



Innovative approaches to delivering Federal-aid road safety projects.

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Force Accounts Lead to Faster, More Cost-Effective Completion of Life-Saving HSIP Projects

Alternative contracting methods such as public agency force accounts can increase the pace and decrease the cost of delivering safety improvement projects. This approach to project delivery is an efficient and effective tool for both improving safety as well as reducing the time and cost to install proven, low-cost safety solutions.

To save funds and reduce the time needed to move projects from identification to installation, the Alabama DOT (ALDOT) and the FHWA Alabama Division Office conceptualized a statewide program that would quickly construct low-cost projects funded by Highway Safety Improvement Project (HSIP) funds, such as signing or striping upgrades, intersection modifications, or access control. Under this program, counties typically work with the ALDOT district offices to identify safety projects that qualify for HSIP funding. The county applies for funding, and division office maintenance forces implement the project.

As part of the application process, the local applicant uses the State bid history to develop what would be considered a contractor's estimate. The county then compares the amount a contractor would charge to the cost for the ALDOT district forces to do the work. Typically, because using public agency forces is much more economical, there is often a significant variance in the prices that a contractor might expect to bid versus the cost to use public forces. This comparison provides the basis of estimate for the cost savings from using public agency force account procedures—a necessary step in meeting statutory and regulatory requirements under 23 U.S.C. 112 and 23 CFR 635.204.

What is a Force Account?

The term “force account” means the direct performance of highway and highway-related construction work by any public agency, a railroad, or a public utility company by use of labor, equipment, materials, and supplies furnished by them and used under their direct control. (23 CFR 635.203(c)).

Federal-aid highway construction projects must be awarded to the lowest responsive, responsible bidder, unless the State DOT demonstrates, to FHWA's satisfaction, that another method is more cost effective or an emergency exists. (23 U.S.C. 112)

For more information, see the [FHWA Policy on Agency Force Account Use \(5060.1\) - Resources | Federal Highway Administration \(dot.gov\)](#).

“We expect to see an average savings of about 49 percent.”

— John-Michael Walker
ALDOT HSIP Program Manager

According to Alabama Traffic & Safety Operations Engineer John-Michael Walker, the HSIP program manager for ALDOT, “We estimate we’ve approved about \$2.3 million in Federal-aid work, including labor, since [Fiscal Year 2020].” He explains that the amount that has actually been charged is a little over \$1 million, so the savings is significant, and what’s more, those savings are then used to implement even more life-saving countermeasures on Alabama roadways.

“Based on the project applications we’ve received, we expect to see an average savings of about 49 percent [compared to what the State would spend by contracting the work out],” Walker noted. “The idea is to use force accounting for lower-cost projects, so we try to cap them at \$100,000 or less,” Walker added.

In Mississippi, the process works in a slightly different fashion, with Mississippi Department of Transportation (MDOT) safety engineers meeting quarterly to discuss locations of concern and to review crash data to

identify sites that need to be analyzed more closely for potential treatment. Once sites are identified, the team determines the most effective solution and implementation strategy, including whether a force account could be appropriate.

“The goal is to get the application [for force account approval] in [with the Division Administrator] and get approval within 2 weeks. Once we had approval, some force account projects were able to be done within a week because the maintenance forces already had materials on hand,” said MDOT State Safety Engineer Mark Thomas.

Recently, MDOT identified an intersection with safety concerns where a permanent solution had been planned, but where the need to treat the existing safety issue was becoming urgent due to unacceptably high crash rates. Because crashes were continuing to occur, “[w]e couldn’t wait 2 years to construct an RCUT [restricted crossing U-turn],” Thomas explained. MDOT used force account procedures to reconfigure the intersection using snap-back delineators, creating a directional median supplemented with signage directing drivers to use the existing crossover. “We put in the interim improvements within roughly 6 weeks so we could make those intersections safer,” he noted.



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Figure 1. Image. Temporary snap back delineators and supplemental signage were installed on US 533 in Jefferson County, MS to mitigate an urgent intersection crash problem until a permanent RCUT could be installed. Signage was also installed (lower right) to assist drivers in navigating the configuration.

Lessons

For States interested in using force accounts to install low-cost countermeasures, Walker and Thomas agreed that ensuring buy-in from maintenance staff is one of the most important factors, noting that State DOT staff are essential to making the process a success. Coordinating with FHWA is also an important element for success in using force accounts.

For more information on this practice, please contact your State’s FHWA Division Office.

