

Executive Summary

“The occasion is piled high with difficulty, and we must rise to the occasion . . . So we must think anew, we must act anew, we must disenthrall ourselves and then we shall save our country.”

—Abraham Lincoln

Confronted by severe recession and economic breakdown, the United States reaches a pivot point for overhauling its dilapidated and outmoded infrastructure. The nation can either leverage crisis into opportunity for future growth by developing a new 21st-century infrastructure model, or backslide into more of the same: greater congestion, deteriorating road and transit networks, and the heightened probability of systemic water system failures.

Infrastructure 2009 warns that short-term stimulus funding for various road, transit, rail, and water projects offers no substitute for a concerted long-range U.S. effort to maintain national prosperity in a rapidly evolving and more competitive global marketplace. The report recommends a total revamping of how the country plans, funds, and implements infrastructure programs, using the following four-pronged approach:

SET A NATIONAL STRATEGY: The United States hasn't initiated a national infrastructure plan since the 1950s, when interstate highway construction began. Today, the country's challenges appear more complex and daunting, and many systems are either obsolete or crumbling and require rebuilding and reinvention. New transport networks must interconnect more efficiently to move goods and people through increasingly gridlocked global pathway cities. New corridors for passenger and freight rail must link to surrounding regional markets and merge into cross-national networks. Innovative new transit schemes, connected to airports and train stations, must help reduce car dependence, prevent bottlenecks in commercial centers, and decrease pollution. The country also needs to plan for 110

million more people by 2050, including provision for water and power in more densely populated metropolitan areas and regions. The President and Congress should move expeditiously to develop a bold national infrastructure agenda for implementation beginning in 2010.

PLAN HOLISTICALLY: Imperatives for reducing congestion, cutting carbon footprints, decreasing foreign oil dependence, and ensuring water supplies require thoughtful integration of transportation, energy, and environmental programs with land use planning and housing policy. Where people choose to live and work and how they travel will often be determined by the cost and convenience of various transport options. Planners need to encourage development of more compact, pedestrian-friendly neighborhoods tied into transit networks, connecting to commercial hubs. Road systems alone can no longer handle traffic volumes from spread-out suburbs, many of which develop their own urban nodes.

REVAMP GOVERNMENT: Federal, state, and local governments must restructure transportation, housing, water, and energy agencies to manage and execute infrastructure policy in concert. The White House should develop a national infrastructure strategy, working with a high-level commission of policy experts to select merit-based projects that fit objectives. States must break down silos and impasses between various transport agencies and land use authorities to formulate effective long-range regional plans, which coordinate with federal programs and tie into national networks.

CHANGE FUNDING APPROACHES: New infrastructure networks and necessary repairs will cost trillions of dollars to complete over the next two decades. The United States should establish an American Infrastructure Bank to help finance national networks, attract more private capital, and advance public/private partnerships. In addition, funding burdens must shift from taxpayers to users since depleted government coffers will not sustain initiatives. There's no alternative: gas taxes must increase and innovative user fee approaches adopted, including vehicle miles traveled charges. Smart metering technologies must be installed in homes and businesses for power, heating, and water. These approaches not only raise revenues, but also help people adjust behaviors to realize more economically efficient travel and use of resources. Future federal funding to states and local governments must link more directly to carrying out national objectives for infrastructure policy.

The report also recommends:

- **Focus stimulus funds on repairs**—Fix-it-first programs can prevent major breakdowns and costly dislocations. It's better to spend these monies on averting catastrophes than on new projects before the government has established a national plan. Candidates for funding range from rusting bridges and overpasses to outmoded water treatment plants and structurally deficient levees. And repair needs dwarf stimulus allocations—much more funding will be needed.
- **Direct infrastructure planning and funding at global pathway cities**—These gateways concentrate the nation's economic activity and must have the capacity to accommodate increasing populations as well as greater volumes of travelers, cargo, and goods.
- **Invest in national assets**—The country's major ports and international airports need upgrading to meet standards set by facilities in other world markets. The nation must also refashion its freight networks serving ports and airports and finally enter the age of high-speed rail, which could help reduce road and airport congestion.
- **Reconfigure suburbs**—Urbanizing suburbs in major metropolitan areas require new planning frameworks that can help reduce car dependence and accommodate more compact communities. Transportation and land use planning must integrate on a regionwide basis to serve multinucleated urban centers and manage future growth.
- **Borrow from global competitors**—The United States could benefit by adopting strategies implemented by its global competitors to improve connectivity, create efficiencies, and fund projects. Among concepts worth studying and applying: the European Union's integration of transport networks, the European Investment Bank, Germany's freight tolling system, Canada's federal funding of provincial and local projects to promote national goals, Bogota's fast buses, as well as Europe's and Asia's high-speed rail.