

APPRAISAL  
CHALLENGES IN

# DESIGN

# BUILD

With the growing popularity of the design-build model, valuation consistency requires a new level of coordination and communication.

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For large infrastructure projects in the United States, the design-build model is rapidly becoming the preferred method. This delivery system is generally favored because it can furnish the public with a necessary improvement project at a cost and within a time frame not previously possible through traditional project delivery methods. And while it holds the promise of a more effective and efficient approach, it also poses some genuine challenges for valuation consistency.

To ensure that property owners are compensated fairly and equitably along the length of the project, valuation consistency is essential. In design-build projects, consistency is achievable, but it requires a level of coordination and collaboration not typically required on other types of projects. However, when done properly, acquisition efforts are more successful, and the percentage of parcels being acquired through the eminent domain process is reduced.



### Heightened Need for Communication

In right of way acquisition, there are two very critical factors that impact an appraisal—time and project design information. In traditional projects, an appraiser usually has adequate preparation time, along with access to the final plans, profile sheets, surveys, title information, right of way maps and data about each parcel. With this basic information furnished, the appraiser can concentrate on valuing each subject before and after the acquisition.

What is drastically different about design-build projects is the notion of “parallel paths” to completion. It requires the team to schedule as many activities as possible to run concurrently with the design phase of the project. This adds an additional dimension to the engineering designer’s role whereby they not only need to finish the various project designs and plans on an accelerated schedule, but they must also budget time to interact in the design process with other units like right of way, environmental and utilities. This interactive role and level of sharing by the design group is critical to how successful other right of way contributors will be in their parallel roles for the project.

### The Added Complexities of P3

Public-Private Partnership (P3) projects introduce a new level of coordination and communication requirements into the design-build practice, and this further complicates right of way’s role in the valuation process. The P3 process introduces a private development company who is given financial incentives to be the project’s general contractor, shifting a substantial amount of the burden and liability shifted from the public agency to the developer. Generally, the private contractor or development entity selected by the project’s public owner subcontracts for right of way services through an acquisition service provider, who then manages appraisal and appraisal review services.

For design-build/P3 projects, the developer’s right of way consultant or acquisition service provider usually subcontracts for appraisal and appraisal review services with several appraisers who have been approved or pre-certified by the public agency. These appraisers and review appraisers must be willing and able

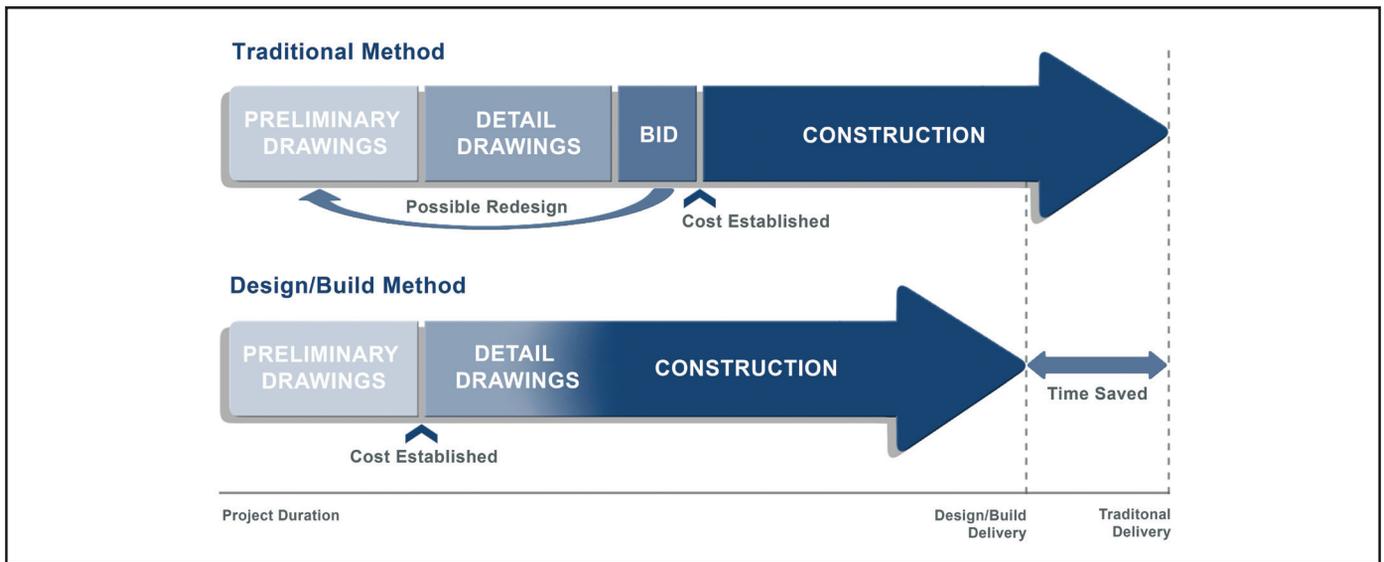
to commit their time and their staff’s time to meet the developer’s project schedule and still deliver credible appraisals for each parcel assigned. This is no easy task, because even if design is well underway before appraisals commence, detailed right of way maps matching the developer’s new roadway design may not be available. This heightens the need for open communication between the project designers and appraisers and is absolutely essential for fair measures of compensation.

### Whole and Partial Acquisitions

Appraising whole or partial acquisitions for highways, power lines, oil and gas lines and other corridors can be complex and difficult work. It also carries the added responsibility of the appraiser being asked to testify and defend their opinion of value at a hearing or trial should negotiations fail to reach a settlement with affected property owners. For these projects, it’s best to hire experienced eminent domain appraisers with a well-trained staff of appraisers and reliable office support staff to assist them in completing their assignments in a timely manner. They also need to be seasoned expert witnesses, able to defend their opinions of value in a professional manner.

In general, appraisers tend to specialize in specific types of residential, commercial or industrial properties. However, an eminent domain appraiser must be skilled in appraising a broad spectrum of real property types. The reason for this diversity of experience and expertise is that right of way corridors do not discriminate in the types of properties they impact. Therefore, an appraiser must be able to demonstrate just as much competence in appraising a single-family home as a ten-story office building situated along a corridor.

Appraisers working on design-build/P3 projects are also challenged in delivering their reports in sync with the developer’s timetable. In meeting the schedule, adequate resources must be allocated. Since the majority of acquisitions for design-build/P3 projects are partial acquisitions, the appraiser must be skilled at determining the larger parcel, valuing remainder properties, determining realistic damages and formulating reasonable costs to cure. This requires the best appraisal reports coupled with appraisers who are able to keep pace with the schedule without sacrificing good internal quality control.



According to the Design-Build Institute of America, use of the design-build model has greatly accelerated in the United States over the past 15 years, making it one of the most significant trends in design and construction today.

### Challenges Facing Review Appraisers

The fee appraisal reviewers face different hurdles than what the appraisers must overcome. Even though review appraisers have similar time and quality issues, they have consistency responsibilities that are quite different. For example, reviewers may be assigned to assess an appraiser they have never worked with before. This can occur when there is an inadequate supply of local, experienced right of way appraisers available in the vicinity of the project, forcing the acquisition service provider to find appraisers outside the area. A review appraiser who is teamed up with an unfamiliar appraiser may need additional time to create a good working relationship. Prior to the project's start, it's suggested that a few sample reports be requested from new appraisers to ensure there are no conceptual or methodology surprises when the project begins.

Another challenge for review appraisers is the number of appraisers they are assigned to review. One appraisal reviewer could be assigned to examine several different appraisers' work on the same project.

The valuation methodology needs to be fairly consistent among the project appraisers to ensure property owners are compensated equitably. However, the consistency has to be achieved without infringing on the appraiser's impartiality or independence. Appraisal reviewers must strike a fine balance between offering guidance and recommendations to appraisers without injecting themselves into the appraiser's valuation process, which must be avoided to maintain appraisal integrity.

Difficulties may arise if different appraisers are appraising similar types of properties but using different data sets, as this can result in substantial valuation variances. Other differences may be in

each appraiser's determination of the larger parcel, or their approach to the valuation of remainder properties. In these situations, the review appraiser might even find themselves assessing similar property appraisals from different appraisers that have significantly different valuation conclusions.

### Potential Impact on Valuation

There is a tendency to employ a sizeable number of eminent domain specialists for appraisal and appraisal review on large-scale projects. The rationale is that the more appraisers hired, the easier it will be to satisfy the compressed schedule and meet the acquisition milestones. The result may be a lack of valuation consistency unless there is an internal quality control to monitor values of like properties between all of the different appraisers and appraisal reviewers.

Parcels are typically appraised and reviewed based on each appraiser's set of data without an internal global review for consistency. The acquiring agency may assume this responsibility to ensure properties are valued equitably, but it is really a responsibility that is inherent in the developer's right of way quality control plan. One possible solution would be for the developer to add an overall project appraisal reviewer to the right of way team who would be responsible for valuation consistency among the various appraisers and appraisal reviewers. Although this may provide better consistency and quality control, it also carries with it the burden of additional costs, resources and time.

### Envisioning the Remainder Properties

In valuing property improvements, there are more variables involved. When appraisers are provided adequate information, they can better formulate reasonable highest and best uses for the remainder

properties. Communication between the appraisers and the developer's engineering designers plays a major role in attaining valuation consistency, as appraisers may find it difficult to visualize remainder properties without good drawings, plans and surveys that provide a complete picture.

A skilled appraiser can introduce market-derived consistency and support for their improvement values using the cost, sales comparison and income approaches. Improved properties with similar uses such as office, retail or industrial uses should reflect similar unit values from the market. In complex remainder properties, a land planner, structural engineer, architect, traffic engineer or other specialist may be needed to give the appraiser a more precise vision of the remainder property and the uses to which it may be put. Even though experienced appraisers have a keen sense of what the market will accept in terms of remainder properties, it is often prudent to consult an engineering or structural expert who has designed, retrofitted and obtained permitting for similar properties to examine potential solutions and their reasonable costs. While appraisers must ultimately determine whether or not the remainder solutions furnished by experts would be acceptable to the market, they must decide how much of an expert's report to include in their appraisal.

### The Right Pairing

There are several steps that developers and acquisition teams can take to overcome the challenges of valuation consistency. Assigning appraisals by groupings of properties with similar highest and best use is one solution. Often assignments are made merely by the order of parcel numbers. For example, an appraiser may be told they have been assigned parcels 100 through 150. This is a far too simplistic way to portion out assignments and extremely shortsighted considering the potential impact on valuation consistency. The key is to contract appraisers in accordance with the properties' highest and best uses. To make this possible, the developer's right of way team should carefully examine the properties along a project corridor and classify them according to their current or potential highest and best uses before assigning appraisals.

Pairing an appraiser with the appropriate parcel category is another way to ensure valuation consistency. For example, if an appraiser is well known for their exceptional work with shopping centers, they should be assigned all of the shopping center parcels on the project. At major intersections where there may be intense commercial uses like convenience stores with service stations, fast food restaurants or retail developments, assigning one

appraiser who is experienced with these types of properties works better than several different appraisers and different review appraisers. Commercial properties tend to become less intensely developed moving away from a major intersection so those may be grouped with an appraiser who specializes in smaller commercial uses. The best way for managers to make these determinations is to observe their past work,

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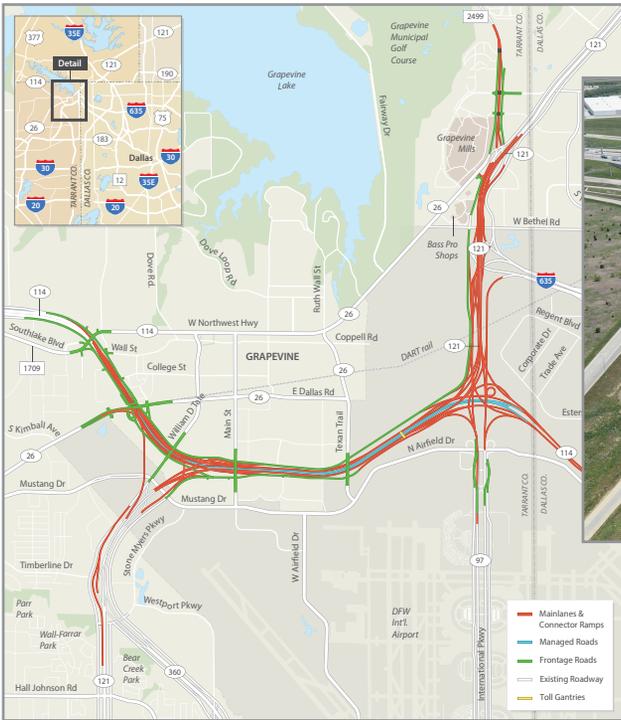
speaking with colleagues, and ask the appraisers themselves what properties they feel most competent in appraising.

Another tool is the use of a right of way map that has land values written on it either electronically or manually as the project progresses. When a parcel is appraised, the approved land value per unit of comparison is inserted onto the map within the parcel boundaries or the whole property boundaries. Every week or so, the map is updated and emailed to the project review appraisers so they are aware of the appraisal values on parcels surrounding the properties they are reviewing.

### Design-Build Success Story

A prime example of putting the design-build model into practice is the DFW Connector Project. In 2009, the Texas Department of Transportation through the Texas Turnpike Authority Division, now the Strategic Projects Division of TxDOT, began program management through a comprehensive development agreement. The DFW Connector, an overhaul of State Highways 114 and 121 in northern Tarrant and Dallas Counties in Texas, was designed to double capacity on a stretch that was averaging 180,000 drivers each day. With 24 lanes across at its widest spot, it would also untangle the congested highway traffic north of Dallas/Fort Worth International Airport.

The \$1.1 billion project spans about 14.4 miles. The right of way acquisition was significant, as a variety of businesses were impacted, including auto dealers, restaurants, banks, convenience stores, shopping centers, big-box retailers,



In Texas, the design-build model was used for the DFW Connector Project, a \$1.1 billion project that was completed nine months ahead of schedule.

office/warehouse properties and some special-purpose properties. Since the acquisition schedule was extremely tight, the project developer and TxDOT recognized the only way to achieve the deadlines was through good communications and partnering at the outset.

The developer's team made it possible for the right of way group and their appraisers to obtain timely access to critical roadway design information, even though the highway was still essentially in the design stage. Through clear channels of communication between the design engineers and appraisers, the right of way appraisal team was able to properly visualize the impact of the acquisitions and value them accordingly. The designers also furnished aerial maps of each parcel with the parcel acquisition surveys superimposed. This was another key component that helped the appraisers to better determine how each property would be impacted. The developer's right of way consultant also had the insight to contract with one large, local appraisal firm—one that was known for its strong internal quality control program—to appraise all of the properties and monitor consistency throughout the project. The right of way consultant hired

two independent fee appraisers to review each appraisal, and they were able to introduce a higher level of consistency into the valuation process. Appraisal consistency was given a high priority by both the developer and TxDOT, and this was evidenced by the resulting valuations and their corresponding offers to property owners.

By using the design-build process, the billion-dollar project was completed nine months earlier than planned. Time is money, and Texas is saving taxpayers both. When it comes to building a model of transportation efficiency, this project is considered a world-class transformation of highways that has raised the bar on project delivery.

### In Summary

The design-build/P3 project model has some definite advantages when used for new infrastructure and major improvement projects. It can deliver projects at a reduced cost and within a compressed time schedule that is not feasible with traditional project delivery methods. However, since property

owners and their attorneys typically compare the land values along the project corridor, valuation consistency is needed for credible results. On design-build/P-3 projects, this is achievable, but it requires the combined efforts of appraisers, review appraisers, right of way acquisition service providers and the project's developer.

When consistency becomes a project priority, right of way acquisition efforts are more successful, and the percentage of parcels being acquired through the eminent domain process is reduced. The emphasis on communication and collaboration makes it a worthy effort. ⚡



*John is an appraisal and right of way consultant with Atkins North America, Inc. He has over 40 years of appraisal experience and has focused exclusively in right of way program management for design-build/P-3 projects for the last 13 years.*