

Alternative Delivery: No Silver Bullet For Rail Projects

BY SAMI SOUFI

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RECENT STUDIES SHOW THAT transit infrastructure projects in the U.S. can cost upward of \$1 billion per kilometer. Given these findings, along with continued inflationary price pressures in materials, labor, and management, it is unsurprising that U.S. public transit agencies are eager for program and project delivery methods that commit to cost and schedule savings.



Sami Soufi

At first glance, “alternative” project delivery methods, such as design-build and progressive design-build, offer owners a solution: shifting risk onto a qualified, combined design and construction entity (the design-builder) in exchange for less prescriptive requirements and more performance-based requirements. In theory, this formula enables the design-builder to deliver the desired transit project through increased innovations and creativity, minimizing costs and schedule. These types of delivery work when the contractor is not losing money. When the contractor *is* losing money, they will often look for a loophole in the contract to bail out of the project.

In the last few years, design-build and progressive design-build have become less and less “alternative”: high-profile, multi-billion-dollar rail and transit projects in Los Angeles, Seattle, and Maryland, among many others, are employing design-build delivery, and the list of design-build programs is only growing as funds from the Investment in Infrastructure and Jobs Act enter the procurement cycle.

However, as the results show, design-build is no silver bullet to control costs or schedule. The challenge of bonding multi-billion-dollar, design-build transit projects—which are in themselves complex and inherently risky—means only a

limited number of entities will be able to form design-build partnerships, limiting potential innovations from the start. Similarly, contractors in the U.S. are increasingly struggling to realize their expected profitability on mega-transit projects and many are no longer interested in pursuing these projects. These factors, and more, can come as a surprise to owners who are thinking that when they sign the contract, they can relax while the design-builder is progressing or struggling.

For design-build delivery to succeed, there needs to be a meeting of the minds and continuous collaboration between design-builders and owners. From the project management perspective, important considerations when deciding if your project is better positioned for success with a more traditional delivery method include:

- Transparency in how the agency wishes to transfer specific risks to the design-builder. A formal single risk register prepared at the start of your project, and accepted by all entities, can help facilitate this discussion and allocate risk more equitably.
- Specific definitions of success for the design-builder. Owners should do their homework on market conditions; availability of resources, expertise, and materials; and what constitutes a viable estimate for their project. Quantifying these and other factors will deliver more realistic procurement and provide guardrails for the design-builder.
- An honest and accurate assessment of how ready your organization is to manage a multi-billion-dollar, complex transit project. From ROW acquisition and enabling work to validation and verification, transit projects are long-term, highly visible undertakings with multiple stakeholders and goals. Does your agency have the



Foothill Gold Line Extension, CA.

Photo by Foothill Gold Line Construction Authority

skills to manage a design-build delivery? To oversee work in the field? To address technical and managerial issues as they occur—without delaying progress? Much better to answer these and other questions before procurement than during delivery.

- Ability of the agency to get government waivers to complete unfinished projects using Time & Material (T&M).

APTA, in addition to the Design-Build Institute of America (DBIA) and the Construction Management Association of America, among many others, offer invaluable resources for agencies considering alternative-delivery methods. These include white papers and checklists on the challenges above, as well as much more detailed considerations.

In addition, soliciting the support of

a qualified program or project management consultant can help your agency decide if alternative delivery fits your project. This support can help with navigating USDOT regulations around design-build delivery, addressing stakeholder concerns, coordinating with third parties, and enabling collaboration throughout the project process.

The key to cost control is not any particular delivery method or construction means and methods, but utilizing experts who know how to deliver major transit projects. If your agency has this expertise, then you are wise to consider all delivery methods, including design-build. If not, soliciting the help of partners who can bring this expertise to bear for your project can help you decide if design-build is truly going to help you realize your project as planned.

CLEVELAND CLUES

Cleveland is certainly a city of firsts. The **first indoor shopping mall, The Arcade Cleveland**, opened in May of 1890. Threatened with demolition, the city added it to the National Register of Historic Places, Cleveland’s first building to do so. The building is now home to a Hyatt Regency hotel.

The **Cleveland Browns** were originally in the All-America Football Conference from 1946-49 and won that league’s championship all four years. When it joined the NFL in 1950, it won the championship that year, and also in the 1954, 1955, and 1964 seasons. That means the Browns have **eight championships** to its name.

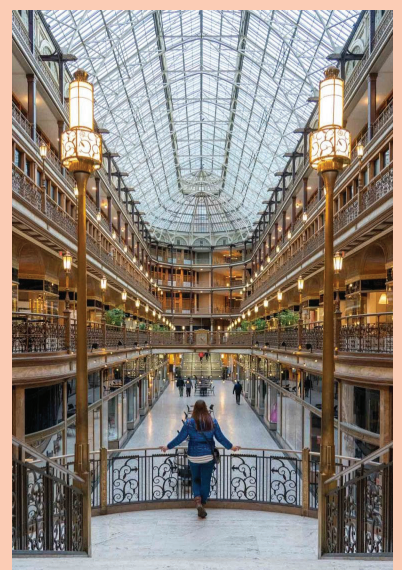


Photo by Hill International, Inc.

Sound Transit, Seattle, WA, Redmond Technology Station.

Collaborate

Hill's Program and Project Managers play an important role in helping our clients achieve equitable outcomes for diverse communities, providing customer-centric solutions at the forefront of every project where we are engaged.

The logo for Hill International, featuring the word "HILL" in a bold, red, sans-serif font with horizontal lines above and below it.

International

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Together with our clients, we are breaking ground faster, smarter, and better than ever before—providing greater access and equity. This includes implementing new tools and technologies to promote knowledge transfer for building more sustainable transit-oriented development opportunities, including workforce development and affordable housing for the cities and neighborhoods that we serve.

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Hill's foundation includes a culture of managing project risk, with effective mitigation and opportunity planning. This includes the selection of the right project delivery method, combined with a robust project management information system (PMIS) that focuses on schedule, cost, and quality with real-time dashboard reporting systems.

We view our transit clients and colleagues as an integrated team and a vital resource to positively impact the lives of future generations.

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