Recent headlines tell a pretty scary story: Caterpillar, 20,000 jobs, eliminated; Home Depot, 7,000 jobs, gone; Sprint Nextel, 8,000 positions, axed; "Lending Drops at Big Banks;" "Recession Batters Law Firms," Economic pain to be 'worst in 60 years.' The list goes on.

The bottom line is that the national and global economic downturn is worsening and there is very little evidence that private sector spending alone can reverse the downward spiral. In response to the economic emergency, the Obama administration and the newly convened 111th Congress are collaborating on an $825 to $880 billion economic stimulus package called the American Recovery and Reinvestment Act (H.R. 1/S. 1). Two-thirds of the legislation's spending will be dedicated to direct spending in the form of public works, energy infrastructure, social spending, broadband deployment, and health information technology. The remaining one-third will be dedicated to individual tax cuts and business tax incentives. The plan is to spend out the $825 billion over a two-year period. The purpose is to cushion the blow of what is shaping up to be a deep and severe economic recession. To put the $825 billion spending package in perspective, consider that in fiscal year 2008, the total regular discretionary budget of the United States government (excluding mandatory entitlement spending accounts for Medicare and Social Security) was $931 billion.

This article addresses various issues associated with the American Recovery and Reinvestment Act that is moving its way through the United States Senate and House of Representatives, including the anticipated timing of the legislation, the type of public works spending envisioned in the bill, the expected impact of emergency public works spending on the construction industry, and whether the legislation is being drafted in such a way as to maximize economic and job creation impact.

Legislative Process and Timetable

House and Senate Democratic leaders want to have the final version of the American Recovery and Reinvestment Act on the president's desk for signature by the President's Day recess that begins on February 13. Both Senate Majority Leader Harry Reid (D-Nevada) and House Speaker Nancy Pelosi (D-California) have threatened to keep both chambers in session during the President's Day recess if the legislation is not done by then. To reach the President's desk, however, the legislation must travel the lengthy legislative process in both the House and Senate – committee consideration, floor debate, conference committee, final passage, and presentation of the final bill to President Obama for signature.

In addition to the legislation's procedural requirements, policy disagreements between the two political parties and among the Democratic majority could slow down the process. While both parties agree on the need for an economic recovery package, Democrats and Republicans differ on the means to achieve that goal. First, Republicans believe that the legislation gives short shrift to tax cuts for businesses and individuals. Secondly, they argue that direct public works spending will not maximize the job creation impact economists claim will be necessary to counter the debilitating effects of economic recession. This has become a major point of contention between the two political parties, but as will be discussed in greater detail below, Democrats have included provisions they claim will accelerate public works spending. In addition, a bipartisan consensus is forming in the Senate to provide more relief for the
housing sector and possibly eliminate funding considered non-stimulative. Despite these policy
differences, the popularity of the new president and public demand for action on an economic "stimulus"
will likely override resistance to the legislation and lead to enactment of a final package later this month.
Thus, the amount and type of direct public works spending in the legislation are expected to stay fully
intact.

The Stimulus Package

The following areas will probably have the greatest impact on the construction industry. Below is a list of
the broad categories of programs and activities for which direct public works stimulus funding will be
provided under the pending House and Senate stimulus legislation (the amounts are approximate).

- $27 billion to $30 billion in highway construction
- $5 billion for miscellaneous surface transportation investments
- $19 billion for clean water, flood control, and environmental restoration investments
- $8.4 billion to $10 billion for transit projects
- $1.3 billion for rail transportation
- $1.3 billion to $3 billion in airport construction
- $6 billion for sewer, wastewater, and drinking systems
- $1.4 billion for rural water and waste water facilities
- $16 billion for school modernization
- $6 billion for Corps of Engineer and Bureau of Reclamation projects (dams, inland waterways, ports
  and harbors)

As currently drafted, the legislation will rely upon the existing statutory formula that distributes the bulk
of funding to the states, which in turn reallocates the funds to project sponsors. These formulas and
funding distribution systems are determined on a program-by-program and statute-by-statute basis, but
broadly speaking, state governments are expected to receive a large share of the public works stimulus
funds for reallocation to project sponsors and lower levels of government.

The Impact of Stimulus Legislation on the Construction Industry

By any measure, the construction industry has suffered disproportionately since the subprime housing
crisis afflicted the economy starting in 2007. By one estimate, between December 2007, when the current
recession began, and November 2008, construction firms have cut more than a half-million jobs while
other estimates suggest that construction employment has plummeted by 1.3 million workers, from 9.3
million to 8 million. The major home builders that profited so handsomely during the housing boom are
now teetering, and industry suppliers are suffering as well, including steel, asphalt, concrete, fabricated
metals, and the plastics and rubber sectors.

The Problem of Timing — Economists and policy makers have long debated the precise impact of direct
public works spending on job creation in the construction industry. Analysis of public works spending in
the post-World War II period suggests that such spending tends to spend out at low rates due to the delay
between the time federal funds are "obligated" and project sponsors are able to hire workers, order
equipment and supplies, and obtain the necessary permits. While such slow spend out rates are contrary to
the intended purpose of so-called "countercyclical" strategies, this is not problematic for lengthy
recessions. Assuming for the moment that the recession that began in December 2007 will be as long as
forecasted, enactment of a major emergency public works program today would have the intended
purpose of producing a countercyclical effect – government-induced demand for goods and services
through increased spending in order to create and preserve jobs. If, however, the recession that began in
December 2007 is of short duration, enactment of a major emergency public works program today would
actually have a pro-cyclical effect by increasing demand for labor after the economy has hit bottom, thus driving up wages and the inflation rate. Since practically all economists predict at least another year to 18 months of recession, Democrats consider the pending economic stimulus bill to be a well timed injection of critical stimulus spending.

However, to counter the slow spend out rates associated with traditional public works spending, the House and Senate committees with prime responsibility for federal infrastructure programs have added language to the stimulus legislation to speed up the public works spend out rate. Under current budgetary procedures governing the expenditure of federal highway funds, the "obligation" toward a project agreement between the Federal Highway Administration (FHWA) of the U.S. Department of Transportation and state governments gives the states authority to enter into contracts that lead to job hiring and the ordering of supplies and equipment. The normal time frame between obligation (project agreement) and contract award is 60 to 120 days. The House and Senate legislation attempts to accelerate the obligation process through a carrot approach. The bill's "use it or lose it" provision requires that states obligate the stimulus funds no later than six months after enactment of the legislation or risk returning the money to the U.S. Treasury for reallocation to other states that are ready and willing to obligate funds immediately. The thinking behind this provision is that states will be under extraordinary pressure to spend down the stimulus funds if they know they are at risk of forfeiting it to other states. In addition, key senators have asked the Congressional Budget Office for ways that the legislation can be amended to speed up the flow of infrastructure dollars. Among the recommendations supplied by CBO is authority to pre-award contracts or self-certify contracts to be followed up with post-contract award compliance review, non-competitive bidding, or the waiver of environment and judicial reviews. At this time, these recommendations have not been adopted. To help guide state and local authorities in the disbursement of funds, the National Governors Association (NGA) has identified $43 billion in "ready to go" infrastructure projects and the U.S. Conference of Mayors has prepared a list of such projects totaling $63 billion.

The Multiplier Effect — The Bureau of Economic Analysis (BEA) of the United States Department of Commerce employs input-output and "employment requirement" models to measure the impact on job creation by a particular economic activity. Essentially, the direct and indirect employment of economic activity under these models is expressed by the number of jobs per billions of dollars of expenditures spent on the particular economic activity in question. These job creation estimates are divided into three measures:

- The number of jobs directly attributable to the activity;
- The number of jobs indirectly attributable to the activity; and
- The number of jobs induced through the economy as a result of the activity.

The "induced jobs" metric is part of a phenomenon of what social scientists call the "multiplier effect." As an example of this effect, the FHWA estimates that for every $1 billion spent on highway and road construction projects, 27,822 jobs are created. But of those 27,822 jobs, 13,962 are classified as "induced" jobs, which is over 50 percent of the total number of jobs created. One reason some analysts are skeptical of the job creating potential of public works spending is over-reliance on the multiplier effect. When considering the expenditure of massive amounts of taxpayer dollars for public works programs contemplated by the pending stimulus legislation, analysts and policy makers would prefer a much stronger direct linkage between federal expenditures and actual job hiring associated with public works projects.

Conflicting Job Creation Data — Federal experts are not in full agreement on the precise number of jobs created by federal expenditures on road and highway projects. For example, the FHWA estimate of 27,822 jobs for every $1 billion noted above shows that 13,860 jobs are directly or indirectly created, with 9,500 attributable to the construction industry and 4,300 attributable to supporting industries. The Bureau of Labor Statistics (BLS) of the U.S. Department of Labor, however, calculates that for every $1 billion in
federal highway funds, only 11,768 jobs are created, with 6,900 attributable to direct construction jobs. The difference between FHWA and BLS in direct construction employment lends credence to critics of public works spending that even the most expert of federal officials in the field of econometrics appear to lack objective, uniform performance measures on which to calculate the impact of stimulus legislation.

Still, regardless of whether one uses the FHWA or BLS to calculate potential job creation, anywhere from 210,000 to 285,000 "direct" construction jobs could be created assuming the House and Senate agree to spend $30 billion in FHWA highway projects as contemplated under the current legislation. These numbers would be much higher if the "indirect" job impact predicted by both agencies is included in the calculations. Indeed, if the FHWA's multiplier effect on "induced" jobs is taken into account, the number of jobs created by $30 billion in FHWA spending under the American Recovery and Reinvestment Act would exceed the number of construction jobs lost between December 2007 and November 2008.

Conclusion

At the time of this writing, the Senate was still in the process of "working its will" on the stimulus legislation. Senators turned back an amendment that would have substantially increased surface transportation and water resources infrastructure spending by $25 billion while other senators contemplate offering amendments that would trim the bill by $10 billion in non-stimulative spending. As noted above, changes made by the Senate to be stimulus bill will have to be reconciled with the House version before it can be sent to the President for signature. Regardless of the outcome of specific amendments, the construction industry should expect billions of dollars to be allocated among the fifty states for infrastructure projects. Whether such spending will have the intended stimulative effect is the $800 billion question that Congress, the White House and economists are asking themselves.