



Project Summary

Texas Department of Transportation

0-6592: Economic Impacts of ARRA Stimulus Funding on TxDOT Projects

Background

In February 2009, Congress passed the American Recovery and Reinvestment Act (ARRA) with the goal of stimulating employment. The Texas Department of Transportation (TxDOT) received \$2.25 billion of the \$26 billion that was allocated to transportation construction nationwide. State departments of transportation (DOTs) are required to report monthly to the Federal Highway Administration (FHWA) the number of employees at each ARRA jobsite, payroll, and hours worked.

The employment impacts of construction go well beyond the direct jobs on the site, however, the lack of a formal measurement system makes the task of estimating indirect and induced employment difficult. This research project explored the employment impacts of ARRA funds on TxDOT projects.

What the Researchers Did

Eight research tasks were undertaken in the period from September 2009 to August 2010. State DOT reporting of ARRA impacts was reviewed, and DOTs reporting indirect impacts were contacted. Use of Input/Output (I/O) models was of specific interest, but early in the research it was noted that commercial I/O models are not calibrated for current economic conditions, and could give misleading estimates.

A database that presents ARRA data in graphic formats was created. To complement this effort, DOT ARRA reporting websites were evaluated for ease of access and transparency.

TxDOT ARRA projects were analyzed by work type to understand differences in reported labor usage. In addition, for selected projects, the labor, material, and equipment components were studied to develop comparisons between ARRA project spending and 'normal' costs.

Selected contractors working on TxDOT ARRA projects were interviewed. The objective was to understand their employment models and use of equipment, off-site labor, and suppliers. To explore indirect impacts of ARRA funding, suppliers were interviewed and their supply chains analyzed.

What They Found

Researchers found that:

- The general opinion of contractors is that ARRA funds have saved jobs but have not created new jobs.
- Even though public spending is typically only 10-20% of contractor activity, ARRA has kept the construction industry alive after the disappearance of private spending in the last 2 years.

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- Most contractors could not suggest anything to create jobs other than government spending. They felt that infrastructure spending is the best because tangible assets are created, they improve economic efficiency, and ultimately create jobs.
- The ARRA funds were spent at the best time. Competition has been fierce, driving down prices 30% or more. Low prices have bought more projects than usual.
- Contractors maximize equipment usage, and will only hire when they have a larger workload lined up. Because they can flex employee work hours from 30 to 70 hours per week, new jobs will only be created when work volume more than doubles.
- Construction workers depend on overtime for spending money (which supports jobs in the wider economy), but reduced overtime has hurt those jobs.
- Transport is a significant cost on highway projects, and location of material sources gives advantage to specific contractors. Suppliers close to jobsites have benefited from ARRA funds. However, most do not know the funding sources of orders received.
- Building an ARRA project in a particular location does not create jobs there because contractors use in-house forces as much as possible, while suppliers always utilize labor from around their base.
- Direct labor is just about 30% of project cost. Most construction employment is generated among suppliers and equipment companies.
- Direct jobs from ARRA are being accurately tracked, but indirect/induced jobs are difficult to quantify. Commercial I/O models may give misleading answers due to the unique economic circumstances of the ARRA.
- Contractors do not want to share data because of competitive reasons. Without such data, the complexity of the supply chain for construction makes estimation of downstream labor usage difficult.
- ARRA funding either directly or indirectly helped many firms stay in business. As one contractor put it: “ARRA may not have created jobs, but it saved our industry.”

What This Means

The researchers provide the following recommendations:

- Because direct labor is already being submitted by ARRA contractors, TxDOT should institute a similar system for all projects. This data would be useful for reporting the direct benefits of TxDOT construction expenditures.
- Projects with high material usage are likely to benefit Texas workers, while projects with high equipment usage have more diffuse impacts. This fact should be considered if funding is to be tied to supporting the local economy.
- The general opinion among contractors and suppliers is that more infrastructure funding is needed. However, they believe that the larger problem is lack of confidence in the current market. Increased and reliable funding would create that confidence and support Texas jobs. Such funding will help in restoring private sector investment and increasing employment.

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