MCX



Member Communication Experience

Dual Delivery: A Viable Strategy for Complex Transit Projects

Written by: Andrew Ditter, PE, Construction Manager, Hill International

With global demands for greener, faster, and more equitable transit on the rise, we can expect agencies and owners around the world to continue investing in public transportation.

Proving this trend are massive funding vehicles, such as the U.S. Federal Government's Infrastructure Investment and Jobs Act. To manage these inherently complex projects, system owners must identify and implement the right delivery method. Delivery method selection has cost, schedule, and quality repercussions that last through closeout, handover, and even into operations.

Many owners are considering new and innovative delivery methods to derive the most value from their investments. One notable strategy is dual delivery, which involves splitting up works that might reasonably be packaged as a single project to take advantage of the different benefits associated with different delivery methods and improve project outcomes.

Clients can use a dual delivery approach to achieve greater efficiency and deeper customization in line with their overall project goals. This can include optimizing for schedule, cost, quality, or something else entirely. For a transit agency planning to deliver a rail line extension, for example, designbuild delivery can offer notable cost and schedule advantages for works with relatively predictable designs. For elements requiring lengthier planning — such as brand-new track construction — owners may benefit more from the reduced risk associated with construction manager at-risk delivery and a guaranteed maximum price.



THE CHALLENGES

Dual delivery is not a cure-all for overcoming the challenges associated with selecting and implementing a delivery method. This approach is associated with several unique challenges and requires a strong management framework to maintain control over project outcomes. For example, a major challenge stemming from dual delivery involves doubled project communications. Reticular communication lines, two document control systems, extra meetings, and different intra-team relationship dynamics can increase projects' management capacity needs, as well as their risk.

Other challenges include developing a quality assurance approach that can enforce the same level of quality control on both sides of the fence and cultivating a win-win approach

to help ensure the project teams work together for the benefit of the owner's vision, despite the separate contract environments. A win-win approach is often critical because of the construction crews' proximity. In many cases, projects procured via dual delivery are adjacent or even overlapping. This means management teams have to negotiate space and staging plans, safety plans, scheduled utility outages, and more between multiple contractors.

MANAGEMENT SOLUTIONS

In my experience, dual delivery does not make projects more technically challenging for designers or contractors. In fact, it often simplifies the separate projects. Rather, dual delivery creates management complexity for the owners' teams. As such, the most important prerequisite for dual delivery success is sufficient management capacity. Before undertaking such projects, owners have to evaluate their in-house management capacity, as well as any existing contractual vehicles they have for management consultant support to determine if they will need to bring aboard additional management staff. Once owners have verified sufficient management capacity, they can implement several management solutions to drive dual delivery success.

A programmatic communications approach will help owners manage the communication-heavy environment of dual delivery. This involves maintaining a complete contact list for both projects, inclusive of all project participants and stakeholders; facilitating sufficient inter-project communications to promote overall "program" success; and communicating overall updates and any impacts to both project organizations, stakeholders, and the public. For example, clients can hold meetings with all stakeholders and both contractor teams to promote safety and help minimize disruptions caused by project activities.

A programmatic approach also involves designating a contact point for all communications across both projects. Pure project and construction management firms are best suited to serve in this role, able to engage both contractors on site safety, conduct weekly coordination meetings to prevent overlaps/conflicts in work activities, promote dialogue to ensure sufficient space for each contractor's activities, liaise with all third-party stakeholders and the public, and manage two document control systems to allow for simple inter-

project document exchange, as well as security for each project's confidential materials. This approach also prevents complications related to miscommunication and improperly stored documents, driving on-budget, on-schedule delivery.

Moreover, pure project management firms are always able to act in the owner's best interests, managing projects and negotiating challenges without any conflict of interests.

This advantage is especially important on dual delivery projects, where there are generally more stakeholders and more potential conflicts. For example, because of their interconnectedness, dual delivery projects face risk related to scope allotments as the projects evolve. When end-user requirements or unknown conditions cause scope creep, pure project management firms can help owners quickly and fairly negotiate with the contractors to identify agreeable, cost-effective contract solutions for new scope allotments.

MAKING DUAL DELIVERY WORK FOR YOU

Despite the increased management complexity resulting from separate packaging and delivery methods, dual delivery provides opportunities to realize cost, schedule, and quality efficiencies on complex transit projects. By leveraging the power of creative delivery approaches, such as dual delivery, transit owners throughout the U.S. and around the world will be able to deliver more successful projects that promote access to economic opportunities, enhance sustainability and environmental justice, and improve system efficiency for the people that depend on these services.



About the Author

Andrew Ditter, PE, has more than 25 years of experience in the engineering industry. He currently works as a construction manager out of Hill International, Inc.'s Austin, Texas, office. His duties include day-to-day coordination with his project teams and all aspects of project management, including reporting, cost management, change management, schedule management, contract management, communications, document control, safety management, and risk management.

About the Article

Republished from <u>Hill International News</u>. <u>Hill International</u> provides program, project, and construction management services for clients in a range of sectors undertaking major construction projects across the world. Their services include cost engineering and estimating, quality assurance, inspection, scheduling, risk management, and advisory services.

Any views and opinions expressed in this article may or may not reflect the views and opinions of the Construction Management Association of America (CMAA). By publishing this piece, CMAA is not expressing endorsement of the individual, the article, or their association, organization, or company.