

Authorization Priorities

Executive Summary

Funding and Finance Priorities

Increase revenue flowing into the Highway Trust Fund: Congress should provide additional revenue for the federal highway, transit, and safety programs to prevent significant cuts in the next authorization period.

Expand innovative financing tools: States and local governments need expanded tools to help finance major capacity expansion and reconstruction projects. Congress should provide increased flexibility for using tolling and public-private partnerships, and provide additional innovative finance mechanisms such as tax credit bonds.

Explore alternative funding mechanisms to supplement or replace the gas tax: Over the next several decades fuel efficiency improvements will erode the ability of the gas tax to finance the surface transportation program. Congress should begin exploring new funding mechanisms that could supplement or replace the gas tax and fund research and development of new options.

Investment Priorities

Invest resources in preserving and rebuilding the existing system: Current funding levels don't even cover maintenance and preservation of the existing system. Congress should make a significant reinvestment in the nation's aging surface transportation system, particularly bridges, to bring it up to a state of good repair.

Target earmarks to deliverable projects that are strategic investments in Oregon's transportation system: Because of the scarce resources available to the state and local governments, earmarks should be secured to help deliver priority projects that are strategic investments in Oregon's transportation system, both on local roads and state highways.

Invest in multi-modal solutions to the challenges of freight mobility: In order to preserve a strong economy and support interstate commerce, Congress should increase investment in projects that improve freight mobility across a variety of modes.

Improve public transportation: In the 21st century, public transportation must play a larger role in the nation's transportation system. Congress should invest additional resources in interurban bus and rail programs, senior and disabled transportation, and public transportation within urban and rural areas.

Increase funding for federal lands transportation programs: Providing access to Oregon's vast tracts of federal lands imposes large costs on state and local governments that derive very little revenue from these lands. Congress should expand the investment in federal lands transportation programs.

Program Reform Priorities

Shift to an outcome-based program focused on supporting national goals: Congress should create a surface transportation program that is focused on key areas of national interest,

concerned more with on outcomes and improved system performance, and more flexible and mode neutral.

Improve highway safety: Congress should take steps to reduce the number of Americans who die in highway crashes each year. Congress should set a fatality reduction goal and provide financial incentives for states to achieve this goal.

Streamline regulatory processes to improve project delivery: Too often regulatory and environmental processes required under the federal-aid highway program hamper the ability of states and local governments to deliver projects in an efficient manner without necessarily improving project outcomes or environmental quality. Congress should shift to a more outcome based approach that focuses on green outcomes, not red tape.

Reform the bridge program to better target resources to priority bridges: Congress should improve the ability of states and local governments to target the highest priority bridge repair and replacement needs by shifting to a risk-based inspection program and waiving prescriptive rules on investing resources.

Make the existing transportation system work more efficiently: Infrastructure solutions alone will not be adequate to meet all of America's transportation challenges. The federal government should encourage states and local governments to implement non-infrastructure solutions such as wider deployment of Intelligent Transportation Systems (ITS) and consider the use of congestion pricing where it may be appropriate and valuable for managing demand.

Encourage climate-friendly transportation solutions: Congress should seek to reduce the transportation system's greenhouse gas emissions by encouraging reductions in vehicle miles traveled (VMT) through strategies such as expanding public transportation, pricing to manage demand, Transportation Options programs that reduce single occupancy vehicle use, and financial incentives to states and local governments that reduce VMT.

Introduction: A Pivotal Moment for Surface Transportation

America's surface transportation system, long the envy of the world and a major factor in the nation's economic dynamism, is at a crossroads. The system built in the 20th century is coming under growing strains, and the need for greater investment by all levels of government is becoming increasingly clear. Even as we face this need for increased investment, however, the resources at our disposal are flat or declining.

Increased investment is only part of the answer, however; additional resources must be combined with a fundamental change in how we do things. The 20th century's transportation system, which served a growing nation so well, must shift to one that meets the needs of the 21st century, and our approaches to addressing transportation challenges must change as well.

This is a pivotal moment for the surface transportation system, a time when the nation must choose whether it will muster the political will to rededicate its substantial resources to maintaining and improving the transportation system and decide whether it can cut through the bureaucracy and interests that have encrusted the surface transportation program.

Into this debate, the National Surface Transportation Policy and Revenue Study Commission, a panel chartered by Congress in SAFETEA-LU, has injected new thinking. The Commission's report puts forward a fresh and compelling vision for a federal surface transportation program that has lost some of its vitality in recent years. The Commission recommended:

- Significantly increasing federal and state investment in surface transportation;
- Streamlining project delivery processes to ensure that projects can be delivered on time and at significantly reduced cost without sacrificing environmental quality;
- Refocusing the federal surface transportation program on important national priorities and directing investment based on a national surface transportation strategic plan;
- Investing significant resources in moving freight by a variety of modes;
- Investing in 21st century solutions such as high-speed rail between major urban centers;
- Creating a more performance-based federal program with an emphasis on outcomes rather than process;
- Beginning the transition from the gas tax to a new funding mechanism.

The Commission's report should be a strong foundation for the work Congress will undertake in the next authorization bill.

The Need for Increased Funding

America faces a major transportation funding shortfall. Current transportation funding levels are causing our highways to slowly deteriorate. Simply maintaining the condition and performance of the highway system so that we do not allow road conditions and congestion to grow worse will require increasing our national investment in transportation over the next decade by more than one half *trillion* dollars. The amount needed to actually *improve* the system's performance and reduce congestion is more than twice as much. In Oregon, the story is similar. The Oregon Transportation Plan estimated that Oregon faces a *\$1.3 billion* annual gap in the funding needed to adequately maintain and expand the state's interconnected system of state, city, and county roads and other transportation modes over the next several decades.

Even as population growth and rising volumes of freight increase the need for investment in transportation projects, funding for highway and transit programs will be constrained due to a number of factors, including the imminent exhaustion of the balances in the Highway Trust Fund's Highway Account, the declining purchasing power of the federal gas tax, and revenues that will lag behind growth in traffic due to increased fuel efficiency.

Increasing Need for Transportation Investment

A number of factors are increasing the need for investment in Oregon's transportation system.

Over Capacity Highways: Virtually all of the state's highways were built decades ago to handle a smaller population and traffic volumes that were much lower than those we now face. Rapid growth in traffic has used up the excess capacity on many highways.

Rising Truck Volumes: As foreign trade becomes a larger component of America's economic activity, freight volumes are rising rapidly. By 2030, freight volumes are projected to rise by 80 percent, and most of this will travel by truck.

Rapid Population Growth: Oregon's population has grown rapidly in recent decades and is expected to continue growing at rates significantly above the national average. Even though people are driving less in the face of high gas prices, overall traffic volumes in Oregon will hold relatively steady because more people continue moving into the state.

Aging Infrastructure: Highways and bridges, like people, face increasing problems as they age: pavement cracks, roadbeds fall apart, and bridges begin to deteriorate. With the Interstates now half a century old, much of the state's highway system has aged so much that it is failing and needs to be repaired or rebuilt. Unfortunately, inadequate resources have led to a significant backlog in needed reconstruction.

Inadequate Resources

Even as Oregon and the nation face an increased need for transportation investment, the states and the federal government are confronted by the prospect of reduced resources to maintain and expand the transportation system.

Flat Fuel Taxes: Taxes on gas and diesel in Oregon and at the federal level, which provide most of the funding for surface transportation, have not been raised since 1993. As a result, gas tax receipts at the state and federal level have grown only modestly and have not kept up with growing needs.

Rising Construction Costs: Construction costs have soared in recent years due to rising prices of key materials such as asphalt and steel. As a result, every dollar spent on highway and road construction in 2008 buys just half of what it did in 2003.

Exhaustion of the Highway Trust Fund's Balances: Balances in the Highway Trust Fund's Highway Account will soon be exhausted, and Congress will be forced to either raise additional revenue or cut annual funding for highways by \$6 billion or more below current levels—leading to a reduction of about \$65 million in Oregon's annual federal highway funding. While the Mass Transit Account does not face as immediate a crisis, the long-term shortfall for federal public transportation programs is even greater than for highways.

[Insert chart showing funding levels in future]

Increases in Fuel Efficiency: High gas prices are already leading people to purchase more fuel efficient vehicles, and higher federal mileage standards are expected to accelerate this trend. As a result, states and the federal government will collect less gas tax revenue for every mile people drive.

Priorities For Authorization

Funding and Finance Priorities

With enormous needs confronting transportation agencies and dwindling federal resources to address these challenges, the next authorization legislation should focus heavily on how to pay for the investments needed to preserve and improve the nation's transportation system to further national goals and interests. In addition to raising additional revenue for the Highway Trust

Fund to prevent cuts in the highway and transit programs, Congress should expand financing tools available to transportation agencies and begin searching for options to supplement or replace the gas tax.

Increase revenue flowing into the Highway Trust Fund

With the Highway Account's balances nearly exhausted and the Mass Transit Account soon to follow, additional revenue equivalent to a 4-5 cent per gallon increase in the federal gas tax will be needed just to prevent cuts in highway program funding, while a larger increase would be required to address needs that are going unmet at current funding levels and to make up the purchasing power the gas tax has lost to inflation.

Oregon has traditionally been a donor state to the Highway Account that pays in more than it receives. Under SAFETEA-LU, however, the state has become a "donee" state. Because Oregon already receives a fair share of funding under the federal highway program, any increase in the federal funding flowing to the state and local governments will require increasing the total size of the surface transportation program and maintaining or increasing Oregon's current share.

While the vast majority of revenue for the Highway Trust Fund comes from the gas and diesel taxes, Congress could look to other sources, such as truck and vehicle fees, to provide additional resources.

- Oregon requires large trucks to pay their fair share for the disproportionate wear and tear they cause to the state's highways, but at the federal level the largest trucks pay only about half of their fair share. Congress could consider increasing fees already levied on large trucks or creating new user fees that would rectify this imbalance and dedicate these new funds to freight projects that would benefit the trucking industry.
- Most states derive a significant portion of their highway revenues from vehicle and driver fees such as license, registration, and title fees and vehicle excise taxes. The federal government could create similar fees to raise substantial amounts of money without increasing the cost of filling up the gas tank.

Expand innovative financing tools

Federal grant funding from the Highway Trust Fund will continue to be the life blood of the nation's surface transportation system. However, Oregon, like many other states, simply does not have the resources to fund large highway capacity expansion and reconstruction projects. In order to facilitate these important projects, Congress should consider expanding opportunities to use a number of innovative financing tools.

- *Tolling*: Tolling may be valuable for adding capacity on high-volume Interstate and urban routes. Congress should examine the current limitations on tolling and consider removing those that inhibit projects from moving forward.
- *Public-private partnerships*: Public-private partnerships (PPPs) can be valuable financing mechanisms when private sector equity can close a financing gap or when a PPP can shift significant risk to the private sector. Congress should consider making it easier for states to use this financing tool when it serves the public interest and enhances the national transportation system.

- *Tax credit bonds:* Tax credit bonds, such as the “Build America” bonds proposed by Senator Wyden and Senator Thune, could be an excellent way to supplement Highway Trust Fund revenues and construct nationally significant infrastructure projects.

Explore alternative funding mechanisms to supplement or replace the gas tax

As vehicles become more fuel efficient over the next several decades, the amount of revenue generated by the gas tax for every mile a vehicle travels will decline, leading to flat or even declining gas tax receipts. Congress and state legislatures may not want to spend the political capital necessary to raise fuel taxes to keep up with both inflation and fuel efficiency gains. The next authorization bill should explore transitioning to a new funding mechanism and fund research and development to determine whether there is a viable replacement for the gas tax. ODOT has explored the possibility of moving to a per mile user fee, which would ensure that all users pay for the system and would prevent revenues from falling due to improvements in fuel efficiency, and the National Surface Transportation Policy and Revenue Study Commission and numerous other policy groups have endorsed exploring moving toward a per mile fee.

Investment Priorities

Congress should seek to direct resources to a number of priority areas that would benefit Oregon and improve the nation’s transportation system.

Invest resources in preserving and rebuilding the existing system

The mounting needs of Oregon’s aging infrastructure and inadequate funding to meet these needs have led ODOT and many local governments to focus limited resources on preserving and rebuilding existing highways and bridges that are vital to the state’s economy and quality of life. The next authorization legislation should take up the challenge of preserving our nation’s aging infrastructure with a sustained commitment to rebuilding our critical transportation assets. In addition, expanding capacity on the highway system should focus primarily on strategic investments on existing corridors, including addressing bottlenecks.

As part of its commitment to preserving existing infrastructure, the next authorization bill should focus on sustaining increased funding for bridges. Of the 6700 bridges in Oregon, 427 are structurally deficient, meaning they have main supporting elements in poor condition. Another 1108 are functionally obsolete, meaning they cannot safely handle current traffic levels and conditions. The investment of nearly \$1.8 billion in state and local bridges under the three Oregon Transportation Investment Act (OTIA) programs has improved the condition of Oregon’s bridges and reduced the number of structurally deficient spans, but after the conclusion of the OTIA programs the condition of Oregon’s bridges will deteriorate if additional funding is not dedicated to bridge repair and replacement. Over time, more and more bridges will become structurally deficient, requiring weight limits that restrict the flow of freight. ODOT’s recent Bridge Needs Study of state highway bridges identified approximately \$373 million in annual bridge funding needs from 2011-2026—an amount nearly five times larger than ODOT’s current bridge program. And even if these large needs were met, bridges more than 50 years old would grow to more than 60 percent of state highway bridges—more than triple the level in 1999—and 14 percent of the state’s bridges would remain deficient.

[Insert photos of Isthmus Slough and I-5 Columbia River bridges]

Target earmarks to deliverable projects that are strategic investments in Oregon's transportation system

Earmarks have been used effectively by Oregon's congressional delegation to provide funding for important highway and transit projects. With limited funding available to meet all of the needs to preserve and expand Oregon's highways and transit systems, Congress should target earmarks to deliverable projects that address high priority needs throughout the state.

ODOT, the Association of Oregon Counties, and the League of Oregon Cities and other stakeholders agree on the following principles for earmarks.

- *Strategic Investment:* Earmarks should be provided for projects that are strategic investments that address problems on Oregon's transportation system, are included in or consistent with an existing transportation plan document or needs list, and have been identified as a local, regional or state priority. Projects should provide significant benefits to Oregon and its transportation system in areas such as economic development, freight mobility, environmental quality, congestion relief and mobility improvement, safety, and other priority areas.
- *Support:* Projects should have strong support, including support from local governments, area and/or statewide advisory bodies, the public, and the business community.
- *Readiness:* Projects should be developed enough to identify potential concerns and demonstrate that they have no known fatal flaws. Work on the project should begin during the timeframe of the transportation authorization legislation (2010-2015).
- *Funding:* Earmark funding, when combined with funding already committed to the project and additional available resources, should be used to complete a project or a project phase. Construction of the project may be structured in phases so that the earmark funds received will complete construction of a segment of the project.

Invest in multi-modal solutions to the challenges of freight mobility

Dealing with increasing volumes of freight is one of the challenges facing America's transportation system that cries out for federal attention and investment because of the federal government's interest in ensuring a strong economy and facilitating interstate commerce. In the next authorization bill, Congress should address the movement of freight by all modes, including highways, rail and ports, and improve the connections between these modes.

- *Create a Freight Account that would fund freight projects across modes:* Congress should consider creating a multi-modal Freight Account of the Highway Trust Fund that would dedicate revenues from increases in existing user fees as well as new fees to freight projects. For example, Congress could raise user fees paid by the trucking industry—including the diesel tax and other truck user fees—and put these revenues into a Freight Account to pay for a new highway program that could only be used for projects focused on highway freight-related projects. Other sources such as Customs duties or new freight fees—such as a fee for each container brought into the country—could be tapped to provide public investment in rail, port, and intermodal projects.

- *Fund a Projects of National and Regional Significance Program:* Many large highway projects that address freight bottlenecks have significant national or regional benefits but are of such a large size that they are difficult for a single state to finance. Congress should provide significant funding for the Projects of National and Regional Significance program in order to help states and metropolitan regions pay for major projects. Much like the transit New Starts program, such a program should focus large discretionary grants on projects that meet certain criteria, including congestion relief and improved freight mobility.
- *Create a High Priority Freight Corridor Program:* While freight moves on most of the nation's highways, certain highway corridors connecting gateway areas and large urban centers, such as Interstate 5 (I-5), face particularly high freight volumes and will be increasingly strained by future growth in truck traffic. Congress should consider creating a High Priority Freight Corridor Program that would invest additional resources in addressing freight bottlenecks and other challenges on the highway corridors that are the backbone of the nation's goods movement network, including I-5.
- *Tax credits for railroads:* The freight rail system faces serious congestion, limiting the ability of railroads to move additional freight. American railroads are engaged in an aggressive capital program to expand capacity on their systems, and providing regional short-line and large Class 1 railroads tax credits to offset the cost of capacity expansion projects could help increase rail capacity and take some of the burden off highways. Any federal assistance to Class 1 railroads such as Union Pacific and Burlington Northern Santa Fe should be coupled with reforms to ensure public investments benefit the transportation system and serve the public and shippers rather than merely increasing profits.

Improve public transportation

High gas prices, an aging population, increasing congestion, and growing concern over global climate change all point to the need for public transportation to play a larger role in the transportation system. Much of the new capacity added to the transportation system will need to come in the form of public transportation, including bus service, light rail, bus rapid transit, commuter rail, streetcar and high-speed passenger rail connecting major urban centers. The next authorization bill should invest additional resources to preserve current services and build new operating capacity in both urban and rural areas.

- *Urban area transportation:* Public transportation plays a major role in mobility in urban areas, and effective development of urban public transportation can create denser urban areas that reduce reliance on automobiles and decrease greenhouse gas emissions. Congress should significantly increase transit funding flowing to urban areas so public transportation can play a more significant role in solving transportation challenges within America's cities. Congress should increase funding for the Small Starts and New Starts programs so Oregon communities can continue to expand their transit systems, and these programs should be streamlined in order to reduce the difficulty of securing funds for important transit projects.

- *Interurban public transportation:* Public transportation service between major urban centers remains underdeveloped, in part because there is little federal support for this form of public transportation. The I-5 corridor in Oregon and Washington, for example, has limited interurban public transportation despite high volumes of traffic on the corridor. Congress should look for ways to help states and local governments expand public transportation between urban centers in order to provide additional transportation options, increase capacity on key corridors, and reduce greenhouse gas emissions. The National Surface Transportation Policy and Revenue Study Commission recommended creating a program to expand passenger rail service on major intra-regional rail corridors, including the Northwest Corridor from Eugene, Oregon to Vancouver, British Columbia. Congress should also provide resources for interurban bus service to complement passenger rail.
- *Rural public transportation:* People living in small towns and rural areas need public transportation for basic needs such as access to medical care, jobs, daily living necessities, educational opportunities, and social activities. However, large numbers of Oregonians live in communities with little or no public transportation. Congress should expand the federal government's support for rural public transportation to offer additional travel options in sparsely populated areas.
- *Senior and disabled transit service:* The aging of America will require a significant federal investment in transit service for seniors and the disabled if we are to reap the economic and social benefits of keeping our seniors independent and productive while allowing them to "age in place" in their chosen communities. Transit systems around the country are facing increased demand for federally-mandated (Americans with Disabilities Act) paratransit service for people with disabilities, and without additional federal support the added cost for this service often reduces the amount of fixed-route service a transit system can provide for the general public.

[Insert photos of buses, MAX, EmX, streetcar and Amtrak *Cascades*]

Increase funding for federal lands transportation programs

Providing access to Oregon's vast expanses of federal lands imposes large costs on state and local governments that derive very little revenue from these lands. The federal transportation program recognizes federal lands as a national responsibility, and Oregon annually receives an allocation of money that provides a portion of the funding needed to preserve and improve forest highways that provide access to national forest lands. Oregon receives a larger allocation of Federal Lands Highways program funding than any other state, and any additional federal investment in this program will provide significant benefits to the state and could help make up resources lost by Oregon counties due to the likely end of county timber payments.

Reform Priorities

The federal surface transportation program's current structure has been held up for criticism on a number of points: its block grant nature does not focus on achieving outcomes that support national interests and goals; its dozens of modally separated and fragmented programs are too prescriptive and inflexible; and regulatory requirements have delayed too many important

projects and driven up their costs. At this pivotal moment for the surface transportation system, the federal program should be refocused on supporting national goals and objectives and reformed into a less process-oriented and more flexible and performance-based program.

Shift to an outcome-based program focused on supporting national goals

The current surface transportation program is essentially structured as a block grant to states and local governments. Funding is awarded based on outdated formulas that do little to encourage better performance or reward good outcomes, and funding has very little connection to supporting national interests and goals. Too often programs are inflexible and mode-specific and do not allow funding to flow to the best solution to a transportation problem. For example, to address congestion on the I-5 corridor, ODOT could use federal surface transportation funding to build an additional lane on the freeway, but not to shift traffic to freight rail or public transportation, even if that were less expensive and had lower environmental impacts.

Congress should reform the current system to create a program that is:

- Focused on key areas of national interest, particularly improving safety, strengthening the economy and achieving environmental goals;
- Tied to performance and focused on outcomes, so that states and local governments would have incentives to improve the performance of the transportation system and achieve certain outcomes;
- Flexible and mode neutral, so resources could be invested in whatever can most effectively solve transportation challenges and meet economic, community, and environmental goals.

Improve highway safety

Each year nearly 43,000 Americans die in crashes on our roads and highways, and countless more are injured. The sheer number of lives lost in motor vehicle crashes should be recognized as a national crisis. The next authorization legislation should continue to improve the safety of our roads and highways.

- *Set a national goal for fatality reduction:* Congress should require the development of a National Strategic Highway Safety Plan that would refocus highway safety efforts and set a goal of cutting fatalities in half by 2030.
- *Shift to an outcome-based, performance focused safety program:* Current federal safety programs are fragmented and prescriptive. Funding is divided between numerous separate programs that come with strings attached, making it difficult to invest resources where they can have the greatest impact on reducing crashes, fatalities, and serious injuries. The next authorization bill should shift to a performance focused safety program that provides state and local governments broad flexibility to invest in the highest priority safety areas. In exchange for this flexibility, states should be held accountable for reducing highway fatalities and serious injuries and provided incentives for doing so.

Streamline regulatory processes to improve project delivery

Federal environmental laws contain rigorous protections that ensure transportation projects minimize and mitigate harm to the human and natural environment, and the federal-aid highway

program imposes significant requirements and don't recognize the differing nature of roads and geographies. Too often these requirements hamper the ability of transportation agencies to efficiently deliver projects, adding significant time and cost to projects, and often without a corresponding improvement in project outcomes. States and local governments often find that they can deliver projects faster and at lower cost if they do not use federal highway funding because they don't have to deal with the federal-aid highway design standards, procedures, and environmental processes—and yet those non-federal projects rarely result in impacts any greater than if they would have gone through the federal process. In the next reauthorization legislation, Congress should focus both on streamlining the federal-aid highway program's requirements and making it easier for transportation projects to navigate the environmental process without lowering the bar on environmental protection.

In addition to the project delivery streamlining proposals put forth by the National Commission, Congress should consider a number of steps:

- Focus on accountability for overall environmental and project outcomes, not following processes that may or may not make sense for a particular project.
- Move the Federal Highway Administration (FHWA) from a permitting role to a quality assurance role at a programmatic level, so the federal government would ensure environmental and other outcomes without having to oversee and approve every action.
- Reduce federal oversight and requirements for small-scale projects that use only a minimal amount of federal funds and have limited community and environmental impacts.
- Reform rules that which require federally-funded transportation projects to accommodate projected traffic volumes at least two decades into the future. The federal program should allow lower cost, smaller scale solutions to address immediate problems.
- Shift toward outcome-based design standards focused on achieving certain outcomes (like addressing safety problems) rather than “one-size-fits-all” requirements.
- Enable and encourage states to use programmatic permits that provide a single set of terms and conditions for a specific type of work and specify expected environmental outcomes.
- Encourage states to use a streamlined environmental review process that brings regulatory agencies into the project development process to identify and address issues at an early stage, such as the Collaborative Environmental and Transportation Agreement for Streamlining (CETAS) program that was pioneered by ODOT.

Reform the bridge program to better target resources to priority bridges

In addition to increasing funding for bridges, Congress should improve or preserve the ability of states and local governments to target scarce resources to the highest-priority bridge repair and replacement needs by making a number of changes to the bridge program.

- Reform the requirement that at least 15 percent of each state's allocation of Highway Bridge Program funding be spent on bridges that are not on the federal-aid highway system, primarily on low-volume local roads, which forces transportation agencies to fund lower priority projects and skip over important bridge needs. States that share funding with local governments at a rate proportional to their needs should be allowed to waive this requirement.

- Continue current flexibility that lets states and local governments select the highest-priority bridges for funding.
- Shift to a risk-based bridge inspection program that would allow states to define a risk-based inspection frequency and level of inspection based on the level of vulnerability rather than requiring that all bridges be inspected every two years, regardless of structural conditions or risk;
- Eliminate the ten-year rule, which limits the ability of transportation agencies to spend federal money on the same bridge within a decade.

Focus on making the existing transportation system work more efficiently

For decades, the *de facto* response to most transportation challenges has been an infrastructure solution such as building additional lanes or expanding an interchange. These will remain important, but infrastructure solutions alone will not be adequate to meet America's 21st century transportation challenges, particularly with the imperative of reducing greenhouse gas emissions looming over the transportation system. Faced with an inability to add capacity due to costs, policymakers will need to increasingly turn to solutions that reduce demand on the transportation system and make the existing system work more efficiently.

- *Intelligent Transportation Systems:* Intelligent Transportation Systems (ITS) applications can help make the existing work more efficiently and address congestion caused by traffic incidents. The Portland metro region has been a leader in deploying ITS solutions such as ramp meters and incident response vehicles, and use of additional tools such as intelligent signal systems that dynamically adapt to changing traffic conditions hold promise as well. The next authorization legislation should encourage development and deployment of the next generation of ITS applications.
- *Vehicle-Infrastructure Integration:* Vehicle-Infrastructure Integration (VII) initiatives—which will use advanced technology to allow communication between the roadway and vehicles—promise to improve operations of the highway system. While automakers have made significant advances with in-vehicle technology, VII remains in a very early state of development and will require congressional leadership in the next authorization bill to move forward.
- *Congestion Pricing:* Most parts of the transportation system have adequate capacity—except at peak commute periods. Across the world, transportation agencies are experimenting with charging higher rates for use of the transportation system at peak travel hours to encourage use of transit and shift non-essential trips to the off-peak period. While congestion pricing will have limited applicability, Congress should consider reducing barriers to implementation of congestion pricing so states and local governments can deploy it where it would be appropriate and useful in managing demand.

Encourage climate-friendly transportation solutions

The transportation system produces about 33 percent of the nation's greenhouse gas emissions, and road use is responsible for about three-quarters of these emissions. The next authorization legislation should invest resources and promote strategies to limit this impact by reducing the amount of vehicle miles traveled (VMT). While expanding public transportation in concert with implementing pricing or tolling could be one of the best ways to reduce VMT and thereby limit greenhouse gas emissions, a number of other strategies should be encouraged.

- *Land use/transportation integration:* The experience of Oregon and other states with integrating transportation and land use planning and decision-making has demonstrated that creating good land use patterns can help reduce demand on the road system. The next authorization legislation should look for ways to transplant elements of Oregon's successful experiment with land use/transportation integration so that federal transportation policy encourages land use patterns that improve rather than harm the transportation system and reduce VMT.
- *Transportation Options:* Transportation demand management tools that encourage reduced reliance on single-occupancy automobiles can be cost-effective solutions to addressing transportation challenges. Educational campaigns such as the "Drive Less, Save More" initiative undertaken in the Portland metropolitan region have helped reduce the number of miles people drive, and wider application of telecommuting, changing work shifts to avoid peak commute hours, carpooling, and other options could significantly reduce demand on the transportation system. Federal policy should encourage government agencies and the private sector to implement these initiatives.
- *Bicycle/pedestrian infrastructure:* The next authorization legislation should ensure there is adequate funding for bicycle and pedestrian infrastructure programs. Just as importantly, states and local governments should be encouraged to build bicycle/pedestrian infrastructure throughout their transportation system and create communities that encourage travel by these environmentally-friendly and healthy modes of travel by making them safe and convenient.
- *Incentives for VMT reductions:* Congress should set a goal of reducing per capita VMT by a certain amount each year and then set aside funding to award as a bonus to states and metropolitan areas that meet this goal.