

A large orange rectangular box containing the title "Infrastructure Funding: Design Now And Be Ready" in white, bold, sans-serif font.

## Infrastructure Funding: Design Now And Be Ready

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### ***Investment in engineering phase will pay future dividends for New York State***

- Infrastructure is critical to economic growth. Smart investments create short and long-term job opportunities, enhance the state's competitiveness and desirability as a place to live, work and do business.
- For every billion dollars spent on construction projects in New York, an estimated 10,106 direct and indirect jobs are created according to the Congressional Research Service's Report, "Job Loss and Infrastructure Job Creation Spending during the Recession, October 2, 2009."
- More specifically by segment, the American Council of Engineering Companies' (ACEC) sources indicate that:
  - for transportation spending, the job creation rate is higher, at 34,000 jobs per \$billion.
  - for water and waste water infrastructure spending, the job creation rate is approximately 23,500 per \$billion.
- To be 'shovel-ready,' projects need to be completed through the planning and design process. The engineering phase can take from several months to several years depending on the size and complexity of the project. (If projects are delayed too long, redesign and updated regulatory permits may be required, which could increase overall project costs.)
- Engineering design accounts for roughly 6 percent of total construction project costs. A relatively small investment in design services translates to large payout.
- Based on the 6 percent figure, for every 60 million dollars invested in design services, between 10,000 and 34,000 jobs will ultimately be created if the projects are constructed.
- New York State needs inventory of designed "shovel-ready" projects on the shelf to compete for stimulus funding. Investment made in the engineering phase today will pay dividends in the future.

## ***Construction-ready projects get funded!***

- *Case Study #1:* The **Osaga River Bridge** in Tuscumbia, Missouri, was the country's first stimulus-financed project. In the months before the ARRA bill was enacted, the Missouri Department of Transportation workers laid the groundwork for the \$8.5 million, 1,084-ft. bridge, completing design, obtaining environmental approvals, getting bids from bridge contractors and identifying the low bidder. MoDOT estimates construction of the new bridge will support an incremental 250 direct and indirect jobs.
- *Case Study #2:* New Jersey Department of Transportation recently leveraged \$70 million in ARRA funds to proceed with the second phase of a major replacement project on the **Route 52**

**causeway near Atlantic City**, which will include replacement of two existing lift bridges with fixed spans, improve approach roads and eventually create a visitors center, multi-use sidewalks and fishing piers. The \$251-million project will create 500 new construction jobs through its three-year duration.

- *Case Study #3:* An upgraded **Wastewater Treatment Plant** project in Live Oak, California, was designed and went to bid in 2007, but the city needed state grants in order to keep utility bills down for residents in the struggling city so construction was on put on hold. When the stimulus program was announced, the city shifted its efforts to federal funding, receiving a \$16 million ARRA award.

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*Founded in 1921, American Council of Engineering Companies of New York is one of the oldest organizations of professional consulting engineering firms in the U.S. A statewide association, its members represent all major engineering disciplines and range from highly specialized solo practitioners to multidiscipline firms employing thousands with branch offices worldwide.*

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## Engineers Need Additional Insured and Indemnity Coverage in New York City

### ***Why the need for additional insured and indemnity coverage?***

**C**urrent construction contracts with New York City leave engineers providing construction management/administration (CM) and resident engineering inspection (REI) services unfairly exposed to liability from lawsuits arising from worksite claims, including bodily injury and claims arising from death.

Protection is afforded to the City, and in some cases others, through indemnification provisions and provisions requiring “additional insured” coverage to those entities by the various contractors and sub-contractors. This additional insured coverage and indemnity is not presently extended to engineers, leaving the engineers liable even though they are “agents” or “standing in the shoes of” the owner. Additional named insurance coverage would not be meant to cover engineering design errors and omissions but

rather protection from general liability claims that may occur from a worksite related injury.

Under New York State Workers Compensation laws, an injured employee is limited to workers compensation with respect to his or her employer and cannot commence a liability action against his or her employer. He or she may, however, assert a case against others at the construction site. The engineer providing CM and/or REI services often becomes the target of the claim, even if they had nothing to do with the accident or were not responsible for supervising the worker.

Engineers have suffered undue administrative costs and financial burdens resulting from law suits. In some instances, their insurance carriers have raised rates based on these suits.

***It is, therefore, imperative that engineers, when providing construction management/administration and resident engineering inspection services, be added to the list of parties benefiting from contractor’s indemnification obligation in construction contracts with New York City and added as an “additional insured” party under the contractor’s insurance.***

## Case studies show:

- **Engineers share of settlement can be anywhere from a nominal amount to 50% of a large settlement.** In one instance, an engineering firm's share to settle an electrical contractor's employee claim of injury during pipe installation amounted to \$750,000, 50% of the settlement. In another case, an engineering firm was required to pay \$335,000 to settle a claim made by a contractor's employee when a manhole exploded, causing injury to the employee. In neither case was the engineer directly supervising the injured worker.
- **Substantial administrative time and expense is required.** Even before a settlement is reached, legal fees alone can mount into the tens, or even hundreds, of thousands of dollars, not to mention the lost time of the firm's professionals in depositions, document production and dealing with lawyers. The average settlement time is two to three years.<sup>1</sup>
- **As a result of claims filed against engineering firms, insurance costs rise disproportionately.** For one engineering firm, their umbrella carrier declined to renew the policy and a new carrier increased the premium by 51%; the general liability carrier increased the premium by 45%. Premium increases in that firm have averaged over 30% a year for the past nine years. For another engineering firm, the extent of the claims caused the general liability carrier to decline to

renew the policy; the new carrier increased the premium 60%. No other factors had caused the insurance to be dropped or caused an increase in premium with a new carrier.<sup>1</sup>

- **How many of these claims are related to CM and REI services versus design?** Approximately 92% of the claims were associated with construction management and resident engineering inspection services; only 8% were design related.<sup>1</sup>
- **Won't this significantly drive up premiums for contractors?** Industry experts say that most mid-size to large contractors have blanket additional insured coverage via an endorsement to their general liability policy. Therefore, the amount they are already paying for the endorsement will not change by adding engineers. For smaller contractors, some add additional insureds on a case by case basis. The extra cost varies by state and can vary by project, but the charge is typically anywhere from \$200 to \$500 per additional insured. Contractors may be concerned that they might pick up additional losses, which could eventually lead to higher premiums, but it's an indirect connection. However, to the extent that the contractor's carrier is already defending the City, or other owner, the risk is already priced into their coverage, and having a single law firm may reduce the cost of the case.<sup>2</sup>

<sup>1</sup> ACEC New York Member Survey, February, 2010

<sup>2</sup> Ames & Gough, Inc., February, 2010

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