RIGHT-OF-WAY DESIGN-BUILD AND ALTERNATIVE CONTRACTING PEER EXCHANGE

Summary Report on a Peer Exchange

Sponsored By:
Office of Real Estate Services
Federal Highway Administration
U.S. Department of Transportation

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Multimodal Systems Research and Analysis
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Research and Innovative Technology Administration
U.S. Department of Transportation

U.S. Department of Transportation
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Office of Real Estate Services

the VOLPE center

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November 17, 2009
Austin, Texas

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I. Executive Summary

On November 17, 2009, the Federal Highway Administration's (FHWA) Office of Real Estate Services sponsored a one-day peer exchange focusing on the experiences of several State Departments of Transportation (DOTs) with design-build contracting and the use of alternative contract procurement methods. The purpose of the peer exchange was threefold:

- Provide opportunities for peers to share best practices and lessons learned in design-build contracting and project delivery;
- Increase networking opportunities among Right-of-Way (ROW) professionals; and
- Share knowledge on the ROW and utility acquisition processes of State DOTs.

The Texas DOT (TxDOT) hosted the event at its Turnpike Office in Austin, TX. Participants consisted of: staff from FHWA Headquarters, the FHWA Texas Division Office, Colorado DOT, Florida DOT, Georgia DOT, Massachusetts DOT, Maryland State Highway Administration (SHA), Missouri DOT, Ohio DOT, South Carolina DOT, TxDOT, Utah DOT, Washington DOT, West Virginia DOT, Wisconsin DOT, the International Right of Way Association, and the United States Department of Transportation (USDOT) Volpe National Transportation Systems Center (See Appendix A for complete list of participants). Participants represented 13 State DOTs, including ROW directors, legal counsel, innovative contracting specialists, utility and railroad coordinators, and ROW project managers. Presentations on use of design-build contracts, with a ROW component, were given by the Texas, Utah, and Missouri DOTs.

The TxDOT requests for proposals and contract packages called "Book 1, Book 2, and Book 3," are online. To view Texas documents, go to http://www.txdot.gov/business/partnerships/cda_rfp.htm. Contracting requirements for North Tarrant Expressway can be found at www.txdot.gov/business/partnerships/tarrant_express.htm; and information for the Dallas/Fort Worth connector is at http://www.txdot.gov/business/partnerships/dfw_connector.htm.

The Utah DOT provided a ROW acquisition procedure that is used when developing a design-build contract with ROW as part of the contract. Their procedure is attached as Appendix D., Utah DOT Right-of-Way Procedure Part 19C: Right-of-Way Acquisition Procedures for inclusion in Design Build Request for Proposal (RFP). Missouri DOT gave an overview of the kcICON Bridge project in Kansas City.

The Washington State DOT described efforts to develop an alliance-type contract that would allow very early contractor selection and use of the contractor's knowledge (as part of the team) through-out project development. While this first effort did not result in an alliance-type contract, we are hopeful that a State DOT will try this innovative concept in the near future.

Overall observations and lessons learned:

- Engage ROW professionals early in project development to improve coordination.
- There are specific strategies to engage early ROW project involvement.
- Use of the design-build approach creates challenges for ROW professionals.
- Building interpersonal and relationship skills will assist ROW professionals.
- Utility companies can provide cost-estimates to State DOTs.
- Use of alternative contracting approaches will likely increase in the future.
- Make use of ROW processes that can occur prior to environmental review completion.
- Ensure upper-management buy-in to assure early ROW involvement.
- Establish a reputation for fair ROW negotiations.
- Ensure accurate documentation of project scope and procedures in the RFP and contract.
- Include environmental commitments in the RFP and contract.
- Co-locate the design and ROW teams to facilitate coordination and communication.
- Evaluate all applicable State laws.
- Consult with utilities and property owners early in the ROW process.
- Promote innovative solutions to difficult problems using a design-build approach.

II. Background

As amended, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) established the rules, policies, and procedures for acquiring real property, or ROW, and the relocation of individuals and businesses affected by federally funded projects. The law was enacted to guarantee that people whose real property is acquired, or who are compelled to move as a result of projects receiving Federal funds, will be treated fairly and equitably and will receive assistance in moving from the property they occupy. USDOT is designated as the Federal Lead Agency for the Uniform Act. In turn, USDOT delegates this responsibility to FHWA, which in turn supports the acquisition and management of real estate as required for the development of transportation services and facilities. The FHWA provides guidance, resources and tools on corridor management, property valuation, relocation assistance, utility management, and ROW management.

In recent years, transportation agencies increasingly have been using innovative project delivery strategies. These strategies aim to lower project costs and increase quality while streamlining project delivery. Design-build contracting has been identified as one innovative strategy to accomplish these objectives. Design-build contracting combines a project's design and construction phases into one contract to expedite the project delivery process. Two separate contracts are typically required to procure design and construction services in a traditional contracting approach, such as design-bid-build. Using a design-build approach, however, the transportation agency may acquire the ROW and provide it to the contractor for design and construction. Construction begins before the project's final design has been completed.

The FHWA sponsored this peer exchange to promote knowledge and information sharing among State DOTs on innovative project delivery mechanisms. This report provides a summary of the presentations given and the discussions held at the workshop. It will be a resource for State DOTs and transportation agencies that want to learn more about alternative contracting methods and approaches. The report concludes with a section on participants' observations and lessons learned.

III. Presentations and Discussion

Welcome and Introductions

Kathy Facer and Bruce Bradley, FHWA Office of Real Estate Services
Janice Brown, FHWA Texas Division

Ms. Facer thanked participants for attending the peer exchange and asked that peers continue providing ideas for future peer exchanges and other outlets for States to share their experiences. Ms. Brown welcomed all and acknowledged the challenges that ROW and realty departments in State transportation agencies traditionally have faced, while noting the benefits of the workshop in providing peers with networking opportunities.

Mr. Bradley welcomed participants and stated the goals and objects of the workshop as follows:

- Identify best practices associated with public private partnerships and alternative project delivery methods to address ROW and utility needs;
- Identify how integration of ROW and utility processes, with design and construction, can improve project delivery, scheduling, project quality, and reduce cost; and,
- Demonstrate similarities between design-build concepts and the best for project, early contractor involvement, approach used by alliance contracting teams.

He shared information on the FHWA Surface Transportation Environment and Planning Cooperative (STEP) research program.[1] The Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A

[1] More information on STEP is available at http://www.fhwa.dot.gov/HEP/STEP/index.htm

Legacy for Users established STEP is a significant source of funding for FHWA research on realty, planning, and environmental issues. To conduct a needs-driven research program and involve stakeholders in research prioritization, STEP solicits stakeholder comments via an online form during a three-month period each year, which typically occurs in the summer or early fall. Mr. Bradley informed peers that the STEP feedback period was open until December 2009 and he encouraged all event participants to submit comments via the program's website.

Overview of International Scan

Gerry Solomon, FHWA Office of Real Estate Services
Jeff Zaharewicz, FHWA Office of Program Administration

In September 2008, FHWA conducted an international scan on innovative ROW and utility processes in Canada and Australia.[2] The scan complemented previous research work completed in 2000 that documented design-build processes in Norway, Germany, the Netherlands, and Britain. The objectives of the 2008 scan were several, and included ways to explore and analyze alternative project delivery methods that include ROW and utilities, such as alliance contracting and integration of ROW and utilities with project development under traditional and alternative contracting with long-range planning, design, and environmental processes. The project team included representatives from the FHWA, four State DOTs, academia, and consultants.

Major Findings

The international scan team identified several shared themes in Canadian and Australian uses of alternative contracting methods.

Promotion of non-adversarial solutions – Both Canada and Australia placed an emphasis on consensus-building during ROW negotiations to improve professional relationships with the utility industry at all levels. For example, Australian states share results of realty appraisals with property owners to help encourage trust between parties. In addition, Australian states provide reimbursement for property owners to obtain their own appraisals.

Use of alliance contracting for project delivery – Alliance contracting is similar to design-build contracting in terms of its emphasis on collaborative decision-making. The philosophy of alliance contracting is that what is best for the project is best for the team. All team members share both risks and benefits. Unlike design-build contracting, however, alliance contracting includes the project team, with the contractor as a member of the team, as well as utilities and ROW, in defining the scope of projects. British Petroleum first developed alliance contracting as a way to better manage oil reserves in the North Sea. This approach is gaining popularity in Australia, particularly when there are uncertainties about the optimum solution for a project. Uncertainties can include unpredictable risks, a project difficult to scope or price, time pressures, and a desire for breakthroughs and innovation.

Implementable Ideas

The project team identified numerous ideas that potentially could be transferred to a U.S. context. Nine of these ideas were identified as priorities:

- Alliance contracting;
- Cooperative ROW acquisition;
- Visualization techniques;
- Professional competency development;
- Reimbursement for utility relocations involving incentives;
- Corridor preservation strategies;
- Multi-level approaches to ROW acquisition;
- Geospatial ROW asset management systems; and
- Coordination of utilities during construction.

[2] The final report is available at http://international.fhwa.dot.gov/pubs/pl09011/

Considerations for Alliance Contracting

Mr. Solomon and Mr. Zaharewicz noted that the international scan team had been most intrigued by the concept of alliance contracting. In Australia, the alliance contracting method has been used in addition to traditional design-build contracting. In the alliance approach, the agency uses an early contractor involvement model that focuses on assembling and integrating the best leadership, management, and project execution team based on qualifications and experience. Following a "best-for-project" approach, each team includes participants from the selected consortium or the transportation agency, depending on the expertise needed. The early contractor involvement approach means the alliance team is involved during project scoping and design. The alliance approach requires transparent communications between the parties, particularly on compensation and cost structures. Strategies to achieve this goal include establishing a fee structure for all direct project costs that uses open-book accounting, viewable by all parties, a separate corporate overhead and profit calculation, and clear gainshare-painshare arrangements.

The alliance team is responsible for coordinating with utilities early and finding optimum relocation strategies. This means that one team interacts with utilities during design and construction. The alliance team presents a unified front for dealing and negotiating with property owners. Along with its best for the project philosophy, other hallmarks of the alliance contracting method include: hand selection of team members, integration of a business focus to clearly identify the roles and responsibilities of all team members, effective engagement of ROW and utility stakeholders, emphasis on accountability and collaboration, and documentation of lessons learned and outcomes.

The following should be taken into consideration when deliberating whether to use alliance contracting:

Applicability – Alliance contracting might not be applicable for every type of project. The scan team's Australian hosts identified a set of circumstances conducive to the use of alliance contracting, such as: challenging scope and risk management issues, high likelihood of stakeholder input, aggressive time schedules, and team commitment to innovation.

High demands – The method places high demands on senior management and might not achieve the most competitive construction price. However, due to its commitment to upfront relationship-building, the method helps to decrease disputes and claims.

Project magnitude – Alliance contracting might involve higher start-up costs due to its hands-on emphasis. Therefore, a project should be of a large enough magnitude to justify the start-up costs.

Best value application – While the method might be more expensive initially and labor-intensive, it is a best value application; its use increases potential for improved constructability and better overall project quality.

Follow-Up and Next Steps

As a follow-up to the international scan, the scan team produced a project implementation plan to capture goals, benefits, and strategies to transfer the nine priority ideas to a U.S. context. The scan team is continuing to fund research and efforts related to the nine priorities. The project team has formed an Expert Task Group to promote scan findings and implementation ideas, to monitor effectiveness of these ideas, and to liaise with other like-minded industry working groups.

Current research is focused on a scan of State DOT Memoranda of Understanding (MOUs) to compare and contrast existing American MOUs with their Australian counterparts. In Queensland and New South Wales, Australia, highway agencies are exploring a multi-level MOU with major utility companies. The MOU facilitates the coordination process and optimizes the relationship between transportation agency and utility interests. The intent of the current research is to develop a template multi-level MOU that could

aid alliance contracting implementation in the U.S. The team will identify States willing to pilot a multiple-level MOU, document the process, and share lessons learned.

Questions, Answers, and Comments

Question: How are financial risks managed and shared in alliance contracting?
Answer: There are processes for sharing and managing risk. For example, in Australia, a team charter arrangement was used to establish who was best situated to handle risk.

Question: Did the FHWA scan team develop different models for alliance contracting?
Answer: There are many versions of alliance contracting. The project team has not yet developed formal models.

Question: What is the difference between alliance contracting and other cooperative methods such as design-build contracting?
Answer: There are subtle differences. In alliance contracting, the potentially impacted parties are included in the project scoping discussion, before alternatives have been defined. This helps to eliminate potentially defensive relationships. In addition, alliance contracting shares benefits and risks with all stakeholders.

Question: How does the National Environmental Policy Act (NEPA) process fit into alliance contracting?
Answer: Alliance contracting could help identify situations where NEPA analysis is not necessary; for example, if utilities are eliminated from project scope.

Comment: In the U.S., incorporating utilities as equal project decision-making partners could be challenging for some areas.

Comment: In Australia, all railroads and utilities were historically public entities. The companies had roles in project decision-making because they owned the project. When utilities were privatized, the culture of collaborative decision-making continued and leadership recognized the importance of maintaining it.

Question: Did the project team collect MOU samples?
Answer: Yes, the project team has a library of documentation that is available. In addition, the team has continued its contacts with the project hosts.

Question: Did the project team identify ways to transfer the alliance contracting concept to the U.S.?
Answer: Not yet, but this is something that might be pursued in the future.

Presentations
All Participants

Texas DOT Turnpike Authority Division: Overview of TxDOT's comprehensive development agreement program, including the request for proposal and evaluation processes.

Don Toner, TxDOT

The TxDOT Turnpike ROW office[3] is organizationally located in the TxDOT Turnpike Authority Division. Its primary role is to provide program management oversight and, at the same time, to coordinate the acquisition of ROW (including relocation), provide for utility relocations and adjustments, and manage surplus real property for the Turnpike projects in Texas. ROW activities include surveying and mapping of property, purchasing property, relocation assistance, and preparation of condemnation packages. There are more than one million acres of ROW on the Texas State system.

[3] http://www.txdot.gov/about_us/administration/divisions/row.htm

CDA Overview

Comprehensive Development Agreements (CDAs) are agreements that TxDOT develops with one contractor to design and acquire ROW, relocate and adjust utilities, and construct, finance, and operate or maintain certain transportation facilities, including highways, turnpikes, freight or passenger rail, and public utilities. More broadly, CDAs are public-private contracting tools that allow the private sector to develop or invest in the Texas transportation system.

Texas State legislation and Federal legislation, including Chapters 223 and 227 of the Texas Transportation Code and the Uniform Act of 1970, govern CDAs. To manage the CDA process, TxDOT convened a steering committee comprised of senior executives. TxDOT also uses contractor support to help manage the CDA program, as the TxDOT ROW office has only 12 full-time employees. The Texas Transportation Commission and the TxDOT executive director also support the CDA program.

The CDA process is documented in a series of four books:

- Book One details CDA terms and conditions;
- Book Two details project-specific requirements;
- Book Three provides information on CDA programmatic requirements and required standards; and
- Book Four provides additional reference information documents.

For a sample, the CDA documents for the North Tarrant Expressway are at http://www.txdot.gov/project_information/projects/fort_worth/north_tarrant_express/cda.htm#book2 Additionally, the Texas Landowner's Bill of Rights[4] is extended to CDA developers.

Risk Allocation

Risks are known and unknown issues that result in schedule or construction delays, or issues related to environmental approvals, project design, or ROW acquisition. Risk allocation is a key component of CDAs. The CDA process enables TxDOT to transfer all project risks to those parties best equipped to manage them. Transferring risks has associated costs and benefits, which TxDOT carefully weighs before determining whether a CDA is an appropriate project tool.

In a traditional design-bid-build contract, very little risk-sharing occurs between the project owner and developer. Under the CDA model, however, risk-sharing is more extensive. There are several different types of CDAs, each of which involves different patterns of risk allocation:

- **Design-Build CDA –** This type of CDA involves transferring design- and schedule-related risks to the project developer while sharing most risks related to construction, ROW, and environmental compliance. Some design-build CDAs might also include maintenance responsibilities.
- **Pre-Development CDA –** This type of CDA allocates risk related to project finances and implementation to the developer. The pre-development CDA focuses on the first steps of a project to better define project and/or corridor wide elements.
- **Concession CDA –** This type of CDA transfers all risk to the project developer. The project owner (i.e., TxDOT) retains responsibility only for the environmental approval portion of the project and then turns the work over to the developer, while retaining full TxDOT oversight.

At completion, projects can be transferred back to TxDOT either at the end of the CDA term (up to 50 years in the concession model) or after construction (in the design-build model).

CDAs provide flexibility to developers, allowing them to design and construct projects within schedule constraints. However, TxDOT has specific requirements that do not change no matter what type of CDA

[4] The Texas Landowner's Bill of Rights is available at http://www.oag.state.tx.us/agency/landowners.shtml

is utilized. TxDOT reviews and approves all acquisition, relocation, and utility packages; approves all property owner offers and settlement opportunities; oversees property management, and manages the eminent domain effort. TxDOT also ensures compliance with all State and Federal rules and regulations.

Procurement Process

CDA procurements involve a two-stage process and can be submitted either at TxDOT's request or as unsolicited proposals. To initiate CDA procurements, TxDOT first issues a request for detailed proposals that include project technical provisions and associated reference documents. After receiving proposals, TxDOT assesses them in a detailed evaluation. A request for a Best and Final Offer (BAFO) is issued and the best-value BAFO proposal is selected. Finally, TxDOT enters into limited negotiations with the best-value proposer and awards and executes the CDA. Throughout the evaluation process, financial information is separated from the project's technical provisions to ensure an honest appraisal. Additionally, identifying information is removed so that evaluators cannot ascertain who the developers are. This effort to issue a proposal, evaluate proposers, select, and negotiate with the successful proposer can take up to a year. Requests for proposals are available on the TxDOT website.

Current CDA Projects

TxDOT has been engaged in CDAs for eight years and is currently involved in execution of CDAs for seven projects, including: the State Highway (SH) 130 segments one through four (2002) and segments five and six (2007)[5], the North Tarrant Express (2009), the Interstate 635-Lyndon B. Johnson (LBJ) Freeway (2009), and the Dallas-Fort Worth (DFW) Connector (2009).

The State Highway 130 project focuses on improving highway mobility and developing a portion of the highway as a toll road. Segments one through four are being developed under a design-build CDA model (inclusive of maintenance) while segments five and six are being developed under a concession CDA. Under the agreement, the developer is designing, constructing, operating, and maintaining the toll road for a 50-year period. The developer is financing the project; however, the agreement allows TxDOT an increasing share of toll revenues over the 50-year period.

The North Tarrant, DFW Connection, and LBJ Freeway projects, which also focus on improved highway mobility, are all occurring in North Texas (see Figure 1). These projects present challenges for ROW acquisition since all involve building over existing infrastructure. Recently, TxDOT purchased some of the necessary ROW for these projects and turned them over to the developer using various CDA models, including a design-build CDA (for the DFW Connector) and a concession CDA (for the LBJ Freeway project and phases 1 and 2W for the North Tarrant project).

[5] For more information on the SH 130 project, see http://www.mysh130.com/default.asp

Figure 1. Map of the North Tarrant, DFW Connector, and LBJ Freeway projects. The North Tarrant project is highlighted in blue; the DFW project is highlighted in black. The LBJ Freeway project is highlighted in red.

Benefits and Lessons Learned

CDAs have helped to expedite project delivery in Texas. For example, TxDOT has built more than 90 miles of highway over the last six years. Mr. Toner estimated that these miles would have taken over 30 years to build without the use of CDAs. Additional benefits of CDAs include:

- Providing a cost-effective system of toll roads using private-sector partners and multiple financing options;
- Facilitating cooperation and coordination among TxDOT offices, the Texas Office of the Attorney General, FHWA, and consultant staff, which helps further project successes; and
- Procuring two project management contracts (totaling $14 million) to assist TxDOT in procuring parcels, relocating utilities, and support access issues and all eminent domain proceedings.

While CDAs have many benefits, they are special tools and might not be suitable for every project. For example, due to their complexity, CDAs lend themselves to large projects. Mr. Toner also reported several lessons learned from utilizing CDAs in Texas:

If developing a CDA program, involve the Attorney General's office as early in the process as possible to ensure adherence to all rules and regulations. TxDOT worked closely with the office from the very start to ensure buy-in from the Texas Transportation Commission and TxDOT administration.

Use specific terms to define participating entities. For example, the term "developer" could refer to a contractor, a constructor, or a ROW acquirer. It can be problematic to use general terms that do not sufficiently outline each entity's responsibilities and obligations.

Ensure accurate documentation of the CDA process. Tools such as flowcharts and checklists help to outline program processes and procedures to ensure proper guidance and oversight, while facilitating audits that might occur in the future. It is important to be as specific as possible in the documentation to preclude differing interpretations. TxDOT makes revisions to the CDA program books on a consistent basis to incorporate lessons learned from previous projects.

Ensure front-end ROW approvals are done correctly. To ensure the legality of all processes and avoid legal challenges to ROW activities, it is crucial that ROW approvals are completed correctly the first time.

Questions, Comments, and Answers

Question: What is the number of proposers in TxDOT's request for proposal (RFP) process?
Answer: There are few firms that manage project budgets in the billion-plus dollar range, which is the range of TxDOT's alternative contracting projects. It is challenging to ensure that there is sufficient competition for the RFPs; therefore, TxDOT works diligently on the procurement side, to ensure that there are multiple bidders.

Question: How does TxDOT handle stipends to the losing bidder?
Answer: TxDOT does have a stipend program in place. The stipend is adjusted based on project size. In the past, TxDOT has paid up to $1 million to the losing bidder to offset the cost of preparing submission documents to provide a responsive bid. However, the stipend program is only a partial payment: for one project, the losing bidder invested $2.4 million; the stipend offset less than half of the investment.

Question: Does TxDOT own the bidders' ideas once the stipend is paid?
Answer: Yes. In the past, TxDOT has been able to use excellent ideas from a losing bidder's package, so it is a win-win situation.

Question: Are utilities paid for their relocation?
Answer: There have been different scenarios based on State law. Currently, utility relocation is 50 percent compensable. This legislation was adopted in September 2005, though some projects were grandfathered into this law. When TxDOT started the CDA program, 100 percent was paid for the utility relocation. The change in State law has been challenging, since utility companies are now less inclined to move forward on our project schedule. In addition, the time and budgeting schedules of utilities do not match those of TxDOT. Early communication has become important to ensure that expectations are aligned.

Question: Do utility companies have to provide the 50 percent match upfront?
Answer: If a facility is on a public ROW then TxDOT reimburses utilities 50 percent. If the facility is on a property interest, TxDOT pays 100 percent for that facility.

Question: Does TxDOT use a formula to identify the exact stipend?
Answer: The formula is based on the project magnitude and complexity; the TxDOT Transportation Commission establishes the exact stipend. The bidder is eligible for the stipend if a responsive proposal is submitted. All eligible responsive bidders receive the same amount.

Comment: Stipends can be a sensitive issue. Contractors might be more used to taking risks than consultants.

Question: Have toll roads been operating long enough to show a return on investment?
Answer: Yes. Revenue on toll roads in central Texas has surpassed expectations. Original traffic revenue studies for the area cited concern about the community's responsiveness to a toll road. However, the saturation and responsiveness rate for the toll tags has surpassed expectations. Cash flows are ahead of projections and TxDOT is paying down its interest and loans more quickly than it had anticipated initially.

Question: When TxDOT embarked on CDA projects, how did TxDOT acquaint the developers with the CDA process?
Answer: TxDOT emphasized that better communication will lead to a quicker project. FHWA guidance and involvement was very important; TxDOT co-located with a FHWA district engineer in the office during the design and construction phases. This was a successful strategy. In addition, FHWA conducts a quarterly review of all developers' projects.

Question: How much design or acquisition does TxDOT complete before starting the CDA process?
Answer: TxDOT handles and completes the environmental process. TxDOT also progresses the project roadway design to a schematic level of sufficient detail that will allow a CDA proposer to analyze the

project and determine the intent of the Department. Typically, TxDOT will determine lane assignments and much of the design criteria. If NEPA is complete, TxDOT may begin some of the ROW acquisition. Typically, we leave design, property surveys and ROW acquisition to the developer.

Comment: When MassDOT goes through the NEPA process, it is required to have completed most design elements and therefore typically has completed most of the ROW process.

Comment: It can be beneficial to incorporate more design elements and TxDOT has experimented with various systems. The initial intent of design-build was to turn the project over to the developer to buy the ROW for facilities and construct the project. Using this method, TxDOT has to be cautious about getting too far out in front of reasonable design and purchasing property on the basis of a schematic drawing.

Question: Does TxDOT use incentives in its oversight program?
Answer: TxDOT does not provide incentives in its oversight role, though incentives are allowed for acquisition. TxDOT is currently looking at ways to provide incentives to property while staying within the bounds of the Uniform Act and Texas law.

Question: Is TxDOT involved in selecting subcontractors?
Answer: No. The developers manage their own subcontractors. TxDOT does not want to take on the risk of managing subcontractors. TxDOT is only informed of subcontractors via the procurement document. After the procurement process has concluded, the developer provides TxDOT with a list of subcontractors and appraisers as part of their facilities management plan. TxDOT does review the appraisers' credentials and approves any replacements that are different from what was listed in the original procurement document.

Question: What is the intent of the TxDOT acquisition package approval?
Answer: TxDOT's intent is to close parcels as quickly as possible. We have to evaluate the developer's submission and respond quickly on all packages and settlement requests. Condemnation occurs after the eminent domain package is provided to TxDOT. Once TxDOT approves the condemnation package and ensures that all front-end actions are satisfied, TxDOT has a limited number of days to obtain possession and provide the real estate to the developer so that they can begin construction.

Question: After the condemnation package is processed, does TxDOT take back the risk that initially was transferred to the developer?
Answer: According to the TxDOT CDA process, the risk is shared but some risk does transfer back to TxDOT. As a result, TxDOT manages condemnation packages very carefully to ensure that parcels are delivered on time.

Question: Has TxDOT seen comparable eminent domain rates between traditional and design-build contracting?
Answer: Design-build rates are slightly higher. TxDOT uses an estimation tool that includes a higher condemnation rate to ensure that there is sufficient funding. Success is measured by speed, budget and condemnation rate. TxDOT strives to keep parcels from being another statistic. Developers are required to try to contact the property owner multiple times before TxDOT can approve a condemnation package. The TxDOT CDA was specifically written to minimize the condemnation rate and improve communication with property owners.

Comment: The CDA process is similar to what is done in Ohio, but it appears that TxDOT has raised the CDA process to the State level.
Answer: Yes. TxDOT is using the CDA program in various parts of the State and also seeks State and local funding. Having local support is an important part of our success.

Utah DOT: Overview of UDOT's experience with the design-build process, including key lessons learned, best practices for scope of work development, and issues specific to appraisal, valuation, relocation, and property management.

Karen Stein, Utah DOT

The UDOT ROW Division acquires properties, manages relocations, and provides oversight for all ROW considerations for State and Federal highway projects in Utah. Instead of the ROW Division handling utilities, they are handled through supplemental agreements. The Division has 21 staff, five of whom are lead agents that provide coordination and oversight for design-build and design-bid-build programs. To help support an increasingly large ROW workload, UDOT utilizes consultant support. The ROW Division also provides oversight for field staff and employs a field design-build manager.

Due to the small size of the ROW Division, it is difficult to manage work on larger projects while being solely responsible for property acquisition. For larger projects, separate offices handle property acquisition and the ROW Division provides project management and oversight.

Use of Design-Build at UDOT

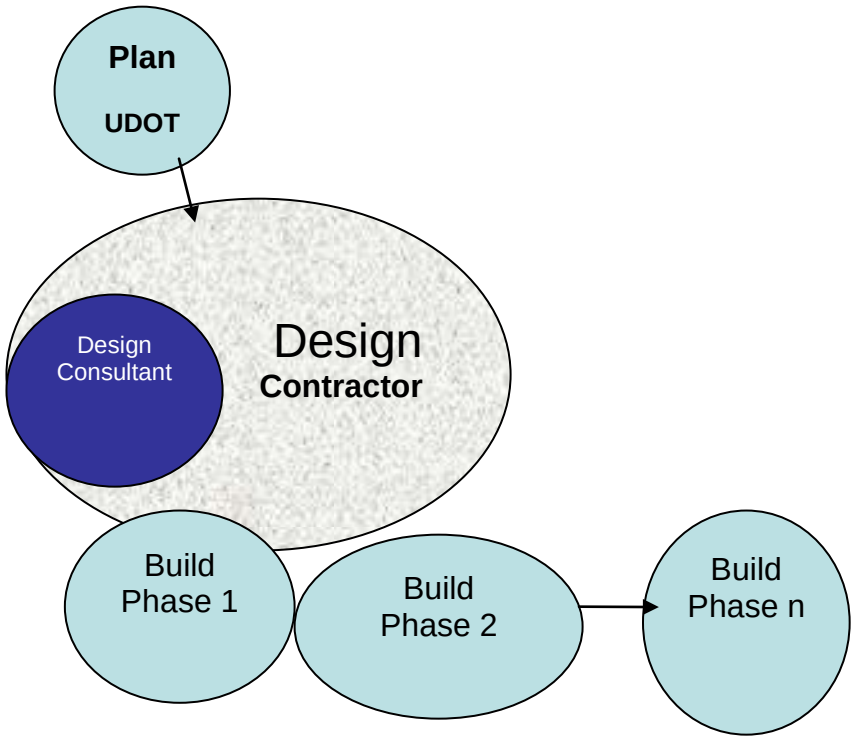
A design-build process was implemented in 1999 to meet UDOT's business needs and strategic goals. As at TxDOT, the UDOT design-build process is used as a revenue-sharing device and financing mechanism. However, UDOT is not currently using design-build for toll roads since UDOT does not have legislative tolling abilities. Table 1 below illustrates some of the projects for which UDOT might implement a design-build approach as well as the corresponding reason for using the approach.

Table 1. Use of Design-Build for UDOT Projects.

UDOT Project Characteristics	Reasons for Using Design-Build Approach
Insufficient UDOT in-house resources	Design-build can provide financing mechanisms for project
Could benefit from fast-tracked delivery	Stacking design and construction together, as in the design-build approach, can streamline project delivery
Has high need for innovation	Performance specifications in design-build can encourage the contractor to develop innovative practices
Occurs on an Interstate route	Design-build can help mitigate third party utility delays
Has known and transferable risks	Design-build allows risks to be transferred to the party best- equipped to manage them

There can be a high need for innovation when there are significant geographical elements (such as a bridge needed over a river) or other challenges in design that the engineers want to address with innovative design idea. We have seen innovations with the ABC Bridges on several projects (Accelerated Bridge Construction) or if innovative methods are needed on an Interstate route, etc. UDOT's design-build process involves delegating the design and build phases of the project to one or multiple contractors (see Figure 2). UDOT retains responsibility for planning the project and hiring the consultant.

Figure 2. UDOT's Design-Build Process.



The project construction phase takes place concurrently with the design phase. Under design-build, ROW needed for the project is cleared with a Letter of Consent. Remaining properties are described as "hold off" zones for construction until ROW can be cleared.

After the Notice to Proceed date, UDOT negotiates with the design-builder regarding certification of subsequent parcels. These steps differ from a traditional design-bid-build process, during which construction proceeds only after all ROW is cleared. A key feature of the UDOT design-build process is a high level of cooperation between stakeholders. Cooperation is required to keep design-build projects on schedule and, at the same time, not to encroach construction on properties that have yet to be cleared.

Under design-build, UDOT typically purchases properties early on in the process and then maintains the properties until the need for demolition or salvage is identified.

To facilitate communication throughout the process, UDOT utilizes its web based electronic database system to which ROW staff, consultants, and field agents have access. The database includes a computerized diary or agent's log that documents all contacts with the property owners or displaced persons during the acquisition or relocation processes. ROW staff can view the agent's log easily to monitor the acquisition process and the status of the property negotiations.

During the ROW negotiation process, property owners can seek free legal advice from attorneys in the Office of the Property Rights Ombudsman; an office set up by the State legislature and mandated to protect private property rights. This right to access the Ombudsman is noted in a written outline of private property owners' rights that UDOT provides to property owners prior to negotiations. The Ombudsman can investigate whether UDOT has followed proper procedures to acquire property and can recommend solutions to address property owners' grievances.

UDOT Request for Proposal (RFP) Process

The RFP describes the scope of work for the project design. To develop an RFP for a design-build project, UDOT uses a multi-step process:

1) Prepares a list of high-priority parcels;
2) Provides the design-builder with a list of property already acquired or those properties that UDOT will require;
3) Determines whether the design-builder will be responsible for property closings and, if so, whether they will provide title insurance;
4) Gives details on who has signature authority for each step of the design-build process;
5) Grants pre-approval for administrative settlement amounts;
6) Develops contracts or settlement authority for mediations, arbitrations, and condemnations;
7) Considers the process for relocation claims;
8) Develops a negotiated flow chart with the design-builder; meets and discusses the project status on a weekly basis; and
9) Tracks hand-offs to and from the agency, using a shared system if available.

UDOT Design-Build History and Current Projects

UDOT first used the design-build process on Interstate 15 in order to expedite construction prior to the 2002 Winter Olympics in Salt Lake City, Utah. As part of this process, UDOT acquired all residential ROW and a consultant team acquired all non-residential ROW. The use of design-build helped to streamline project construction; UDOT had estimated an eight-year construction period for the project using a traditional design-bid-build process, however, actual construction was completed in four years under design-build.

The 12300 South project took place from fiscal years 2001 to 2004 and represented UDOT's first true use of design-build. Due to the events on September 11, 2001, as well as some air quality containment issues, UDOT wanted to complete the project as quickly as possible. Therefore, the project was shifted from design-bid-build to a design-build program due to the aggressive timeframe.

As a result of using design-build, the project was completed in three years instead of nine (the projected completion time using a design-bid-build process). UDOT reported that the use of design-build had significantly streamlined project construction while, at the same time, reducing condemnation rates (the 12300 South project involved a five percent condemnation rate). However, one disadvantage was that the project involved a high frequency of administrative settlement costs due to its ambitious schedule and cost pass-through. The project was advertised prior to full acquisition of ROW. Ultimately, more ROW was acquired than was actually necessary to meet the environmental needs of the project proposal.

UDOT is currently using design-build for a number of projects, including:

- *Access Utah*, a compilation of five projects [Pioneer Crossing http://www.udot.utah.gov/pioneer, http://www.udot.utah.gov/sr77; SR&77 and I-15; SR-92 are three of these projects.] Go to: http://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:1332 for information about these and other active projects in Utah County;
- Widening of State Route (SR) 68 (Redwood Road) from Bangerter Highway in the north to Saratoga Springs in the south;[6]
- Construction of a new interchange, construction/reconstruction of new roadways, and removal of existing interchange infrastructure on Interstate 15;[7] and
- 114th South project; The 11400 South Project includes a new interchange on I-15 at 11400 South, the connection of 11400 South between 700 West and 1300 West, and widening from State Street to Bangerter Highway. This project is currently under construction and is expected to be completed by 2011.

[6] More information on the use of design-build for SR-68 is available at http://www.udot.utah.gov/sr-68south/db.aspx
[7] More information on the use of design-build for I-15 is available at http://www.udot.utah.gov/laytoninterchange/home.aspx

Project Overview: Initial improvements to the 11400 South Corridor encompass the area between State Street and Bangerter Highway. The construction project includes the following:

- Construction of a new I-15 interchange at 11400 South with new auxiliary lanes northbound and southbound between 11400 South and 10600 South;
- Widening of 11400 South to five lanes (four traffic lanes with a center median) with shoulders, curb and gutter, and sidewalks;
- Construction of traffic and pedestrian structures across the Jordan River and improvements to the Jordan River Parkway Trail;
- Improvements at many intersections, such as dedicated turn lanes or upgraded traffic signals;
- Raised medians in some locations along the corridor to control access, and improve safety and traffic flow;
- A bridge at the Union Pacific Railroad tracks where the tracks will accommodate future UTA FrontRunner and continued rail service http://www.udot.utah.gov/11400south/;
- Fort Lane Interchange project http://www.udot.utah.gov/laytoninterchange and http://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:2345; and
- Adding a continuous flow intersection to 6200 South.[8]

UDOT is planning to add three more design-build projects over the next year-and-a-half.

Benefits and Risks

Ms. Stein reported that there are both benefits and risks to using design-build. Use of design-build can streamline project delivery and ROW acquisitions since construction and design occur simultaneously. Additional benefits can include:

- Expansion of State DOT resources for engineering and acquisition/relocation processes;
- Easier identification and management of risks;
- Reduction of design errors and need for design detail, and encouragement of design that mitigates damages;
- Innovative design and construction elements (although innovation is specific to the selected contractor, their experiences, and capabilities); and
- Encouragement of negotiated settlements and effective scheduling methods.

However, design-build can involve several risks, such as higher frequencies of conflict. Traditional design-bid-build projects maintain a balance between scope, schedule, and budget. Design-build projects, however, focus primarily on schedule due to the contractor's focus on earning schedule-related incentives. Scope and budget are less of a focus, which can cause budget issues. Additional risks to using the design-build process can include:

- High costs of proposals and increased overhead and relocation costs, since the State DOT might have to obtain more ROW property than it needs due to partial design;
- Increased effort for the contractor to bid, as the contractor may initially be provided only 30% of the design work completed by the Department;
- Difficulty responding to community concerns regarding the project footprint, since project construction can move forward without a completed project design;
- Potential for coercive acquisition methods. The design-builder must stay on schedule to earn incentives and avoid financial penalties. However, the extreme focus on scheduling could lead to use of inappropriate tactics to clear critical parcels;
- Increased potential for ROW delays due to duplicated functions and oversight required by both the design-builder and the central State DOT ROW office;
- Increased number of condemnation cases and administrative settlements; and
- Due to the rush to clear ROW, there is potential for practices that do not comply with the Uniform Act or UDOT ROW policies and procedures.

[8] More information on the 6200 South project is available at http://www.udot.utah.gov/wego/redwood-road-intersection-improvements.html

Issues and Recommendations related to Design, Appraisal, Acquisition, Relocation, and Property Management

Ms. Stein described some common issues that occur throughout the design-build project lifecycle, and recommended some tips for handling these issues.

Design Issues
Design errors cause most project schedule delays. To streamline the design process, it is important to do the following:

- ***Require a quality control/quality assessment (QC/QA) process to ensure the quality of ROW documents.*** UDOT has made its quality control process more robust over time. Currently, UDOT has recommended that there be two separate ROW design firms working on each design-build project, each of which reviews the ROW documents to provide a system of checks and balances.

- ***Require verification of property ownership information prior to closing.*** The design-builder typically runs a title check to verify a property owner's identity. However, ownership can change over time and therefore the title check should occur as late in the process as possible.

Appraisal and Valuation Issues

- ***Use consistent methodology and comparable sales data.*** For consistency, ensure that there is a single review appraiser or at least one reviewer per identified project segment.

- ***Use appraisers who are familiar with State processes whenever possible.*** Many ROW firms might need to bring in outside appraisers and reviewers. Out-of-state appraisers are not recommended due to a desire to achieve consistency and continuity in the ROW process. However, if utilized, out-of-state appraisers and reviewers should be licensed and familiar with the relevant State codes and local property values and economic trends, etc.

Acquisition Issues

- ***Conduct early acquisition and property purchases.*** The State DOT should begin the acquisition process as soon as possible once the project has environmental clearance. The State DOT should also purchase property for the widest estimated footprint to include all potential easements.

- ***Closely monitor the RFP and contractor's activities.*** All contractor activities should be monitored by the project owner to ensure that the RFP and policies are followed. For example, do not allow the design-builder to use Right of Entry unless other means to acquire have been exhausted. The Design Builder must be motivated to seek a settlement by good faith negotiations. A Right of Entry agreement provides only temporary occupancy. We encourage the Design Builder to encourage the owner to allow occupancy and entry using a document the Department has developed (the Right of Occupancy Agreement) which allows the occupancy with payment based upon the approved appraisal. Ensure that the contractor does not encroach on properties without authorization.

- ***Consider development of a Right of Occupancy agreement.*** In coordination with the Ombudsmen Office, UDOT developed a Right of Occupancy (ROO) agreement (voluntary ROO). If a ROO is developed, ensure that it is used responsibly and only if the property owner is willing to negotiate or mediate differences of value. UDOT does not obtain lien releases on the majority of parcels unless they are of high dollar property and a major take.

- ***Coordinate with property owner and State DOT.*** The design-builder should follow-up to acquire or condemn based on a negotiated timeline that has been established between the property owner and State DOT.

Relocation Issues

- ***Provide timely notification.*** Ensure that relocation notices are prepared and issued appropriately and provide advisory assistance in a timely manner.

- ***Prepare detailed documentation.*** The design-builder should keep detailed documentation regarding each contact with the property owner or displaced person. This documentation should be provided to the State DOT.

- ***Provide a balance between need for timely negotiations and realistic benefits.*** On business relocations, the State DOT's agents need to determine what is most beneficial and cost-effective for the State DOT. The desire to clear properties in a timely manner should not result in inadequate offers of relocation benefits.

Property Management Issues

- ***Consider all aspects of property management.*** Issues to consider could include: salvage rights, lease agreements, terms of assumed lease, demolition schedules, and walk-through and release of security or key deposits.

Overall Issues

- ***Ensure proper qualifications.*** The design-builder should ensure that agents employed on the design-build project meet or exceed the State DOT's minimum qualifications. Additionally, agents employed by the design-builder should be familiar with the subject area to ensure that what is thought to be comparable for replacement property is in fact comparable.

- ***Agents must remember to maintain appropriate relationships with the State DOT.*** Although agents are employed by the design-builder and work closely with the design-builder, agents must remember that they are the face of the State DOT and must adhere to all State DOT rules, policies, and expectations.

- ***The role of the State DOT and builder are different.*** The State DOT should commit to an oversight role and make the design-builder accountable for what is outlined in the RFP. Risks should be managed wisely such that the design-builder retains project risks.

Questions, Answers, and Comments

Question: What is the UDOT ROW Division's involvement in the public participation process?
Answer: The ROW Division obtains public input through the environmental process. Using a design-build model, ROW is involved more often and earlier. For example, ROW might create community groups that encourage people to discuss project issues. Public involvement is built into the contractor and design-build team incentives. There is a survey conducted during and after the design-build project is constructed to assess whether it sufficiently met the community's need. The contractor is scored on this and the bonus award is in part based on these scores. We had a project example where a contractor agree to reconstruct a better quality fence then the project required under the project's technical specifications—as a way to obtain community buy-in to the project. The bonus would allow the contractor to recapture what they expended—in this case, the expenditure for the fence—to encourage community goodwill. Design-build incentives can help promote implementation of an effective public involvement plan.

Question: Is the Utah Ombudsman involved in the scope of transportation projects?
Answer: The Ombudsman is involved only in reaction to complaints in an advisory role. The Ombudsman usually focuses on local government projects. UDOT has found that the Ombudsman provides the most help to property owners on identifying what is compensable and is able to focus their attention on facts rather then on their emotions. The office is also able to steer property owners toward mediation and the office facilitates subsequent mediation or arbitration hearings.

Question: Are there penalties if the design-builder does not adhere to the time schedule?

Answer: Yes. There are also incentives for earlier project completion. Additionally, there are monetary penalties if the contractor does not return its appraisal within a certain time period; however, this is not always enforced.

Question: Do design-builders use their own attorneys to run titles?
Answer: UDOT offers a list of pre-qualified title companies that they can use, but they are not required to use them.

Washington DOT: Overview of Washington DOT alternative contracting.

Fred Tharp, Washington DOT

WSDOT is responsible for managing over 18,000 State highway lane-miles and is currently in the process of a major, 25-year capital construction program estimated at providing more than $15 billion in projects.

To expedite project delivery, WSDOT has legislative authority to utilize several types of alternative contracting methods, including design-build, design-bid-build, and construction management general contracting (CMGC) with special approval. Each approach has different components. For example, under a design-bid-build process, contractors take on little risk and WSDOT accepts all of the risk. Design-bid-build is conducive for projects that are relatively simple. The CMGC process involves hiring a contractor during the design process that assists the project owner with construction management. Under this process, more risks are shared between the agency and the contractor and the final project cost is unknown until after execution of the contract. This process is suitable for more complex projects. The design-bid-build process is suitable for projects that are very complex with multiple unknowns. While price and schedule are fixed constraints, final design is unknown.

Overview of Alliance Contracting Approach

WSDOT identified alliance contracting as an alternative approach to design-build, design-bid-build, and CMGC. Under the alliance contracting approach, the contractor or a consortium of contractors coordinate design and construction. Payment is contingent on adherence to strict performance measures that can include an accelerated construction schedule and project completion deadlines.

WSDOT initially developed an alliance contracting approach to address legislative constraints placed on its use of design-build. Alliance contracting was designed to provide a single contract for both design and construction while meeting minimum criteria regarding scope of service, evaluation of technical information, project costs, and resolution procedures. Alliance contracting is suitable for extremely complex projects with variable unknowns, solutions, costs, and risks.

WSDOT was prepared to deliver a project using an alliance contracting approach (the State Route (SR) 519 project described below). However, the State legislature did not ultimately support use of this approach and, as a result, the agency currently has limited experience with utilizing alliance contracting.

SR 519 ("South Atlantic Street") Project

WSDOT identified alliance contracting as a good approach for phase two of the SR-519 intermodal access project in Seattle.[9] The project involves addressing safety issues related to surface-level rail crossings as well as improving access to the city's waterfront and two major downtown professional sports arenas (see Figure 3). The project involves multiple stakeholders, components, and risks, including Seattle ownership of portions of the project, insufficient budget, and potential utility conflicts (due to the presence of old underground utilities).

[9] Additional information about the project is available at http://www.wsdot.wa.gov/projects/sr519/

Figure 3. Aerial view of SR-519 project site in downtown Seattle.

WSDOT identified the alliance contracting approach as a way to consolidate project design and construction while addressing the project's complex components. Using this approach, WSDOT set the project budget but the contractor had responsibility for selecting an appropriate design. Additional general components of this approach included:

- Creation of stronger partnerships between WSDOT and the design-builder;
- Reduction of proposal development requirements;
- Provision of incentives to the contractor to encourage innovation and efficient delivery; and
- Risk-sharing between WSDOT and the contractor.

The specific components of the alliance contracting approach proposed for the SR-519 project are described below:

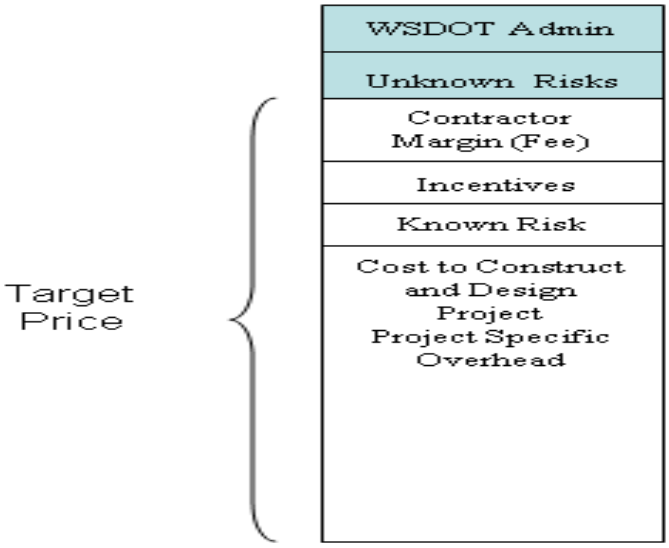
Contractor Selection

To select the contractor, WSDOT developed several criteria for the Request for Quotation (RFQ) and RFP documents, including all information related to the project team (e.g. key personnel and organizational structure) and fee structure (e.g. contractor costs and overhead as well as other pricing considerations). RFP responses were also expected to include a project management plan to identify and address risks, a QA/QC process, and other documents that included traffic management, safety management, and environmental compliance plans. WSDOT also intended to conduct interviews with bidders in addition to reviewing the RFQ and RFP documents.

Project Cost and Pricing Structure

To determine the cost of project components, WSDOT implemented a contract pricing structure (see Figure 4). The project's budget (i.e., target price) was a fixed constraint. Components of the target price—including cost to construct and design, incentives, and project-specific overhead—were set by the contractor. The pricing structure essentially allowed the contractor to identify the percentage of incentives and risks that would comprise the target price.

Figure 4. WSDOT contract pricing structure showing target price and components.



Soliciting Feedback on the Alliance Contracting Process

To solicit industry feedback and receptiveness to reducing all engineering and design to a single RFP, WSDOT presented the alliance contracting process to industry trade groups, including the American Council of Engineering Companies and the Associated General Contractors of America, during a series of monthly meetings.

Feedback from these industry groups noted that WSDOT should keep the alliance contracting pre-qualification process simple so as not to unduly stress bidders' resources in responding. Industry trade groups also emphasized the importance of transparent communication between WSDOT and bidders. Finally, the groups recommended that WSDOT set the target price while allowing the design builder to establish various components of the price, including: risk allocation, incentive distribution, and design/construction costs. WSDOT revised the enhanced design-build process on the basis of industry feedback, specifically incorporating the recommendation regarding target pricing, as previously described.

Outcomes and Current Project Status

While WSDOT was able to develop an RFP to select a contractor and designer for the SR-519 project, the agency could not move forward to implement the RFP due to difficulty establishing upper-management buy-in to the approach. As a result, the original alliance contracting approach was converted to a traditional design-build approach.

After issuance of the project RFP under a design-build template, WSDOT received five Statements of Qualification (SOQs), which were ultimately short-listed to three potential candidates. All of the SOQ proposals received were over budget and, as a result, WSDOT subsequently moved into a BAFO process. The agency revised project scope, adjusted risk exposure, and added $10 million to the project budget. Ultimately, WSDOT awarded the contract to the best value proposal. The winning bid provided the second lowest price, but it also reduced impact to the professional sports arenas adjacent to the project site. Currently, the project is anticipated to be completed on schedule although total project costs are still unknown.

Success Factors and Lessons Learned

WSDOT reported the following lessons learned and success factors from its experience developing an alliance contracting approach:

- ***Soliciting feedback from industry trade groups was crucial to developing buy-in for an alliance contracting approach to the SR-519 project.*** The meetings that WSDOT held with industry helped to build industry trust and buy-in to the approach and allowed WSDOT to make its decision-making processes more transparent.

- ***It is important to carefully review alternative contracting approaches and project components in order to ensure the right approach is selected*.** Each alternative contracting tool is suited for use on certain projects with specific characteristics.

- ***Build support from upper-management and the State legislature*.** It can be difficult to step outside the box when having to develop and implement new strategies and build support for new approaches takes time. However, widespread support is key to an agency's ability to move forward with alternative contracting mechanisms.

Questions, Answers, and Comments

Question: How did WSDOT ensure equitability for bidders while also obtaining a design-builder that met the agency's specific needs and criteria?
Answer: WSDOT provided clear criteria that design-build candidates had to meet and it also scored candidate designers on priority elements.

Question: Did WSDOT intend to select the contractor and then allow the contractor to select the designer?
Answer: WSDOT's design-build legislation instructed WSDOT to enter into a single contract for both contracting and design. However, alliance contracting was viewed as an opportunity to make changes as the process moved forward. This is different than a traditional design-build process. It was important that WSDOT screen for contractors with whom it could develop a relationship conducive to change.

Question: Was it difficult to develop a target price?
Answer: No. The target price was WSDOT's budget for the project, which was set by the legislature.

Question: What interplay was envisioned between WSDOT and the utilities, if WSDOT had moved forward to implement the SR-519 project?
Answer: One of the performance criteria envisioned was the development of rail grade separation that would not impact utilities. WSDOT also met with utilities to discuss elements of the project.

Question: How far along did WSDOT get in terms of identifying utilities for the SR-519 project?
Answer: WSDOT had identified those utilities that were documented. However, some utilities had been in place for over 100 years and they had no associated documentation. WSDOT discovered an undocumented sewer line near one of the sports arenas in the project area. When WSDOT developed the alliance contracting RFP, it included a qualification that contractors would be responsible for all side sewer lines in the project region.

Missouri DOT: Overview of MoDOT experience with ROW and design-build contracting.
Randy Hartman

MoDOT has the seventh largest highway system in the U.S. with more than 33,000 road miles. Moreover, it also has 10,000 bridges, including 53 major river bridges, which is the most in the nation. Funding is a major challenge for the department and MoDOT has identified an annual funding gap of $1 billion.

The Missouri State legislature authorized the use of design-build for three projects, including Interstate 64 (approved in October 2005), Interstate 29/35 (approved in 2005), and the Safe & Sound Bridge

Improvement Program (approved in September 2008 to improve more than 800 of the State's lowest-rated bridges).[10]

Overview of kcICON Project

Interstate 29/35 leads into downtown Kansas City, Missouri, and is a heavily used, congested corridor spanning two counties and cities. The Kansas City Interstate Connections (kcICON) project involves reconstructing, upgrading, and widening parts of the 4.7-mile long corridor as well as constructing a landmark bridge, the Christopher S. Bond Bridge, to replace the 50-year-old Paseo Bridge over the Missouri River.[11] The project is scheduled to be completed in October 2011 and the total budget is $245 million.

MoDOT initially estimated that over $300 million would be required to complete the kcICON project; however, the entire funding amount was not available. MoDOT identified design-build as a useful approach to help leverage existing funding sources, meet the $245 million budget, and streamline construction timelines. MoDOT's design-build process for the kcICON involved several general steps: 1) pre-qualification of design-build teams; 2) issuance of an RFP; 3) a contractor team selected on best value basis; 4) MoDOT's development of conceptual design; and 5) contractor completion of design.

MoDOT accelerated ROW activities to coincide with the RFP process and coordinate with mediation and condemnation activities. The number of parcels estimated for ROW changed as the project design evolved. Initially, in July 2006, 35 parcels were identified for ROW acquisition at a cost of $18 million. By November 2007, 24 parcels were identified at a cost of $5.5 million.

To coordinate surveying for ROW activities, MoDOT also found it important to establish the existing ROW corridor prior to setting new ROW limits and to conduct a survey upfront to offset future problems. Additional ROW activities for the project included:

- Purchasing property;
- Coordinating with utilities, including development of master utility agreements;
- Acquiring third-party agreements; and
- Preparing for construction through coordination with other transportation providers, hospitals, the business community, and police, fire, and emergency management services staff.

MoDOT encountered several challenges in using a design-build process for the kcICON project. For example, it was difficult to coordinate given a diverse group of stakeholders, build relationships with the design-build team and the impacted community, and establish the footprint for a partially designed project. Furthermore, it was difficult to address the impacts of hazardous materials in relation to the ROW corridor. This was a sensitive issue and many property owners expressed their concerns. Business owners in the project corridor also voiced their concerns about road closures, believing that closures would negatively impact their businesses.

Addressing property and business owners' concerns involved close coordination between the design-build team and MoDOT staff. MoDOT worked very closely to build trust and relationships with property and business owners in the corridor and achieve their buy-in to the project. For example, the agency developed a series of Meet and Greets to help build local relationships and buy-in to the project. An attempt was made to meet with every property owner throughout the corridor. Mr. Hartmann noted that he met with several owners multiple times before finalizing the ROW work plan.

Creative solutions were used to deal with some ROW acquisition challenges. For example, MoDOT acquired a parcel that was not marketable during the course of project construction due to its proximity to the project site. The Agency specified in the RFP that the design-build contractor could use the parcel as a staging area during the contract. MoDOT intends to sell the parcel after the contract is complete.

[10] More information on the Safe & Sound Bridge Improvement Program is available at http://www.modot.mo.gov/stlouis/SafeandSound/SafeandSound.htm

[11] Additional information about the KCICON project is available at http://www.kcicon.org/index.html

In addition, MoDOT formed a Community Advisory Group (CAG) to address community relations and ensure that the KcICON Bridge would meet public expectations. The CAG, which acts as a sounding board for MoDOT and a liaison between the agency and the public, is comprised of 12 members identified by local leaders. CAG meets quarterly and provides input on local priorities for the bridge.

Success Factors

MoDOT reported several success factors in its use of a design-build approach for the kcICON project:

- ***Co-locate the project team.*** MoDOT co-located the MoDOT project team with the design-build project contractors and subcontractors, which facilitated communication between design-build team members and MoDOT. In addition, MoDOT found it important to retain the same project management team throughout the course of the project.

- ***Build property owner relationships was crucial to project streamlining.*** MoDOT was committed to building relationships with property and business owners in the project corridor. These relationships helped the Agency more easily establish the ROW footprint, conduct a cost-benefit analysis for ROW acquisitions, and analyze the total and partial number of acquisitions needed.

- ***Use geospatial information systems (GIS) software.*** GIS software facilitated a cost-analysis of the project and helped identify project boundaries, encroachments, property lines, and other ROW data.

- ***Build support from FHWA.*** MoDOT reported that it received a significant amount of support from FHWA to develop the ROW work plan. FHWA personnel were a constant and immediately available resource for evaluating alternatives and discussions related to project conformance to the Uniform Act.

Questions, Answers, and Comments

Question: Did MoDOT plan to build a bridge next to the existing Paseo Bridge and then tear down the older structure?
Answer: It was the responsibility of the design-build contractors, through the RFP process, to propose their project alternatives for MoDOT to evaluate. MoDOT provided the design-build contractors with constraints regarding project location and funding, but left the proposal process of construction and design up to the contractor for evaluation and scoring prior to selection.

Question: How does MoDOT address management issues with other States (i.e., Kansas, Nebraska, and Illinois) that share management responsibilities for the Missouri River bridges?
Answer: MoDOT works closely with the responsible agencies in each State to decide which agency should take the lead. Generally the lead role, and associated responsibilities, alternate with each respective river crossing.

Question: In obtaining ROW for the new bridge, did the adjacent railroad companies lose their track alignments?
Answer: No. It was challenging to work with the five different railroad company stakeholders. Nevertheless, MoDOT was able to develop agreements with all of the companies.

Question: Did MoDOT have environmental documents to work with?
Answer: MoDOT, in association with our engineering consultant during the procurement phase, had completed about 30% design plans and 100% ROW plans. This same consultant cooperatively completed the environmental document. MoDOT's commitment to the design-build contractor was that it would provide the contractor with the ROW corridor and environmental statement, but the contractor would be responsible for conformance to the NEPA Record of Decision.

Question: Did the project bidders include traffic management plans in their proposals?
Answer: Yes. Scoring was, in part, allocated on the basis of bidders' traffic management plans.

Question: Did MoDOT have to make coordination with utilities part of the legal process within the State?
Answer: No.

Question: How much coordination did MoDOT undertake with utilities prior to its award of the contract?
Answer: It was MoDOT's responsibility to deal with early utility relocations; however, the design-build contractor had to deal with presence of several utilities whereby the construction dictated relocation, and corridor-wide fiber optic cables. The design-build team was responsible for the coordination of utility relocation work after the early utility relocation.

IV. Roundtable on Observations and Lessons Learned

All Participants

In a roundtable format, participants were given the opportunity to ask questions, discuss observations made during the meeting, and share additional insights on alternative contracting projects. Participants also noted some of the general lessons their agencies had learned in efforts to develop and enhance use of alternative contracting mechanisms.

To continue these discussions, FHWA will consider sponsoring additional opportunities to promote peer networking and knowledge-sharing on alternative contracting and ROW topics, potentially including follow-up peer exchanges, webinars, or other outreach events.

Observations

- ***It is valuable to engage ROW professionals early on in project development to improve stakeholder coordination.*** Many peer exchange participants stated that it is useful to engage ROW stakeholders at the earliest stages of project development, especially during project scoping. Early engagement can lead to project streamlining and improved coordination and communication between ROW and engineering staff. This can be difficult when project timelines are aggressive or when there is political sensitivity around a project. Since ROW activities have potential to cause project delay, requiring early involvement of ROW activities could reduce ROW constraints and delays.

- ***There are specific strategies agencies can utilize to encourage early ROW project involvement.*** It might be easier to promote early ROW involvement on highly visible projects. Some specific ways to encourage early engagement for all types of projects include:
    - Requiring early ROW involvement in Federal rules and regulations;
    - Encouraging ROW participation in the NEPA process;
    - Encouraging ROW participation in the public involvement process;
    - Identifying advance or early acquisition opportunities;
    - Having ROW review and comment on 30% construction plans for ROW impacts;
    - Continuing outreach, particularly to engineering staff, in order to promote early ROW involvement and the value that it can bring to a project;
    - Having ROW professionals emphasize to engineering staff that ROW can be acquired on time. It could also be useful for ROW professionals to promote themselves as problem solvers who can pinpoint issues that project managers or engineers might not be able to identify; and
    - Having the State DOT develop measures to better assess the cost- and time-savings of early ROW acquisition, or, on the other hand, the impacts of not involving ROW early in project development. For example, one measure could be the reduction of utility delays over a period of time. It was noted that these assessments can be difficult to conduct, since property values and other economic factors typically change over time.

- ***Use of the design-build approach can create challenges for ROW professionals.*** Some participants believed that use of the design-build approach put ROW professionals in difficult positions; because, without knowing the full project design, it can be impossible to document the project footprint for property owners. Furthermore, changing the project design as construction proceeds can strain relationships between ROW professionals and property owners.

- ***Interpersonal skills training can help ROW professionals.*** Several peer exchange participants mentioned that their agencies had promoted training opportunities for ROW staff to learn ways to appropriately interact with property owners. However, some participants also reported difficulty obtaining agency resources for this type of training. Participants reported that property owner interactions are frequently perceived as using soft skills and as nonessential to an agency's business mission. Yet, they also noted that building good relationships with property owners is often the key to a project's success.

- ***Utility companies can offer cost-estimates to State DOTs.*** Many State transportation agencies may underestimate the ROW and utility costs for projects. Utility companies could help address this gap by offering accurate estimates of the likely financial impact of ROW acquisitions. Using the utility's cost estimate could facilitate project decision-making and help avoid conflicts that may occur later in project development.

- ***Use of alternative contracting approaches is likely to increase in the future.*** Some participants believed that State DOTs' use of design-build and alternative contracting projects will increase over time since many transportation agencies are experiencing funding shortfalls and alternative contract methods are essentially public-private partnerships. It is likely that agencies will use combinations of these approaches, since one approach usually does not fit all project circumstances.

- ***State DOTs should consider what ROW processes can take place prior to environmental review completion.*** It is important to educate agency staff that many ROW activities can take place before the environmental process ends; this will streamline ROW acquisitions.

- ***Additional topics for peer exchanges.*** It would be useful to conduct a peer exchange on how State DOTs have successfully worked with railroad companies to acquire ROW. Or a follow-up ROW design-build workshop could delve into: eminent domain impacts, NEPA related risk allocation, use of visualization tools, appraisal and cost estimating processes, and utility MOUs.

Lessons Learned

- ***Ensure upper-management buy-in to early ROW involvement.*** Obtaining upper-management buy-in will help to establish early ROW involvement as a key business practice and routine part of project workflow. To build support at all levels of the agency, improve education of agency staff regarding the value-added provided by early ROW engagement.

- ***Establish a reputation for fair ROW negotiations.*** Build the State DOT's reputation for providing objective and fair prices to property owners during ROW acquisitions. This will help encourage property owners' trust in State DOT ROW activities and the community's buy-in to the project. Agencies should acknowledge when the property owner has a legitimate grievance.

- ***Ensure accurate documentation of project scope and procedures in the RFP and contract.*** It is important to write a detailed RFP for design-build projects because ROW acquisition can occur prior to completion of project design. Without full project design, it can be difficult to explain the need for property acquisition to property owners; in addition, some agencies might acquire more ROW than is necessary. A detailed RFP can help ROW professionals and the design-build contractors better address property owners' concerns regarding the project footprint, which can change as the project evolves.

- ***Include environmental commitments in the RFP and contract.*** Include commitments made during the NEPA process within the RFP and contract, so that all parties are apprised of the environmental requirements. The responsibility to meet these commitments remains with the project owner, who must assure that the contractor complies.

- ***Co-locate the design and ROW teams to facilitate coordination and communication.*** Design-build is a fluid approach that allows for changes in project scope and schedule over time; co-location can help the project team sense and respond to these shifting dynamics as they occur.

- ***Consider applicable State laws.*** Before evaluating design-build or other alternative contracting approaches, carefully review all applicable State laws to ensure the legality of these approaches.

- ***Consult with utilities and property owners early in the ROW process.*** It is important to consult with property owners before scoping project impacts. Extending this same early outreach to potentially impacted utilities can also improve communications. Attempt to identify all impacted utilities early, and while this might be a challenge, it is important to bring utilities to the table early, since often utilities are involved in the project throughout its entire lifecycle. Consider having a neutral, third-party facilitator at these meetings to ensure that true partnership is taking place.

- ***Promote innovative solutions to difficult problems using a design-build approach.*** One agency reported that a large part of their costs came from earthworks excavation. Use of a design-build approach allowed their contractor to come up with creative design concepts and innovative engineering to reduce excavation impacts.

Questions, Answers, and Comments

Question: MoDOT took responsibility for delivering all project ROW while Utah handed this over to the design-build contractor. Did the Utah model cost more?
Answer [from Utah DOT]: It can be cost and time efficient to have the State DOT purchase all of the required ROW upfront, prior to turning ROW over to the designer and engineer. On the other hand, purchasing all ROW upfront can result in delay while the contractor waits to begin construction. Consider a dual approach, whereby the DOT acquires some of the ROW early and allows the contractor to acquire the remaining properties.

Question: When acquiring ROW upfront, is it possible to run the risk of purchasing ROW that is not needed? How can an agency determine whether it overpaid for ROW or whether it was worth it to purchase all ROW upfront?
Answer [from Utah DOT]: In most cases, agencies can recoup the money later; for example, if there is surplus ROW at the end of a project, the agency can sell that back to recoup costs. However, when using the design-build method, there is a chance that the agency will purchase more ROW than is required due to the fact that only partial project design is available. In many States, the design-build method is still relatively new and agencies have not yet determined the impact of early ROW acquisition.

Question: Does Utah have an approved list of on-call consultants that are pre-approved?
Answer [from Utah DOT]: Utah DOT does have a preapproved list but the design-build contractors do not have to pull only from the list; they can also partner with other ROW firms.

Question: Utah DOT mentioned that it offers incentives to contractors based on their ability to positively respond to community preferences, and this is assessed by polling the public after project completion. Would FHWA be willing to pay for these incentives?
Answer [from FHWA headquarters]: It appears that these types of incentives respond to FHWA's priorities to promote livability and context-sensitive solutions in a ROW context. FHWA could participate in these incentives, if they are structured in terms of early community involvement.

Question: The environmental process seems to be a risk that is not typically shifted to contractors during a design-build process. Have any of the participants seen an opportunity within State DOTs to shift environmental risk to the design-builder?
Answer [from West Virginia DOT]: It might be possible but it is extremely important to proceed with caution when considering transferring environmental risks to the contractor. The contractor might be dealing with a diverse range of stakeholders, including: the U.S. Environmental Protection Agency, State Historic Preservation Organizations, the U.S. Fish and Wildlife Service, and citizen opposition groups. For a substantial project with complex environmental issues, the amount of time that environmental reviews require might preclude contractor involvement.

Question: Using a design-build process, is it difficult to go through the NEPA process and obtain buy-in from resource agencies on a partially designed project?
Answer [from West Virginia DOT]: This can be very difficult, but good relationships are crucial. State DOTs should promote good working relationships with resource agencies so as to encourage conversations on environmental issues even without full project design.

Question: Is the alliance contracting approach applicable to other types of alternative contracting?
Answer [from the International Right of Way Association]: In concept, yes. The alliance contracting emphasis of bringing all project parties to the table early on in project development is certainly a transferrable concept.

Appendix A. Participant List

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Appendix B. Workshop Agenda

FHWA Design-Build Contracting Peer Exchange
Agenda
Austin, Texas – November 17, 2009

Goal: *Share lessons and challenges in design-build contracting, incorporating Right of Way (ROW) activities into project development and alternative contract procurement methods.*

8:00 – 8:20 **Welcome and Introduction** *Kathy Facer, Jan Brown, Marsha Bayer, FHWA*
Welcome from FHWA, participant self-introductions, and logistics.

8:20 – 8:30 **Agenda and Objectives** *Bruce Bradley, FHWA*
Overview of the peer exchange agenda and objectives.

8:30 – 9:00 **International Scan Results** *Gerry Solomon and Jeff Zaharewicz, FHWA*
Overview of FHWA international scan on innovative ROW and utility processes in Canada and Australia.

Break

9:15 – 10:30 **Presentation and Discussion**
- ***Texas DOT Turnpike Authority Division*** *Don Toner, TxDOT*

Overview of TxDOT's CDA program, including request for proposal and evaluation processes.

Break

10:45 – 12:00 **Presentation and Discussion**
- ***Utah DOT Right of Way Division*** *Karen Stein, UDOT*

Overview of UDOT's experience with the design-build process, including: key lessons learned, best practices for scope of work development, and issues specific to appraisal, valuation, and relocation, and property management.

Lunch (delivered)

1:00 – 2:00 **Presentation and Discussion**
- ***Washington DOT Alternative Contracting Ideas*** *Fred Tharp, WSDOT*

Break

2:15 – 2:45 **Presentation and Discussion**
- ***Missouri DOT Design-Build with ROW*** *Randy Hartman, MoDOT*

2:45 – 3:30 **Roundtable** *Bruce Bradley and Kathy Facer, FHWA*
Group discussion to share experiences and lessons learned in design-build contracting.

Break

3:45 – 4:45 **Roundtable** *Bruce Bradley and Kathy Facer, FHWA*
Group discussion to share experiences and lessons learned in design-build contracting.

4:45 – 5:00 **Observations** *Gerry Solomon, Kathy Facer, FHWA*

5:00 – 5:15 **Next Steps** *Bruce Bradley, FHWA*
Discussion of follow-up activities

Appendix C. Glossary

Acquisition – Refers to the purchasing of private property rights for public uses, such as transportation project construction on the State highway system, according to State and Federal guidelines.

Alliance Contracting – The hallmarks of the alliance method include: hand selection of team members, inclusion of the contractor as an early member of the team, integration of a business focus to clearly identify all team members' roles and responsibilities, effective engagement of ROW and utility stakeholders, an emphasis on accountability, and documentation of lessons learned and outcomes. It is an example of an innovative contracting mechanism that aims to lower project costs and increase quality while streamlining project delivery.

Appraisal – A written statement independently and impartially prepared by a qualified appraiser setting forth an opinion of defined value of an adequately described property as of a specific date, supported by the presentation and analysis of relevant market information.

Best and Final Offer (BAFO) – Indicates that no further negotiation of term amounts is possible. A BAFO can be requested by procuring official if bidders have submitted proposals within close competitive range.

Comprehensive development agreement (CDA) – Agreements with one contractor to design, acquire ROW, adjust utilities, and construct, finance, and operate or maintain certain transportation facilities, including highways, turnpikes, freight or passenger rail, and public utilities. There are several types of CDAs, including a design-build CDA, a pre-development CDA, and a concession CDA. Each type involves different patterns of risk allocation. CDAs are essentially public-private partnerships.

Condemnation – Refers to the act of a public authority exercising the power of eminent domain according to State and Federal guidelines.

Construction manager general contractor (CMGC) – In this process, the contractor is hired during the design process and assists the project owner with construction management. In CMGC, risks are shared between the agency and the contractor and the final project cost is unknown until after execution of the contract. This process is suitable for complex projects. CMGC is an example of an innovative contracting mechanism that aims to lower project costs and increase quality while streamlining project delivery.

Design-bid-build contracting – Design-bid-build contracting involves use of two different contracts that procure design and construction services. Design-bid-build is a traditional approach to project delivery.

Design-build contracting – Design-build combines a project's design and construction phases into one contract to expedite the project delivery process. Design-build is an example of an innovative contracting mechanism that aims to lower project costs and increase quality while streamlining project delivery.

Easement – An interest in real property that conveys use, but not ownership, of a portion of an owner's property.

Eminent domain – Refers to the power of a public authority to purchase private property rights for public use according to State and Federal guidelines.

Federal Highway Administration (FHWA) – A branch of USDOT that administers the Federal-aid highway program and the Federal Lands Highway Program.

Federal Highway Administration Office of Real Estate Services (FHWA HEPR) – An office within FHWA that supports the acquisition and management of real estate as required for the development of transportation services and facilities, and provides resources on corridor management, property valuation, relocation assistance, utility management, and Right of Way management.

Letter of Consent – Document that formalizes agreement or gives access by one entity to land owned by another entity.

Memorandum of Understanding (MOU) – Document describing and formalizing an agreement between multiple entities.

National Environmental Policy Act (NEPA) – The Act requires Federal agencies to consider the environmental impacts of proposed actions and reasonable alternatives to these actions. The Act also requires Federal agencies to include environmental considerations in decision-making processes.

Notice to Proceed – A document from a project owner to a contractor stating the date when contractor activities, as subject to the contract terms and conditions, can commence.

Ombudsman – Entity or individual that liaises between an organization and other constituencies for the purpose of resolving differences and facilitating fair mediation.

Quality control/quality assessment (QA/QC) process – A system of checks and measures to assure product quality; the QA/QC process can be performed by the project owner, contractor, or by a neutral, third-party reviewer.

Request for Proposal – Document submitted by a project owner to potential bidders describing project scope and requirements for the purpose of acquiring proposals for vendor services.

Request for Quotation – Document submitted by a project owner to potential bidders for the purpose of acquiring price quotations on specific products or services.

Right of Way (ROW) – A term denoting land or property on which infrastructure, such as a highway, is developed. ROW can be granted for infrastructure development through use of various mechanisms, such as easements or full ownership.

Risk – Risks refer to unknowns and, in the context of a transportation project, can include schedule or construction delays, or issues related to environmental approvals, project design, or ROW acquisition

Statement of Qualifications (SOQ) – Document provided by vendor to project owner for the purpose of describing vendor's qualifications to meet project specifications.

Safe, Accountable, Flexible, And Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) – SAFETEA-LU is the current transportation bill with guaranteed funding for highways, highway safety, and public transportation. It was signed into law in 2005.

Surface Transportation Environment and Planning Cooperative (STEP) research program – STEP was established by the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users. The program is the main source of funding for FHWA research on planning and environmental issues. To conduct a needs-driven research program and involve stakeholders in research prioritization, STEP solicits stakeholder comments via a website during a specified period each year.

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (the Uniform Act) – The Uniform Act established the statutory basis for acquiring real property, or ROW, and the relocation of individuals and businesses affected by federally funded projects. The law was enacted to guarantee that people whose real property is acquired, or who are compelled to move as a result of projects receiving Federal funds, will be treated fairly and equitably and will receive assistance in moving from the property they occupy.

Utilities – Entities that maintain infrastructure to provide a public service, such as electricity or water.

Appendix D. Utah DOT Right-of-Way Procedure Part 19C: Right-of-Way Acquisition Procedures for inclusion in Design Build Request for Proposal

GENERAL REQUIREMENTS

General Scope. Acquire Project right-of-way (ROW) and conduct activities related to ROW acquisition in accordance with the requirements of this Appendix B to Part 6C. These ROW activities include, but are not limited to:

A. Mapping.

B. Deeds.

C. Appraisal.

D. Appraisal review.

E. Negotiation.

F. Acquisition.

G. Title insurance procurement.

H. Title clearance.

I. Acquisition closings.

J. Condemnation support.

K. Relocation assistance.

L. Property Management.

M. Clearance and demolition of improvements.

N. As required, environmental testing and remediation.

O. Verify or re-establish existing right-of-way.

Legal Role. Function as Agent for the Department while acquiring ROW for the project.

Department Approval. Obtain the Department's approval of all ROW Design Documents, appraisals, requests to acquire ROW, acquisition documentation, acquisition settlements, Right of Way Contracts, Relocation Notices of Eligibility, Relocation Claims, and requests to commence condemnation proceedings. Provide the Department with all specific reports and supporting documentation for review and approval during the acquisition process.

ROW Costs. Pay the costs of all services and documentation preparation for ROW acquisition and related relocation assistance. The Department will purchase all properties acquired for ROW (relocation costs are included) including all temporary and perpetual easements required for construction. The Department will not pay for easements or ROW which is needed for staging areas.

Local Agency Payments. To facilitate the Department reimbursement of that portion of the ROW costs to be borne by the local agencies, coordinate with the Department and local agencies regarding accounting and approval of these costs.

Additional Properties. Pay the costs of acquisition and relocation expenses (plus the costs of all acquisition and relocation services and documentation preparation) of any additional ROW necessary to accommodate a Department approved change in design, and temporary rights or interest in real property that in the discretion of the Design-Builder is deemed necessary or advisable to acquire for work space, contractor lay-down areas, material storage areas, or other convenience. The Department will not be

obligated to exercise its power of eminent domain for, nor will it have any responsibility for, the acquisition, maintenance, or disposition of Additional Properties, or of any temporary right or interest.

Utilities. For acquisition of existing Utility property interests, comply with the process and requirements set forth in Part 6A—Utility Requirements.

Referenced Standards and Publications

Referenced Standards

General. Conduct all ROW acquisition activities in accordance with the relevant requirements of the standards listed by priority in Table 19C-B-1.

Conflicts, Priority, and Ambiguity. If there is any conflict in standards, adhere to the standard with the highest priority. However, if the Design-Builder's Proposal has a higher standard than any of the listed standards, adhere to the Proposal standard. If there is any unresolved ambiguity in standards, obtain clarification from the Department before proceeding with design or construction.

TABLE 19C-B-1
REFERENCED STANDARDS FOR RIGHT-OF-WAY ACQUISITION

Priority	*Author or Agency*	Title
1*	Design-Builder	Contract for the Project
2	UDOT	Request for Proposals, for the Project
3	UDOT	*Standard Drawings*

** Only to the extent that it exceeds another listed standard.*

Referenced Publications

Supplementary Guidelines. Use the publications listed in Table 19C-B-2 as supplementary guidelines for the practices, procedures, and methods to be used in ROW acquisition. These publications are listed in alphabetical order by the author or issuing agency, and then by title, as they have no established order of precedence.

TABLE 19C-B-2
REFERENCED PUBLICATIONS FOR RIGHT-OF-WAY ACQUISITION

Author or Agency	*Title*
Appraisal Institute	*Uniform Standards of Professional Appraisal Practices* (USPAP)
FHWA	Right-of-Way Project Development Guide, *Federal Aid Policy Guide* (FAPG)
FHWA	*Uniform Appraisal Standards for Federal Land Acquisitions and USPAP*
UDOT	*Manual of Instruction–Right-of-Way* (Design, Part 10) and current UDOT Standards and Practices.
UDOT	*Project Development Process Manual*
UDOT	*Right-of-Way Operations Manual (Policies and Procedures)*
	Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended *and Implementing Regulations found in Title 49 Code of Federal regulations Part 24 and Code of Federal regulations 23 CFR Part 710.313.*

**If no date is given, the most current version as of the NTP date shall be used for reference..*

ROW Schedule

Department Review and Approval

Submittal. Within twenty Working Days after issuance of NTP, submit a schedule for the acquisition and delivery of ROW to the Department for review and written approval. Include in the schedule the following:

A. The beginning date and anticipated completion date of ROW acquisition.

B. Priorities for parcels whose acquisition will significantly impact the Project Schedule and/or affect its Critical Path.

C. Restriction of Department reviews to a maximum of twenty appraisal or acquisition files at any given time.

Implementation. After Department approval, implement the approved schedule as the ROW schedule and integrate it into the Project Schedule

Additional Properties. Notify, in advance, the Department of all Design-Builder Additional Properties and temporary rights or interests in real property to be acquired by the Design-Builder and obtain prior approval for the acquisition of any additional ROW required due to a design change. Comply with all requirements in Part 4 Appendix 4C (Environmental).

Acquisition Files. Submit all complete appraisal or acquisition files to the Department for review and approval, in accordance with Section 19C-B.6.4 (ROW Appraisal and Acquisition File Approval). For submittals of more than one appraisal or acquisition file at any given time, indicate the priority of required review in order to meet the ROW schedule. Each acquisition file shall contain one copy of the appraisal(s) and appraisal review.

Relocation Files. Submit relocation plan and relocation files in conjunction with the acquisition files (for all parcels identified which will require displacement) to the Department for review and approval in accordance with this Section. All acquisitions which will require a relocation must be prioritized to meet the ROW schedule.

Review Period. Assume that the Department reviews will require ten Working Days per twenty appraisal or acquisition files within any given ten Working Days. (The Department intends to review these files as expeditiously as possible.) However, the Department may defer its review of such excess files to a later period of ten Working Days, in which case it will so notify the Design-Builder within ten Working Days after its receipt of the files.

All submittals without a cover letter requesting a Review will be considered courtesy reviews only and the ten Working Days will not apply.

Electronic Summary/Design Packages. All right-of-way design packages are to be submitted to the Region Right-of-Way Engineer for a Review and upon completion will be forwarded to Central Right-of-Way for a Conformity Review. The Department will consider as excess any submittals that require review of more than twenty ownerships with each summary submittal, within any given ten Working Days. The Department may defer its review of such excess files to a later period of ten Working Days, in which case it will so notify the Design-Builder within ten Working Days after its receipt of the files.

All submittals without a cover letter requesting a Review will be considered courtesy reviews only and the ten Working Days will not apply.

Schedule Delay. Assume responsibility for any delays to the Project Schedule that result from submittal of inadequate or incomplete appraisal or acquisition files and/or the inability of the Design-Builder to acquire any ROW in a timely manner.

Deficiencies. A Design Package, an appraisal, acquisition or relocation file shall be deficient, as determined by the Department, if any of its components contains any error or omission or if it fails to meet any of the criteria established in this Appendix B. Upon Department notification of a deficiency, correct such deficiency, and resubmit the file to the Department. The Department will review the re-submittal and notify the Design-Builder of any deficiencies in the resubmitted file within five Working Days of the Department's receipt of the re-submittal.

ROW Scope of Services

General. Complete all administrative activities and prepare all documentation sufficient to acquire the ROW and Relocate the displaced persons. Obtain the Department's review and approval of all

appraisals, legal descriptions, acquisition documentation, purchase prices, and funding and closing procedures. Do not commence any negotiations with landowners until the amount of Just Compensation has been established by the Department. Incorporate 35 days into the schedule for negotiations. Include a minimum of one personal contact per ownership during the 35 day negotiation period with at least two follow up contacts unless or until the agent is successful in reaching a settlement agreement with the owners after the first or second contact.

Eminent Domain. If the Design-Builder and landowner cannot agree upon a purchase price acceptable to the Department, the Department may, at its sole discretion, approve an acquisition through condemnation or eminent domain procedures. Do not begin eminent domain procedures without an approved acquisition memo as part of the acquisition file. Provide legal support services for acquisition through condemnation and eminent domain procedures. The Design-Builder shall incorporate 90 calendar days into the schedule for eminent domain procedures. The 90 calendar days begins on the day the case is received by the court which is at least 30 calendar days after all required documentation is submitted to the Attorney Generals office. (Please note: the 30 day period allows for in state service of the summons to in state grantors or parties of interest. If there are parties of interest who reside out of state and who are temporarily out of the area, this time line may need to be extended.)

A. The Acquisition File for condemnation purposes must contain an approved memo from the Director of R/W to the Attorney Generals office. Attached to the memo and the request for condemnation are several documents including copies of the following: 40 Year Title Report, Agent's log, Appraisal, Appraisal Review, map, statement of just compensation, ownership record and any other documents that would be relevant for the attorney representing the agency. The acquisition file should contain: 2 copies of the appraisal, and 2 copies of the appraisal review along with two copies of the agent's log and any other relevant information that the Attorney General's Office may need to review to properly prepare for the condemnation.

B. Providing that the Design Builder has provided the appropriate documents with the request for condemnation (including but not limited to the title report, an error free legal description and error free map of the parcels) UDOT will submit the completed Condemnation Resolution to the Attorney General's Office within 5 working days after the division has approved the request for condemnation.

Construction Clearance. Do not begin construction on any real estate until specifically approved by the Department after all property rights for the Project have been conveyed in favor of the Department or a Right of Occupancy Agreement, Court Order to Occupy or a Right of Entry Agreement has been validly executed by all applicable parties of interest.

Legal Compliance. Complete and document all ROW activities in compliance with applicable laws (including the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970* as amended, the *Utah Relocation Act*, and other applicable rules and regulations. Prevent fraud, waste, and mismanagement.

Communications. In all correspondence with the Department relating to acquisition of real property, include the following information (at a minimum) in a heading:

A. County.

B. Region.

C. Project Name.

D. Project Number.

E. Pin Number.

F. Highway Designation.

G. Project Limits.

H. UDOT Parcel Number(s).

I. Assessor's Parcel Number(s).

J. Name-of-record owner(s).

ROW Surveying and Mapping

Standards. Perform all ROW surveying and mapping and prepare all ROW documents in accordance with the UDOT *Manual of Instruction,* Right-of-Way*,* Part 10, and the UDOT *Survey Manual.*

Design Package/Electronic Summary In each Electronic Summary or Design Package prepared and submitted for Department approval, include the following items:

A. **Electronic Spreadsheet Summary**: An electronic spreadsheet with the following information:

1. Summary Submittal Number;
2. Pin Number;
3. Project Number;
4. Parcel Number;
5. Type of Granting instrument (fee, easement, etc.)
6. Name of owner(s);
7. Address of property owner;
8. Type of vesting deed;
9. County Recorder Entry, Book and Page for vesting deed;
10. County Tax ID#;
11. Section, Township and Range of Parcel;
12. Latitude and Longitude of Parcel;
13. Acreage and / or square footage;
14. Property type;
15. Contact information for licensed Land Surveyor in charge; and
16. Document preparer to include the company contact information for the person responsible for creating the ROW documents on the cover sheet of each ROW submittal.

B. **Legal Description**: A complete, separate legal description of each parcel that is in a recordable form acceptable to the Department and that includes:

1. The form of granting instrument (fee, easement, etc.) adequate to effect the desired acquisition of the parcel.

C. **Right of Way Map**: The Right of Way Map, as prepared by the Land Surveyor, and a 11"X17" preliminary Right of Way Sheet and ownership Summary Sheet for each Parcel submitted.

D. **Ownership Record**: An Ownership Record on a UDOT RW-51 form going back five years or until a Warranty Deed is found.

E. **Prepare Summary of Right-Of-Way (From RW-53).**

F. **Submittal of Documentation**: Deliver all reports, correspondence and documents relating to ROW acquisition to the Department in both electronic and hard copy formats

or as otherwise requested by the Department.

JOB-SPECIFIC SERVICES

General. Perform the following job-specific ROW acquisition services:

A. **Title Acquisition**: As more fully described in the following subsections, provide all services necessary to:

1. Acquire title in the name of the Utah Department of Transportation to the ROW, in form and substance acceptable to the Department;

2. Relocate displaced persons (i.e., displaced businesses, non profit corporations, small farms and residential occupants); and

3. Clear and/or demolish the improvements from the ROW.

B. **Guidelines**: Maintain a complete set of the UDOT Manual of Instruction, Right-of-Way, Part 10, UDOT ROW Acquisition Procedures; the UDOT Appraisal and Review Manual; and a current approved ROW map for public use.

C. **Meetings**: Attend ROW meetings as requested by the Department.

D. **Letter to Property Owners**: Provide a letter of introduction to each property owner who will be directly impacted by the project and/or occupant, as approved by the Department, on Department letterhead stationery, and signed by the Project ROW Coordinator or his/her designee.

E. **Submittal of Documentation**: Deliver all reports, correspondence, and documents relating to ROW acquisition to the Department in both electronic format and as hard copy, or as requested by the Department.

Title Services

Title Company. Select and contract with one or more title companies approved by the Department.
Title Exceptions and Exclusions. All owners of record need to sign the conveying document. If new parties of interest are discovered during negotiations or vesting is other than was indicated on the original documents, the acquisition file shall be revised to include all corrected grantors and all appropriate forms, deeds and other documents will be revised accordingly.
Title Insurance. The Design-Builder is not required to provide title insurance. However, title reports must be provided to insure that the owners of record are accurately determined prior to the commencement of the Acquisition process.

Appraisal Services

General. For each ROW parcel acquired for the Department:

A. **Appraisals**: Provide the Department with a fair market value appraisal prepared by an appraiser meeting the minimum qualifications established herein, unless the parcel can be valued under the waiver valuation provisions of the Uniform Relocation Act or the implemented URA regulations as described in the UDOT Operations Manual. UDOT will pre-approve the use of the waiver valuation on a per ownership basis. Waiver valuations are acceptable only for low-value, uncomplicated valuations. The Department's pre-approval of the use of waiver valuations may be requested on a per-ownership basis; no offer may be made to a property owner based on a waiver valuation without Department approval. (Just Compensation must be approved by the Department, not the Design-Builder).

B. **Guidelines**: Prepare the appraisal in conformance with Law (including the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as amended), and in accordance with professional appraisal methods and applicable UDOT standards as described in the UDOT Right of Way Operations Manual.

Appraiser Selection. Select qualified, certified appraisers who are licensed by the State of Utah. Department approval is required for each appraiser and each review appraiser the DB plans to use for this project.

Pre-Appraisal Property Inspection. For properties which are improved with residential improvements that will be directly impacted by the project, provide a property (house, building, property, etc.) inspection report; prepared by a qualified inspector, to the appraiser. The report must include documentation of all deficiencies (i.e. mechanical systems, electrical systems, etc.) and comments about structural damages observed by the inspector. The inspection report should be an all inclusive formal Inspection Report. Each appraisal which includes the valuation of improvements, determined by the appraiser to have contributory value, must include an Inspection report, unless the Department determines, on a case by case basis that a formal Inspection Report is not necessary. The appraisal shall refer to the report, by reference, as part of the scope of the appraisal assignment.

Owner Contacts. Establish personal pre-appraisal contact with each owner of record and each occupant lessee or tenant. Contact shall be in person and in writing. The written contact may be but is not limited to the mailing of an introductory letter. Document all contacts using a form approved by the Department. Offer each owner of record, party of interest and any occupants, tenants and lessees; or their designated representatives, in writing, via certified mail return receipt, the opportunity to accompany the appraiser on the appraiser's inspection of the parcel. The appraiser shall maintain a record of all such contacts. Said report shall be included with the appraisal in the acquisition file. If the appraiser is not able to contact the owner by certified mail the appraisal shall use other reasonable and necessary methods to contact that owner and document the methods used in that effort. If contact is not possible or the owner(s) decline to accompany the appraiser for the property inspection, the appraiser shall document these facts in his/her appraisal report.

Appraisal Report. Prepare a complete appraisal report for each parcel that:

A. Complies with and includes all matters required by this Appendix B and the UDOT ROW related manuals; and other applicable guidelines as described in Table 19C-B-2.

B. Satisfies the requirements of the Appraisal Institute's Uniform Standards of Professional Appraisal Practices (USPAP) in effect at the time the appraisal is submitted.

C. Is in the form approved by the Department.

D. Includes all pertinent special analyses, studies, or reports, including but not limited to a Real and Personal Property Report, and/or an Inspection Report.

Compensable Interests. For each parcel, provide the Department with copies of all written leases, licenses, and other occupancy agreements to identify lessees, licensees, and other occupants with potential compensable interests in each parcel to determine the value of each such interest.

Environmental Concerns.

A. Documentation: Document the environmental condition of the required parcel(s), based on field investigations and/or historical review and/or the project environmental permit, and make documentation available to the appraiser(s). Develop the following report(s) for the required parcel(s):

   1. An Environmental Site Assessment (ESA) Phase I;

   2. An ESA Phase II if the ESA Phase I determines that there is a potential environmental risk; and

   3. An ESA Phase III if the ESA Phase II report justifies it (including approximate costs to remediate the parcel to achieve its current use and its highest and best use).

B. Department Notification: Submit timely written notification to the Department of any concerns that could require environmental remediation of or other special attention to ROW parcels and/or Additional Properties.

Appraisal Updates. When required by the Department (e.g., for eminent domain proceedings or to allocate values for ST parcels etc.), update appraisals and appraisal reviews.

Backflow Prevention. Examine local ordinances regarding requirements for meter supply backflow preventers, and/or other special conditions. In the appraisal report, consider the installation of any such appurtenances on the parcel remainder as damage and include it as part of the compensation package to the landowner.
Copies of Documents. When requested by the Department, provide copies of appraisal file documents as may be needed to respond to discovery motions or requests for production.

Appraisal Review

Appraisal Reviewers. Select a qualified appraisal reviewer that is independent from the appraiser and is experienced in appraisal reviews for transportation projects. Meet the requirements specified herein. Select only one appraisal reviewer for the Project to ensure report consistency and fairness unless there is a documented need to employ more than one review appraiser. The use of more then one review appraiser may be allowed, with justification, at the discretion of the Department.
Advertising Signs. Evaluate all outdoor advertising signs, as required, utilizing the appropriate forms and sign schedule, and/or as instructed by the Department. If applicable, provide location and other information about the signs which will enable the Design-Builder to provide all appropriate relocation assistance, including advisory assistance and prescribed 90/30 day notices to the owner of the signs
Additional Reports. Determine, in consultation with the Department, whether additional appraisal reports or technical expert reports are required. If so, initiate, review, and reconcile each report required.
Review of Appraisals. Review all appraisal reports for each parcel to determine their consistency of methodology, supporting documentation related to the conclusion reached, and compliance with UDOT standards, as defined herein and by the Appraisal Institute's *Uniform Standards of Professional Appraisal Practices* (USPAP) and the UDOT *Policies and Procedures* in effect at the time the appraisal is reviewed. Obtain from the appraiser written certification that all these standards have been met.

ROW Appraisal and Acquisition File Approval

Project ROW Coordinator. Before beginning ROW appraisal services, meet with the UDOT Project ROW Coordinator.
Guidelines. For all appraisal and acquisition files submitted for Department approval, follow the guidelines established in the UDOT *Right of Way Operations Manual* and applicable sections of the *Manual of Instruction,* Right-of-Way, and Part 10 and comply with the requirements specified.

Right-of-Way Negotiations

Legal Compliance. Conduct all negotiations in accordance with the requirements of the Law and applicable regulations. Acquisition Agents employed by the Design Builder for this project are not required to be licensed Real Estate Agents in the State of Utah. However, all acquisition agents hired to acquire real property for this project must be qualified agents approved by the Department.
Acquisition Agents/Negotiators. All agents working as Acquisition Agents or Negotiators shall be qualified and experienced. The Design-Builder and firm must obtain approval of each agent who will actually work on the Project. All agents must be fully qualified to perform the duties assigned. At a minimum, the agents must meet the qualifications described in the UDOT RFQ for ROW services. (The RFQ is available from the Consultant Services Page of the UDOT Website. A link to the RFQ is also available from the ROW page of the Department's website.) Agents must also have sufficient experience for the services they will perform for the design build project. Agents shall be adequately supervised by a qualified Design Build Managing Agent.
Work Flow Diagram. The Design Build ROW Manager shall prepare, in a format acceptable to the Department, t a work flow diagram or flow chart which documents the ROW acquisition process. The Flow Diagram shall be prepared and submitted to the Department for Department review within 10 days after the NTP date.
Contact Reports. Prepare, in a format acceptable to the Department, a separate Negotiator's contact report or agent's log which will document each meeting or conversation with any person (or their appointed representatives) who has a compensable interest in each parcel. All contacts must be noted in the agent's log which shall be available for view by the agency on a daily basis. The log entries are to be entered into the UDOT Right of Way ePM system as required by UDOT policies and procedures, as documented in the *UDOT Right of Way Operations Manual.*

Brochure(s). Produce informational brochure(s) subject to Department approval for distribution to all property owners, tenants, lessees or other parties of interest and to actual or potential displacees. The brochure is subject to approval by UDOT prior to distribution.

Presentation of Offer*. For Residential property,* within ten working days of the Department's establishment of Just Compensation, the agent shall prepare the offer to purchase and other required documents as part of the acquisition file. Once prepared, the agent shall present, in person, (when practicable), the purchase offer with the appraisal report on the subject property and applicable brochure(s) to, and only to, the property owner(s) or owner's designee. If the offer is presented by mail or e-mail, the agent shall explain in the agent log why the offer was not presented in person. Document the delivery of the appraisal report with a receipt signed by the property owner or designee. Upon acceptance of the purchase offer, maintain follow-up contacts as appropriate to secure any supplemental documentation needed to facilitate the closing. ***For non residential property***, the agent shall follow the same steps noted above except for the appraisal report. The acquisition agent is not required to provide the property owner of the business property a copy of the appraisal report. Appraisal reports are to be given to the property owner if approved by the Department on an as needs basis. In lieu of providing the owner with a copy of the appraiser the agent shall provide sufficient information from the appraisal to meet the requirements of federal and state law, regulations and Departmental policies and procedures.

Negotiating for Compensable Interests. Identify lessees, licensees, occupants, or other parties with potential compensable interests and if appropriate, after consultation with the Department, negotiate with such parties for the acquisition of their compensable interests. Provide timely response to the verbal or written inquiries of any property owner, lessee, licensee, occupant or other holder of a compensable interest, as applicable, not more than 10 Working Days after the inquiry.

Acquisition Files. Maintain a complete Acquisition file for each ownership. All original documentation related to the purchase of the real property interests will be maintained either in conjunction with or separate from the relocation files in conformance with UDOT standards, manuals, and procedures and as specified herein. (If a separate relocation file is set up and maintained, that file must contain a copy of all pertinent information from the acquisition file, sufficient to satisfy the needs of the relocation agent, the Design Build reviewing agent, and the UDOT ROW coordinator or designated department review person. The Acquisition file must also include a reference to any relocation of displaced persons who occupy any parcel within the ownership. The file must include a copy of any relocation studies that are completed prior to the initiation of negotiations for the purchase of the subject property. The agent log must include any information about relocation assistance provided to the occupants including advisory assistance. Forward the signed original documents to the Project ROW Coordinator. The Project ROW Coordinator will update the ePM system with receipt dates for all documents and files received from the DB. The Coordinator will also confirm that all files are complete and ready for Department review. The file and all forms to be approved must be forwarded by the Project ROW Coordinator to the Department for required review and approval of all contracts, agreements, claims and forms that must be approved by the Director of Right of Way.

Administrative Settlement. If a settlement cannot be reached without an administrative settlement, advise the property owners, and other holders of compensable interests, or their representatives of the administrative settlement process. In all dealings with property owners and other holders of compensable interests, clearly represent and maintain that the Director of Right-of-Way or his designee has the ultimate decision authority regarding any settlement requests. All offers are nonbinding on the Department unless or until the contract is approved by the Director of Right of Way or his Deputy. Confer with and deliver to the Project ROW Coordinator any settlement request from property owners, lessees, licensees, occupants, or other holders of any compensable interest, as applicable, including a detailed recommendation from the Design-Builder in accordance with standards, manuals, and procedures as defined herein. Deliver the administrative settlement request and the Design-Builder's recommendation to the Department within five Working Days of receipt of the request.

Second Appraisals. If a property owner requests a second opinion of value or second appraisal the owner is to seek assistance from Utah's Private Property Ombudsman. The Department can and will pay for a second appraisal if directed to do so by the Ombudsman. In certain circumstances the agency may opt to pay for an additional appraisal without being directed to do so, but this is at the discretion of the agency and must be pre- approved by the Project ROW Coordinator or the Director of ROW.

Evaluation of Settlement Requests. If requested by the Department, participate in the evaluation of administrative settlement requests and attend the settlement meetings. When the Department has made its findings regarding a settlement request, provide a letter of response regarding the administrative settlement findings to the property owner, lessee, licensee, occupant, or other holder of a compensable interest, as applicable. If the property owner is within reasonable proximity of the Project, deliver all such response letters in person within three Working Days of receipt of findings. If personal delivery is not feasible, mail (with return receipt requested) the response letter not more than three Working Days following the findings by the Department, and telephone the property owner to discuss the settlement offer before mailing it. The Project ROW Coordinator, as needed, will call the Department settlement meetings to order. Report to the Department concerning the property of any and all leases or other encumbrances of the subject property, if any, and provide the Department with a copy of identified leases or other encumbrance documents. If the property is subject to a lease, determine the remaining lease term, rents collected and or security deposits held by the grantor. Provide applicable information about any other liens or encumbrances applicable to the subject property including but not limited to property taxes paid if any.

Final Offer Letters. Subject to the Department's prior written approval, prepare and deliver the Four Options Letter to the property owner, lessee, licensee, occupant, or other holder of any compensable interest, as applicable. The Four Options Letter shall be on the Design-Builder's designated right-of-way letterhead and shall be signed by the Design-Builder's Project ROW Negotiation Manager.

Conveyance Documents. Prepare and deliver documents of conveyance (including bisection clause and access clause, if applicable) to the property owner, lessee, licensee, occupant, or other holder of any compensable interest, as applicable, and obtain their execution of the same. Obtain notarization of all signatures on documents to be recorded, in accordance with Utah law.

Deliver the original recorded conveyance document or documents to the Project ROW Coordinator. Upon receipt, the Project ROW Coordinator will log in all documents received from the DB into the UDOT ROW ePM system.

Right-of-Occupancy Agreement. As a last resort, prior to submitting the file to the Department requesting a condemnation, secure a "Right of Occupancy Agreement" between the record title owner(s) and the Design-Builder. The Right of Occupancy Agreement shall grant the Department and the Design-Builder and/or assignees permission to enter and occupy the parcel. If the Design-Builder's best efforts could not result in a negotiated contract agreement or the Design-Builder cannot secure a Right-of-Occupancy Agreement, provide documentation acceptable to the Department that specifies the conversations, correspondence, and all other efforts made to secure the agreement. If occupancy is obtained using the Right of Occupancy Agreement, the Design-Builder must also provide a strategy or action plan to the Department describing what steps will be taken to secure a contract or a negotiated settlement agreement which will include a timeline which includes target dates for settlement and or escalation to condemnation if necessary.

Right-of Entry.

A. Secure a Right of Entry for the purpose of constructing drive way tie-ins, or other features that benefit the property owner, but which are not required for the project. A Right of Entry is only applicable and approved for use when these construction features can be eliminated from the project if permission to enter and construct is not granted by the property owner or his or her designated representative.

B. For all other purposes the Right of Entry Agreement shall be sought as **a last resort only** with written pre-authorization from the Department. The Right of Entry Agreement may only be used after all other methods to secure a Negotiated Contract Agreement or Right of Occupancy Agreement have been exhausted. As the Right of Entry only allows for temporary occupancy, the DB must provide documentation acceptable to the Department which supports the use of this agreement in lieu of a Right of Occupancy Agreement or negotiated contract. The DB must also provide an action plan to the Department describing what steps will be taken to secure a contract or Occupancy Agreement for the parcel that is to be entered with a Right of Entry Agreement. The Action plan and Right of Entry Agreement must be presented and approved by the Department before the DB enters or commences construction on the subject parcel.

Expediting ROW Acquisition. Remain open to all reasonable settlement requests (that comply with the regulations as outlined herein) from property owners that are feasible and help expedite the ROW acquisition process. Note that the Department encourages all positive and creative solutions that both satisfy the property owner and promote the success of the project.
Mediation and or Arbitration. The department encourages the use of mediation and or arbitration as a means for alternate dispute resolution. We encourage all attempts to mediate or arbitrate value or relocation issues in compliance with state statutes.

Closing Services

Request for Funding. Prepare a request for funding in accordance with the UDOT *Manual of Instruction*, Right-of-Way, Part 10, or as directed by the Department.
Closings. Attend closings as needed and as requested by the Department. Provide curative documents and exhibits as required and in conjunction with the applicable title company, if the closing is to be closed using a title company. For partial acquisitions, closings will be completed by the Design Builder unless the Department determines, on a case by case basis, that the Department will be responsible for the closing. In those limited cases, closings will be completed by the Department.

If the property is tenant occupied, the negotiator shall obtain a copy of the lease, security deposits and pro-rated rents. If the property is to remain occupied, a key/security deposit is to be withheld. (Said deposit shall be at least 1% of the purchase price unless otherwise approved by the Department) Notify the Department at least 5 days in advance of all closing appointments. Obtain a set of keys to the property prior to or at said closing, and confirm prior to closing that all conditions of closing have been met. The Agent is also required to complete the Property Management Tenant Occupant Form. For owner occupied property the agent must complete the Property Management Owner Occupant Form. All required forms must be included in the Acquisition File.

If the property is occupied as of the date of closing the Design Builder shall coordinate the closing with the Department's Property Management Section to insure that there will be a Department approved lease agreement prepared for execution by the occupant prior to closing. Said lease agreement will be prepared for execution by the occupant, as lessee, and the Department, as lessor.

Relocation Assistance

Legal Compliance. Provide relocation assistance strictly in accordance with the Law, including, but not limited to the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970,* as amended; the Utah Relocation Act, as amended effective May 5, 2008; and UDOT policies and procedures as described in the *UDOT Right of Way Operations Manual.*
Written Notice. Provide written notice of relocation assistance and a relocation assistance brochure to all potential displaced property owners, lessees, licensees, occupants, other holders of compensable interests and other potential displacees. Base the relocation assistance brochures on the *UDOT Relocation Assistance Brochure*, which is available from the Department.
Interviews. Conduct relocation interviews with potential displacees, discussing general eligibility requirements, programs, and services, then complete and maintain interview forms; and with potential displacees. Maintain a written daily record of all verbal contacts in the agent's log as part of the ePM record.
Ineligible Occupants. Give written notice of the pending acquisition to any occupants believed to be ineligible for relocation assistance. Direct potential displacees to submit eligibility questions in writing to the ROW Coordinator. The ROW Coordinator will forward questions received to the UDOT ROW Coordinator with a recommended answer to each question.
Relocation Assistance. Contact and provide relocation assistance to those parties affected by the ROW acquisition and complete necessary forms for all displacees, as required. Provide sufficient advisory assistance to those actually displaced as well as to those affected by the Project in compliance with applicable regulations and UDOT *Policies and Procedures*. Utilize the Department standardized Right of Way Division electronic project management, (ePM) forms or forms pre-approved by the Department if those forms are not available from ePM.

Relocation Sites. Locate, evaluate, and maintain files on comparable available housing, commercial, retail, and industrial sites, and make these information files available to displaced persons or persons not displaced but who are adjacent to or affected by the project.
Supplements. Compute and submit requests for relocation payments, including Supplemental Housing Payments, rental housing supplemental housing payments to the Department, using a form with a format approved by the Department. Obtain Department approval of all relocation supplements prior to presenting relocation notices of eligibility or housing studies to the displaced person..
Relocation Eligibility Notices. Relocation assistance and Notices of Eligibility must be signed and approved by a qualified relocation agent as designated by the Design Builder. Said agents shall be pre approved by the agency. The Design Builder must obtain approval from the Department of each agent who will actually work on the project. All agents must be fully qualified to perform the duties assigned as described in the RFQ for Right of Way Relocation Services.
Inspection. Verify that all replacement housing as selected by the displacees is decent, safe, and sanitary (DS&S) Perform a decent, safe, and sanitary inspection of the selected replacement residence, using a form pre approved by the Department. **No supplemental housing payments shall be** released to the displaced person unless or until the replacement property has met the DS&S requirements unless expressly and specifically approved by the Department.

Moving Personal Property. For relocation of personal property from a residential property which is owner or tenant occupied, prepare a Scheduled Move cost estimate. If the displaced person elects to claim reimbursement for a commercial move, the displacee shall obtain at least two moving cost estimates from qualified, publically recognized commercial moving companies. (If needed, the agency reserves the right to have the Design Builder obtain a third bid.) The agent shall also prepare a moving plan with appropriate photographs, sketches and, as needed, an inventory of personal property to be moved. Coordinate moves with displacees and moving companies in compliance with UDOT policies and procedures, and the *Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as amended.* For the relocation of personal property from a Non-Residential property the agent and the displacee are to obtain a minimum of two complete bids from qualified moving companies, unless otherwise directed by the Department.

Prior to obtaining the bids the agent shall prepare a moving plan with appropriate photographs, sketches and an inventory of all personal property, which is to be moved. This inventory should be prepared by the displacee, however, if needed; the inventory can be prepared by the agent. The agent and the displacee shall review the inventory to verify that it is accurate. Once prepared, the inventory is to be provided to the moving companies to assure that they will prepare consistent and comparable bids for the move and for all associated mechanical, electrical, plumbing and other reasonable and necessary expenses of the move.

The agent shall monitor the move. All moving expenses must be documented and pre-approved by a qualified agent and by the agency. The maximum eligible amounts should be stated on the displacee's Notice of Eligibility.

Relocation Contact Logs. Maintain relocation contact logs, also known as the agent's relocation log, in a format approved by the Department and as directed by the Department using the electronic project management (ROW ePM system). If the same agent performs the duties of the acquisition agent and relocation agent the agent's log may contain a daily record of both acquisition and relocation contacts. When the log has been completed the agent shall sign and date the log and verify that the contact report is a complete and accurate record of all contacts with the owner and or displaced persons of the subject property.

Closings and Payments. Attend all closings on replacement properties, if requested by any party involved, and ensure that supplemental payments, if any, are properly distributed. Make all residential supplemental payments, except moving expense payments payable to the title company, retained by the displaced person, for the benefit of the displaced person. All supplemental housing payments must be applied to the purchase of the qualified replacement residence only. Process and compute increased interest payments on the mortgage of owner-occupied dwellings as required. Note: Relocation payments are reimbursements of actual expenses incurred. As such, they are not to be released without proof of

the qualified expenditure. Receipts and invoices must be filed once the replacement home has been purchased or rented, and the move has been completed. If funds are advanced based upon estimated expenses, any over payments must be refunded in full to the agency within 30 days of the move from the displacement property and or from the date of closing on a replacement property purchase.

For replacement housing payments, a closing statement, or HUD-1 statement, shall be submitted to the Department upon the closing of the purchase of the replacement residence.

Notices to Displacees. For Residential property: Deliver to displacees a ninety (90)-Calendar-Day Notice simultaneous with the delivery of the relocation Notice of Eligibility and the Supplemental Housing Study. The notice and the study must identify the location of the comparable property used to compute the Supplemental Housing Payment. Upon acquisition of ROW, deliver to displacees a thirty (30)-Calendar-Day notice, as applicable. If displaces have not vacated and if the parcel has been acquired, deliver to displacees a thirty-Calendar-Day letter to displace. For non residential property: Deliver to the displaced person a 90 Day Notice simultaneously with the written offer to purchase. Note that this notice is advisory only. A 30 day notice to vacate shall subsequently delivered to the displaced person when the required vacate date is known, unless the person has already vacated the displacement residence. This notice may not be sent any earlier than 60 days from the date the initial 90 day notice was delivered. All notices need to be noted, where indicated, in the UDOT ePM system (as part of the agent log). Copies of all written notices must be retained in the applicable acquisition and relocation file.

If a displacee has not moved after the thirty-Calendar-Day notice expires, immediately notify the Department's ROW Coordinator and prepare a written recommendation to facilitate the displacee's move.

Eviction Proceedings. Assist the Attorney General's office with any eviction proceedings. Serve notice of eviction proceedings to the occupant(s) of the property who have not complied with move dates. Coordinate the eviction process with the local authorities and accompany the Sheriff's Department when the local authorities are carrying out eviction.

Legal Proceedings. Be available for any legal proceedings, such as appeals or hearings.

Securing Vacant Properties. After a property acquisition and relocation, secure the dwelling and/or other structures no later than 24 hours after vacancy and protect the ROW. Coordinate with UDOT central property management and the Project ROW Coordinator for maintenance and care of properties throughout the project. The Design-Builder is responsible for maintenance and care of properties acquired by the Design-Builder for the duration of the Project.

Displacee Files. Maintain a complete file, separate from acquisition files, on each displace if appropriate and as needed. (If a separate relocation file is set up and maintained, that file must contain a copy of all pertinent information from the acquisition file, sufficient to satisfy the needs of the relocation agent, the Design Build reviewing agent, and the Project ROW coordinator or designated department review person.)

Eminent Domain Relocations. For any parcel referred to the Attorney General's office for eminent domain proceedings that has a relocation issue, Notify the AG that a relocation offer has been made. Include in the documents sent to the AG a copy of all relocation notices including the Notice of Eligibility and the 90 and or 30 Day Notices that have been delivered to the displace. Provide the Project ROW Coordinator and the AG's office any and all contacts with the displacee after the case has been submitted to the AG for condemnation.

If requested, the Utah Private Property Ombudsman may request that the relocation issues be mediated or arbitrated. And, if requested, the Ombudsman may request a second replacement housing study. If such requests are made, the Design Builder shall notify the department that these requests have been made. The Design Builder shall then comply with said requests as required by state statutes.

All correspondence to the displacees or their representative(s) will be prepared on the Design-Builder's designated letterhead and will be signed by the Design-Builder's Project ROW Relocation Specialist.

Relocation Payments. Prepare relocation payment claim submissions for all displacees and all relocation assistance benefits using prescribed and approved forms with all appropriate funding codes. Deliver to each displacee the relocation assistance payments in compliance with separation of function, conflict of interest, provisions of the *UDOT ROW Operations Manual* and the *Uniform Relocation Act.*

Last Resort Housing payments to tenants shall be released to the displaced tenant in installments if the calculated payments will be used by the tenant to supplement their rent at the replacement location unless the release of the full amount is approved by the Department on a case by case basis in compliance with the Department's Operation Manual.

19C-B.6.8 Administration and Management of Right-of-Way

Property Security, Clearance and Demolition of Right-of-Way. After acquisition or possession of any parcel of ROW: Secure and protect all buildings, improvements, and fixtures on the ROW until they are disposed of or demolished. Mow the grass, board up and winterize the buildings as required by the Department or applicable law.
Salvage Rights. First rights to salvage fixtures within an improvement that is purchased for the project shall be retained by the Department. If items are to be salvaged by the Department said salvage work shall be completed prior to the date the property is delivered to the Design Builder for demolition.
Personal Property. Coordinate with the owner and occupants to ensure the clearance of personal property from the ROW, as applicable. Provide written notification to the Department of any real and/or personal property remaining on the ROW after being vacated by the occupants that was not acquired under the acquisition. Advise displaced owner occupants of residential property, to obtain personal property insurance to be effective as of the date of closing on the sale of the subject property to UDOT until the date of vacancy from this property.

Pest Control. Provide for any insect and rodent control and initiate extermination as required to rid the ROW, as applicable, from infestations.

Governmental Approvals. Secure Governmental Approvals required for demolition and environmental surveys or tests, and notify the Department in writing of all such activities.

Documentation. Prepare necessary documentation for disposal of improvements, fixtures, and buildings in accordance with applicable laws and submit the same to the Department.

Utility Service. Terminate all utility service(s) when appropriate.

Demolition/Removal Requirements. Process all required forms, documents, and permit applications in order to proceed with the timely demolition or removal of any and all improvements, buildings, and fixtures located within the ROW, as applicable.

Improvements. Demolish and/or remove all improvements. Document the disposal of improvements, fixtures, and buildings in accordance with applicable Laws and submit documentation to the Project ROW Coordinator.

Department Notification. Notify the Department upon completion of the demolition and clearance of the ROW, as applicable.

Parcel Files. Maintain parcel records on file of all aspects of the acquisition process in accordance with applicable law. Each parcel file and ownership file or relocation file shall include all documents required by the Contract Documents, FHWA, and/or the Department.

Expense Reports. Provide monthly summaries of project expenses, including amounts authorized, amounts paid, and budget forecasting on a parcel-by-parcel and overall project basis.

Projected Funding. The DB ROW Project Coordinator will be required to update ePM (screen 740 in the ROW ePM System as applicable, with all projected ROW expenses. Posting shall be prior to the commencement of the acquisition processes. Subsequent postings will also be required if there are subsequent changes to the projected ROW budget. Provide budget projections and anticipated funding requirements every thirty (30) Calendar Days, or more frequently, as requested by the Department UDOT Project ROW Coordinator.

Status Reports. Maintain and electronically transmit to the Department, in a format acceptable to the Department, monthly status reports of all parcels and activities related to ROW, additional Properties acquisition and disposition, and acquisition and disposition of temporary easements or other property interests. Provide weekly (or as requested) updates to the Department.

Correspondence. Provide copies of all incoming and outgoing correspondence as requested. Number all correspondence in accordance with Section 1.2 “Point of Contact”.

Sub-consultant Reports. Evaluate and report subcontractor status and performance to the Department monthly, or more frequently, as requested.

ROW Tracking System. Input and update parcel status in Web-based spreadsheet tracking document system or as directed by the Department, UDOT Project ROW Coordinator or the Department.

19C-B.6.9 Department Oversight, Monitoring, and Review

General. The Department or its designee may, at its discretion, review and/or monitor the ROW activities and services performed by the Design-Builder. This will be for oversight as a secondary review. Primary review shall be conducted by the Design Builder. The Department will notify the Design-Builder in writing of any Project oversight monitor or reviewer under contract with the Department. Provide any information (in addition to that specifically required elsewhere in the RFP) to the Department requested to assist in the Department’s review and assessment of the progress, timeliness, adequacy, and sufficiency of the Design-Builder’s ROW activities.

19C-B.6.10 Cost Responsibilities of the Department

The Department will:

ROW Costs. For each parcel of ROW, excluding the Design-Builder’s Additional Properties, process and issue all approved warrants for payment of agreed purchase prices or awards, relocation assistance payments, and incidental expenses for the transfer of the ROW to the State in accordance with applicable law.

Approvals. Provide recommendations for approval of all title reports, appraisals, relocation assistance payments, administrative settlement requests, payments, and other approvals required by the Contract Documents, by the State, or by applicable law to the Department. Only the Director of Right of Way or his designee shall have approval authority for any contract, claim or other Right of Way Acquisition or Relocation payment.

Delegation of Approvals. At its discretion, delegate some or all of the approval processes, after provision to the Design-Builder of a signed notification.

Legal Support. Coordinate with the office of the Attorney General or contract condemnation counsel to provide legal counsel to file and prosecute condemnation hearings.

19C-B.6.11 Cost Responsibilities of the Design-Builder

ROW Costs. Pay the cost of, and be responsible for, processing and issuing all payments of agreed purchase prices or awards; relocation assistance payments; and all legal, administrative, and incidental expenses of or related to the Design-Builder’s Additional Properties and temporary easements, or other interests in real property acquired for the Project.

19C-B.6.12 Property Fence Requirements

Regarding fences, comply with the policies and procedures of the UDOT *Manual of Instruction—Right-of-Way, Part 20*, as well as the 2008 UDOT Standard Specifications Section 02822 “Right of Way Fences and Gates”.

Property Fencing for Public Properties:

General. To control pedestrian access to the Project from existing public facilities that are high-risk areas (particularly parks, sports facilities, schools, or any highly traveled pedestrian areas), at a minimum, construct a six-foot chain link fence with metal posts. Use normal and good engineering practices in fencing public properties to control pedestrian access to the Project, following UDOT standard plans and specifications.

Property Fencing for Private Properties:

New Fencing. For fencing other than UDOT standard Right of Way fence instruct the appraisers to use the cost-to-cure format to compensate an owner of private property for a replacement fence when the

ROW line leaves one or more unfenced remainder property(s) that were fenced before the taking. Base compensation for the new fencing on the same type of fence as the property owner's existing fence. Provide all UDOT standard Right of Way fence.

Agreement. When the property owner is paid through the appraisal process for the cost to rebuild the fence on the remainder property, include in the Memorandum of Agreement or the Purchase Agreement the following clause:

> *"It is further understood and agreed that the Grantor has been compensated for the construction of a new fence and shall be responsible for constructing the necessary fencing within thirty (30) calendar days from the date of closing. Grantor specifically understands and agrees that the fences are the property of the Grantor and they shall be liable and responsible for any reconstruction, maintenance, or adjustment with regard to such fencing."*

Temporary Fencing. Make as many efforts as reasonable efforts to ensure that the Property Owners who have been compensated for fencing of the remainder properties erect the fence in accordance with the construction schedule. If necessary to maintain the construction schedule and to control unauthorized access to the ROW by livestock or the public, provide temporary fencing in cases where the Property Owner fails to fence the property within the allotted timeframe. Provide temporary fencing for all shoofly and highway easements. Place temporary fencing prior to any construction activities. Maintain all temporary fencing.

Removal of Fencing. If any existing fencing remains after the Property Owner's retention period has expired, remove the existing fences from the newly acquired ROW and pay all costs associated therewith. Remove all temporary fencing after new fencing has been placed.

Mail Service. Make as many attempts as reasonable to ensure that mail delivery to existing Property Owners is not interrupted, including installing temporary mailboxes during construction, coordinating with U.S. Postal Service mail carriers, and, after Project completion, constructing permanent mailboxes similar to the original mailboxes.

19C-B.6.13 Leaseback

General. With the approval of the Department and at the Design-Builder's option, extend a business tenant's lease or an agreement to lease back to the grantor, the grantor's land or improvements to the grantor after possession has been obtained, taking into consideration the Project schedule and the time frame in which the parcel will be needed for construction. Leaseback agreements shall be in a form approved by the Department and shall be preapproved by the Department prior to the execution of the lease agreement.

Documentation. Submit to the Department in writing substantial documentation to justify the lease extension, the amount of rent, and the termination notification clause. Subject to Department approval, negotiate the lease between the tenant and the Department, and obtain all signatures.

Tenant Liaison. Through acceptance, collect the rent from the tenant and move the tenant unless the Department retains this responsibility and or has selected a qualified Property Management company or firm responsible for this function. If applicable, deliver any and all collected rent to the UDOT Project ROW Coordinator.