

POTENTIAL APPROACHES FOR TRANSPORTATION INVESTMENT

Our nation's transportation system is a product of the 20th century and must be modernized to reflect our current economic, environmental, and societal needs. Across the country, interstates, bridges, railroads, transit, walkways, and bike paths are deteriorating, putting public safety at risk. Many Americans live and work in places where using a car is the only viable transportation option. In an era of unstable gas prices, this leaves families vulnerable because they lack efficient and safe ways to reduce their transportation costs. The Recovery Act allows states to target transportation investments that strengthen existing communities by leveraging the productivity of existing transportation systems. Prioritizing repair of deteriorating infrastructure and investing in transportation choices can provide more job opportunities and long-term benefits. Such a focus can also help communities enhance their economic competitiveness and quality of life.

The Recovery Act provides \$63 billion for investment in infrastructure, including \$46.7 billion for surface transportation projects. The transportation investment includes:

- Highway Infrastructure Investment: \$25.7 billion
 - Funds must be allocated to states, metropolitan planning organizations, or transit agencies by March 10th, 2009, and priority is given to projects that: (1) can be completed in three years and (2) are located in economically distressed areas.
- Surface Transportation Investment: \$1.5 billion³
 - Program grant criteria must be published by May 18th, 2009, and applications for funding must be submitted no later than November 14th, 2009.
- Transit: \$8.4 billion
 - The Federal Transit Administration must allocate funds to states and transit agencies by March 10th, 2009, and by September 5th, 2009, 50 percent of any unobligated funds will be reallocated.
- Intercity Passenger Rail: \$8 billion
 - By April 18th, 2009, the Secretary of Transportation must submit a strategic plan to Congress describing how funding will be used and must issue interim guidance to grant applicants by June 17th, 2009.
- Amtrak: \$1.3 billion
 - Funds must be awarded by March 19th, 2009, and projects must be completed within two years.

Several estimates of infrastructure needs suggest that the total cost of proposed projects is likely to exceed the amounts approved in the Recovery Act. For example:

- In its 2009 *Report Card for America's Infrastructure*, the American Society of Civil Engineers reported that our nation's infrastructure requires \$2.2 trillion in repairs and upgrades over the next five years to bring it to satisfactory conditions and to allow for future growth. ASCE estimates an annual need of \$17 billion for bridges, \$186 billion for roads, and \$15.8 billion for transit.⁴

- The Federal Highway Administration estimates that \$512 billion is needed over the next five years to restore America's deteriorating bridges, roadways, and transit systems.⁵
- The House Appropriations Committee estimates that states have over 5,100 "shovel ready" highway and bridge construction projects that will cost more than \$64 billion—well over the \$46.7 billion investment made possible through the Recovery Act.

POSSIBLE CRITERIA

This gap between needs and available resources for transportation investment raises the question of how projects will be selected. As states and local governments make these decisions, they will need to prioritize the shovel-ready projects most likely to achieve the best short- *and* long-term outcomes. To aid in prioritization, states could apply the following criteria to funds allocated for Highway Infrastructure Investment in the Recovery Act:

- 1. Fix existing bridges and roads before building new ones.** States could require that Highway Infrastructure Investment funds from the Recovery Act be spent to repair deficient bridges and roads before investing in new bridges, new highways, or additional lane capacity. Each state could stipulate that all bridges and highway lane miles in its system must be brought up to an adequate standard before funds are allocated to expanding capacity. For example:
 - The Highway Bridge Program's definition of "deficient"⁶ or a state-specific rating program such as California's Bridge Health Index⁷ could serve as a benchmark for bridge deficiency.
 - States could also use the International Road Roughness Index to define deficient highways (for example, over 200 inches of rough, cracked, or road disrepair per mile).⁸
- 2. Direct Highway Infrastructure Investment funds to enhance road networks in existing communities and to accommodate walking, biking, and transit use.**
 - States and metropolitan planning organizations could allocate a minimum of 10 percent of highway funds in the economic stimulus bill to support pedestrian and bicycle facilities and other improvements, following existing federal transportation formulas.⁹
 - States and metropolitan planning organizations could allocate an additional 50 percent of highway funds to enhance local street networks and to expand transit service in existing communities, which is consistent with the existing Surface Transportation Program.¹⁰
- 3. Exclude right-of-way purchases.** States could restrict Highway Infrastructure Investment funds from being spent on the acquisition of real estate for new highways or additional lanes. The purchase of right-of-way is often a large share of total project costs for new highways and does little to create jobs.

EXPECTED BENEFITS

By using these criteria to prioritize transportation investments, states can achieve the following outcomes:

- **Job creation:** Prioritizing transportation projects that maintain and upgrade existing infrastructure and enhance transportation networks in existing communities will put more people to work than purchasing real estate for additional highway capacity.
 - The American Society of Civil Engineers estimates that, on average, every \$1 billion invested in transportation infrastructure supports 35,000 jobs.¹¹
 - An analysis based on the U.S. Department of Transportation's job-creation model estimates that road and bridge maintenance and repair creates 9 percent more jobs than construction of new road capacity, and construction of new public transportation creates nearly 19 percent more jobs than on new road projects.¹²

- **Long-term benefits:** Fixing existing infrastructure before investing in new will ensure that communities can leverage, preserve, and enhance their past investments in roads, highways, and rail lines. A "fix-it-first" approach will ensure that transportation networks are safe and reliable for current and future users. Investing in existing communities could also save valuable taxpayer money while improving the region's economic performance.
 - For example, a study by the Brookings Institution reports that compact development and investments in the urban core in the next 25 years could save governments 12 percent, or \$110 billion, in road-building costs—a significant savings in avoided infrastructure.¹³
 - Through its State Development and Redevelopment Plan, which directs new growth to existing neighborhoods through redevelopment and infill, New Jersey is expected to save around \$870 million in local road infrastructure costs.¹⁴

- **Sustainable outcomes:** Ensuring that transportation investments support walking, biking and transit use will enable communities to reduce their carbon emissions while increasing transportation choices and improving quality of life.
 - For example, a recent study estimated that U.S. transit use in 2005 avoided more greenhouse gas emissions than are generated by the entire state of Delaware.¹⁵
 - The amount of emissions saved by bicycle commuters in Minneapolis is equal to converting 12 percent of the region's vehicle fleet to hybrid vehicles.¹⁶

If transportation investments in the Recovery Act are not directed toward maintaining the current system and improving the range of choices, many short- and long-term objectives will be undermined. In direct terms, adding more lane miles to the system increases the future cost of maintaining it. Investment in new highways also encourages more spread-out development in areas not already served by public infrastructure. People living and working in these far-flung communities drive much more than those who live in the older suburbs or cities.

The difference that investment priorities can make for climate change is also stark. A recent study estimates that spending \$30 billion on building new highways would increase greenhouse gas emissions by at least 170 million metric tons over the next 50 years. The same investment, if targeted towards road maintenance, would increase emissions by only 19 million metric tons over the same time period. If funding was spent on building new light rail, emissions would drop further to an increase of only 4 million metric tons.¹⁷

RESOURCES

Many states and communities across the country have already taken the lead on prioritizing transportation investments to achieve their goals. The following examples illustrate how the transportation investment in the economic stimulus bill could help communities achieve multiple objectives:

- **New Jersey Fix it First Policy:** The state of New Jersey has embraced a fix-it-first policy where transportation funds are targeted to repair and upgrade existing transportation infrastructure. This policy was written into the state's Transportation Trust Fund Law as amended in 2000¹⁸ and further supported by an Executive Order signed in 2003.¹⁹ The New Jersey's Future in Transportation program complements the state's legislated fix-it-first policy by continuing to focus capital investments to support a healthy, intermodal transportation system.²⁰
- **Pennsylvania and New Jersey Smart Transportation:** The Pennsylvania and New Jersey Departments of Transportation partnered to develop a Smart Transportation Guidebook to integrate the planning and design of streets, highways, and transit. The Smart Transportation Guidebook, which was published in March 2008, outlines how to plan and design roadways that support multiple transportation modes and fit within the context of existing communities.²¹
- **Massachusetts Commonwealth Capital Policy:** The Commonwealth Capital Policy coordinates state capital spending programs to foster sustainable development and conservation across the state. The policy requires municipalities seeking funding from 14 different state programs to submit an application to the Commonwealth Capital program. The goal is to ensure that the projects under consideration are consistent with statewide smart growth and smart energy principles. The policy ensures that state spending focuses investments on existing water, sewer, road, transit, and park infrastructure by linking state spending programs with municipal land use practices. The commonwealth of Massachusetts also uses a Smart Growth Scorecard to prioritize infrastructure and development projects in the state.²²