

INTERIM CHARGE 1B

SB 282 and SB 962, which relate to the funding for the State Highway Fund. Study the current mix of user fee-based funding for the state highway system, including registration fees, tolls, and fuel tax, and determine if current funding generated is sufficient to maintain cost demands. Examine whether current legislative appropriations, including projections for Proposition 1 (severance tax) and Proposition 7 (sales tax) funds, are keeping pace with Texas' highway funding needs to accommodate population and economic development growth. Make recommendations for additional methods of funding or innovative tools that the state could utilize to deliver road infrastructure projects.

1. TXDOT FUNDING SOURCES

In addition to funding received from state and federal motor fuels tax and state vehicle registration fees, the Texas Department of Transportation (“TxDOT”) has utilized several debt financing tools to advance large projects. Moreover, the State Legislature, with voter approval, created two non-traditional transportation funding sources, known as Propositions 1 and 7. Funding for Proposition 1 is derived from a certain amount of the state’s oil and gas production tax revenue. Proposition 7 funds are generated from a portion of sales and use taxes. Beginning in fiscal year 2020, a percentage of motor vehicle sales and rental tax revenue will also contribute to state highway funding as a result of Proposition 7.

2. PERFORMANCE-BASED PROCESS

TxDOT has implemented a performance-based process to utilize non-traditional funds, guide project selection and distribute the funds to the projects in the Unified Transportation Program (“UTP”). The creation of non-traditional revenues and funding streams has allowed TxDOT to implement scenario-based planning instead of the traditional project planning methodology.

Rather than planning projects solely on a fiscally constrained cash forecast, projects may be added to the UTP based on potential funding rather than guaranteed funding. Scenario-based planning allows TxDOT to accelerate certain projects or reduce the number of projects contracted, depending on how funds are ultimately appropriated and realized.

This process has enabled the Texas Transportation Commission to approve the 2021 UTP with more than \$74 billion in planned transportation project contracts.

3. CONTRACTOR FINANCING

TxDOT maintains more miles of highway and more bridges than any other state. With continued population and economic growth, demand on these assets continues to increase. As an expansion of the performance-based approach, we recommend that the Legislature consider the use of contractor financing as an additional tool to address transportation needs across the State of Texas by expanding the use of the Pass-Through Toll Financing program. Texas Transportation Code, §222.104(b), authorizes TxDOT to enter into an agreement with a public or private entity for the payment of pass-through tolls as reimbursement for costs associated with the design, development, financing, construction, maintenance or operation of a facility on the state highway system. The Pass-Through Toll Financing program terminology is statutory and does not imply that a proposed project must have a physical toll collection component.

As pass-through financing was created to stretch already limited tax highway dollars, allowing local communities to fund the upfront costs of constructing a state highway project, the tool can be expanded to allow contractors to fund costs which the state can then reimburse over time.

4. CASE STUDY: MIDTOWN EXPRESS

Midtown Express includes 14-miles of improvements for State Highway (SH) 183 from SH 121 to I-35E, in addition to portions of Loop 12 and SH 114, and includes obtaining right-of-way, reconstructing portions of frontage roads, reconstructing portions of mainlanes



and constructing one managed toll lane in each direction in some locations.

Kiewit provided an innovative fully committed contractor financing solution that delivered the full scope of the project consisting of \$250 million of short-term gap financing. This financing became a “backstop” for the State as they continued to work with the US Department of Transportation to secure a TIFIA loan that eventually replaced the contractor-provided financing prior to the accumulation of any debt service costs.

While the contractor financing was committed with market-competitive rates, the TIFIA program uses Treasury rates plus a small premium and has flexible repayment provisions which provide state DOT’s with numerous repayment options. TxDOT successfully secured TIFIA financing, but Kiewit’s financing solution gave TxDOT confidence to proceed with the project, and an option if TIFIA financing was unavailable.

5. CMGC / CMAR / ECI

In other appropriate circumstances, we recommend the CMGC model. CMGC may also be referred to as:

- Construction Manager/General Contractor (CMGC)
- Construction Manager at Risk (CMAR)
- Early Contractor Involvement (ECI)

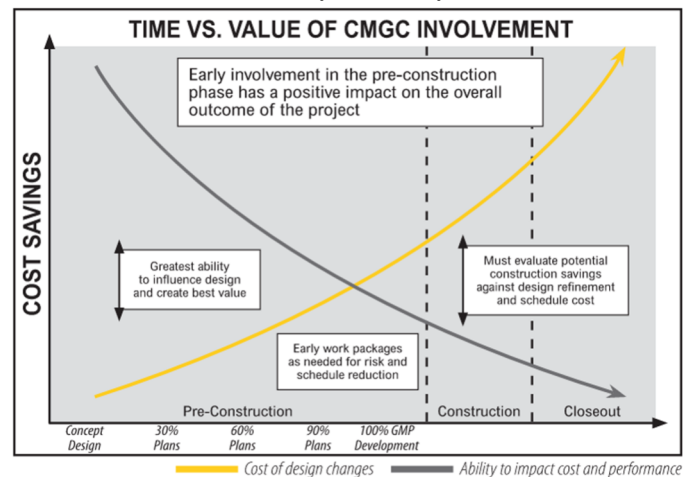
CMGC is a construction-focused delivery method that integrates the owner, engineer and contractor into one team early on to develop the most efficient cost and schedule for the project. The owner contracts with the design engineer to produce the project design; and also contracts with the CMGC firm early on to provide input into the design process. The owner and CMGC firm then negotiate towards a guaranteed maximum price, date certain schedule. In other words, the CMGC provider gives innovative and potentially cost-saving construction input to the owner during the design phases and becomes the general contractor during the construction phase. CMGC allows the owner, designer and general contractor to work together to find the best solution for a project that will in turn provide the best quality and price at the end of the day.

This approach features a commitment by the CMGC firm for construction performance to deliver the project within a defined schedule and price, either a fixed lump sum or a guaranteed maximum price.

Benefits to the owner include:

- Collaboration & transparency in the process
- Innovation & constructability built into the design
- Historically, claims are virtually eliminated
- Proven process to mitigate risk
- Process allows for alignment of budget and design
- Typically delivers project at lowest possible cost
- Opportunity to address stakeholder challenges
- Risk is held by entity most qualified to manage
- Relationship evolution pre-construction to start-up to execution

CMGC/CMAR/ECI Life Cycle Analysis



Contractor financing can also be incorporated into the CMGC delivery model, with any such arrangement being considered a deferred payment. This would allow owners to advance the delivery of a CMGC project prior to assembling all the funding required for the project.

6. CASE STUDY: US 34 PERMANENT REPAIRS PROJECT (BIG THOMPSON CANYON) CMGC

US 34 is a critical artery connecting Loveland and the busy Interstate 25 corridor with the town of Estes Park and Rocky Mountain National Park, Colorado. A series of storms dumped more than 21 inches of water in a few days across northern Colorado, damaging 23 miles of the highway. Kiewit completed emergency repairs on US 34 in just 59 days in 2013 and then undertook permanent repairs in a \$280-million project that started design in Fall 2015. Kiewit finished the work in May 2018, \$100M under budget and two years ahead of schedule. The project was considered a schedule, quality and safety success with 460,000 man-hours completed without a recordable injury.

Kiewit credits the CMGC delivery for enhancing communication with the project's more than 19 local, county, state and federal agency stakeholders in addition to Colorado's Department of Transportation ("CDOT").



"In a traditional low-bid contract, everyone works in silos ... there's a lot of boundaries," Will White, Kiewit's executive project director told ENR. "CMGC tears down those silos ... and provides the lowest cost with the most efficient schedule for stakeholders." The CMGC approach gave stakeholders a clearer sense of what the project could and couldn't achieve. The funding agreement covered damage on only 15 of the canyon's 26 miles. The CMGC approach helped the team prioritize damaged areas and define limits for the project, while generating various engineering innovations to help the roadway and river work together to withstand future disasters. The project first considered the design-build delivery model, but that would have resulted in unaffordable engineering bids. James Usher, project director for CDOT, told ENR "having an experienced contractor at the table during design was key".

US 34 Permanent Repairs Project won ENR's Project of the Year, Best Highway/Bridge for 2018 and eight additional major awards.

7. CHANGES NECESSARY COMPARED TO DESIGN-BUILD PROGRAM

TxDOT's Alternative Delivery Program is currently limited to the Design-Build model. While this alternative project delivery method allows TxDOT to share risks associated with the design, construction and maintenance (as applicable) with the contractor, the

addition of CMGC would expand the options of best-value approaches, afford flexible solutions, work to more effectively to distribute risks to the party best able to manage them, and allow for collaboration to maximize value for money.

Procurements can be structured to incorporate the existing Pass-Through Toll Financing program to leverage short term private sector financing solutions as an additional option to accelerate delivery.

Over the past 3 – 4 years construction costs on average have increased by 10%, and at a minimum, a similar level of construction cost inflation should be expected over the coming 3 – 4 years.

8. ACCELERATING PROJECT DELIVERY

The population of Texas has increased over 70% during the past 30 years and is expected to grow by 60% over the next 30 years. Each day, Texas continues to grow by over 1,000 people on average. This growth ultimately means more vehicles on Texas roads resulting in increased congestion.

As the Legislature evaluates advancing infrastructure projects to reinvigorate the economy, we recommend that the use of contractor financing and the CMGC delivery model be assessed. By combining TxDOT's performance-based process and pass-through toll financing and adding the use of the CMGC model, TxDOT will be able to accelerate the delivery of various projects in the UTP – leveraging current low financing rates and realizing savings resulting from cost inflation and expanding the tools available to safely, reliably, and cost-efficiently advance critically needed infrastructure projects.