are also creating skills. These jobs provide on-the-job training for our construction workforce that will make it easier for them to find good-paying jobs in the future.

While we have created thousands of jobs already, additional opportunities remain. Almost all of the funds appropriated to DOT under the Recovery Act have been committed to specific projects, but much of the project funding will continue to be spent over the coming year, creating hundreds of thousands of new jobs. Some states emphasized the "Recovery" part of the Act, and spent their money quickly on projects that could be started and completed in a few months. Other states emphasized the "Reinvestment" part of the Act, and chose to spend their funds on more complex projects that could create greater long-term improvements to their economies, but which took longer to plan and execute. These projects will not be completed until next year, and they will continue to create jobs through 2011. We knew when the Recovery Act was designed that this would be a long recession. The Recovery Act will continue to create jobs in 2011 and 2012 and continue to help the economy to recover. We estimate that the DOT portion of the Recovery Act will create 523,000 job-years, so we have plenty of jobs left to create in 2011 and 2012.

Growing the Economy

Infrastructure investment doesn't just create jobs – it grows the economy over the long term. There is an extensive economic literature that bears out this observation. Let me give you a few examples.

First, if you look back in history, the effect of our transportation investments on growing the economy is undeniable. In the 19th Century, investments in canals and railroads opened up the agricultural lands of the Midwest and allowed the productive bounty of that land to be shipped to markets in the East and abroad. In the 20th Century, the construction of the Interstate Highway System and our network of hub airports made possible convenient, long-distance automobile transportation and high-speed, long-distance air passenger transportation. The taming of the Mississippi River system with locks and dams made possible low-cost barge transportation of Midwest grain to export ports. More than two hundred years ago, Adam Smith grasped the essential role of transportation in the economy when he observed that

> "The greatest improvements in the productive powers of labor . . . seem to have been the effects of the division of labor, [and] the division of labor is limited by the extent of the market."

He then went on to explain how transportation improvements in 18th century Britain expanded the extent of the market and allowed the British economy to grow.

Second, the Department has sponsored research that quantifies the impact of transportation investments on the growth of the economy. In a series of studies conducted by Ishaq Nadiri and Theofanis Mamuneas, our research has estimated that our expenditures on transportation infrastructure have had a huge payoff on economic productivity.[1] On the average, from 1949 to 2000, investments in transportation infrastructure had a 31 percent rate of return. This rate was particularly high when we were first building the interstate highway network, when we had rates of return as high as 48 percent. But even more recently, in the 1990's and 2000's, we have had rates of return of 6 – 16 percent.

Third, in urban areas, improvements in transportation infrastructure have impressive economic effects. Studies by Glen Weisbrod and his colleagues in the Chicago and Philadelphia metropolitan areas showed that investments in transportation infrastructure that reduced travel times by as little as 10 percent would reduce business operating costs in Chicago by $980 million and in Philadelphia by $240 million each year.[2]

---

[1] The most recent of these is Theofanis P. Mamuneas, "Contribution of Highway Investment to National Economic Growth" (Federal Highway Administration, July 2008).

[2] Glen Weisbrod, Donald Vary, and George Treyz, "Economic Implications of Congestion," National Cooperative Highway Research Program Report #463 (Transportation Research Board, 2001).

Fourth, more recent research by Daniel Graham of Imperial College, London, has shown that, in urban areas, "agglomeration effects" of reducing the costs of travel and freight transportation increase productivity.[3] Businesses are more productive when it is easy for them to ship goods to one another and to travel to one another's offices and facilities. Even after taking into account the time savings for freight and passenger transportation from transportation investments, there is a further 25-percent increase in productivity resulting from these agglomeration effects.

We have seen these effects in the transportation projects we have reviewed as part of our TIGER Grants program. When the Congress authorized the TIGER Grant program last year, and we issued guidance to applicants, we wanted to make sure that we could choose the best projects possible. To achieve this, we required applicants, at least for the larger projects, to do a careful analysis of the benefits and costs of their proposed projects. We then organized a team of economists from within the Department to review those analyses and make sure that their estimates were valid. The results gave us confidence that the projects we were selecting were truly the best projects available.

We repeatedly found projects that had measurable benefits well in excess of their costs. For example, the Priority Bus Transit project for Washington, D.C. had benefits as much as 6 times its costs. The Kansas City Transit Corridors project had benefits equal to at least twice its costs. Several other projects were in the same range. We can invest in these projects confident that we are getting our money's worth.

We want to emphasize that growing the economy is not the only factor that influences our choices of transportation projects. Not all of the benefits of transportation projects can be translated into dollars and cents. Many of the elements that make our urban areas more livable – sidewalks and trees and multiple transportation options – are difficult to assign dollar values to. And we take these kinds of benefits seriously, too. But we also pay attention to the effects of transportation on increasing the number of dollars in our pockets – dollars that enhance our economic security and our sense of well-being.

It's plainly apparent that the Nation's economy is not producing the prosperity that we all expect. There are, of course, many reasons for that, including defects in our financial markets and excessive financial leverage that many consumers were encouraged to engage in during recent years. But clearly one contributing factor is that we have not allocated the Nation's public investment well. We have not invested enough in the public infrastructure that generates demonstrable returns in increased productivity, while we have invested too much in projects whose value was supported more by speculative expectations than by demonstrable contributions to productivity. It's time to refocus our investment priorities toward projects of enduring value –

[3] Donald J. Graham, "Agglomeration, Productivity, and Transportation Investment," *Journal of Transport Economics and Policy*, v. 41, pt 3 (September 2007), pp. 317-343.

projects that make a solid contribution to our Nation's economic well-being. The Department of Transportation stands ready to play its part in that effort.

Thank you, Mr. Chairman, for this opportunity to appear before you. I would be happy to respond to any questions that you have.