

How will I-70 be constructed?

A variety of methods can be used to finance and construct the planned improvements for I-70 East. These methods include both traditional and innovative options. CDOT decides on construction and financing methods by evaluating the following:

- Project goals
- Project constraints such as source of funding, schedule, federal/ state/ local laws, third party agreements with railroads, right of way, and others
- Delivery schedule (construction timing)
- Complexity of the project design and construction
- Level of design (at the time of the project delivery selection)
- Cost
- Project risks

Traditional and Alternative Construction Methods

Traditional methods used by CDOT over the last decade to deliver Projects:

Design-Bid-Build: Two different teams are hired for the project based on lowest price bids.

1. A design consultant is hired to design the project and produce construction plans
2. Following design, the plans are advertised and constructors bid their best price to build the Project
3. The low bid contractor builds the project according to the plans

This method is reliable and everyone understands what is expected. However it is very lengthy, restrictive on innovation and costly in design and oversight.

Traditional and Alternative Construction Methods (continued)

Alternative methods used by CDOT over the last decade include:

Design-Build: One contractor team (designer and contractor) is hired, under one contract, to design and build the project concurrently based on a preliminary design or concept.

Construction Manager/General Contractor (CM/GC): Similar to Design Bid Build but the designer and contractor are hired separately

1. A design consultant is hired to design the project
2. Construction contractor is hired at the same time to provide constructability input to the design consultant and develops a “guaranteed maximum price” to build the project
3. If CDOT agrees with the maximum price – the contractor builds the Project

These methods provide the opportunity for a larger project for a fixed amount of money, innovative design partnerships between the contractor and CDOT, and allows for potential schedule improvements. Overall delivery is quickest with these methods.

This CM/GC provides the opportunity for the contractor to influence the design and match their skills and resources to the Project. Overall delivery time is in-between Design-Bid-Build and Design-Build.

Innovative Finance and Construction Methods

The Colorado High Performance Transportation Enterprise (HPTE) was formed to pursue innovative ways to finance, construct or operate and maintain transportation projects. Innovative financing is needed to offset the limited transportation funding available. The HPTE operates as a government owned business within the Colorado Department of Transportation.

One innovative construction delivery method is a **Public Private Partnership “P3”**. In a public private partnership, a private partner finances the transportation project and agrees to design and construct the Project – sometimes the private partner will even operate, and maintain the highway. The State retains full ownership of the highway. In return, the private partner receives the revenues from annual performance payments or toll lanes. The private partner is selected through an open and competitive process. In addition to providing additional sources of funding for transportation, these partnerships can also provide the opportunity for a larger project for a fixed amount of money and schedule improvements.