

Development of Best Practices for Right-of-Way Valuations and Negotiations in Transportation Projects

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The valuations of properties and the negotiations with property owners are two major tasks in the right-of-way acquisition process for transportation projects. If improved, those tasks can increase the overall project delivery efficiency. The Texas Department of Transportation (TxDOT) funded a research project that aimed to recommend some best practices for successful valuations and negotiations in Texas. The authors reviewed the different strategies and procedures followed in TxDOT by conducting interviews and surveys with right-of-way personnel. Guidelines supported by recommended practices were identified for both valuation and negotiation and then reviewed and validated by experts. Lastly, implementation guides were developed.

INTRODUCTION

Right-of-Way (R/W) acquisition is an essential part of the complex process of developing a highway project. Because the acquisition process occurs immediately prior to the construction of the highway infrastructure, the pressure is always high to acquire property quickly so that the project can begin. In fiscal year 1999, the Federal Highway Administration (FHWA 2003) reported that the federal government spent nearly \$1 billion for R/W acquisition.

R/W acquisition comprises different elements. Among the most vital ones are property valuation and negotiation with property owners. These usually lie on a project's critical path and have an important impact on project schedule and cost. They also affect relationships with property owners because they can engender public trust in transportation planning and in the R/W acquisition process.

A variety of added factors can impede the valuation and negotiation processes as discussed by the following two technical reports. First, Hakimi and Kockelman (2005) argue that time, cost, and public satisfaction are essential performance parameters of successful R/W acquisition for state departments of transportation. They emphasize that inefficient negotiation processes typically frustrate the public and contribute to an increase in project cost and duration. Second, Chang (2005) lists several types of delays in R/W acquisition. These are delays due to pricing, compensation, and impact disputes; title curative (updating title issues and the actual use of the property) and ownership delays; parcel characteristics/improvement delays; environmental issues; legal activity and litigation delays; as well as design change and revision delays. On the other hand, some practices help eliminate such complexity. According to a Federal Highway Administration (FHWA 2006) study, the timing of the involvement of property owners in the design process and the frequency of agency contact with them can have a major impact on successful acquisition. Establishing this connection could result in more timely purchases and the reduction of damages to the affected properties. Similarly, having in-depth interviews with the property owners affords a better understanding of how owners use the property, and helps agents form a comprehensive estimate of just compensation, both of which facilitate negotiations with property owners (FHWA 2002). Further research, however, is needed to identify the best practices for better valuation and negotiation results and synthesize them into useful guidelines.

In an effort to help the Texas Department of Transportation (TxDOT) reduce the time and cost for land acquisition and build good rapport with the public, the research project described in this manuscript was launched to survey and to synthesize best practices in R/W valuations and negotiations in Texas. The objectives of this research were to identify problems and issues, legal constraints, and other factors related to R/W valuations and negotiations in TxDOT's operations, and to synthesize best practices and create guidelines for these processes to improve their effectiveness. These objectives were achieved by conducting interviews and surveys with R/W personnel from TxDOT to identify and evaluate valuation and negotiation methods and practices, reviewing literature and laws, and forming recommendations based on the above. In order to avoid both the shortsightedness that would result from too narrow a scope, and the decreased applicability that comes from too broad an approach, the scope of this research was limited to practices related only to the valuation and negotiation phases of the acquisition process. The process preceding negotiations (i.e., appraisal review) and the subsequent processes (i.e., condemnation or relocation) are not included in the study. The scope of this research was focused on the state of Texas and the results are more applicable to Texas. However, the procedure followed could be used by other DOTs to obtain R/W acquisition best practices for other states.

OVERVIEW OF RIGHT-OF-WAY ACQUISITION PROCESS

According to the *Real Estate Acquisition Guide for Local Public Agencies* (TxDOT 2004), the R/W acquisition process comprises five phases: planning, appraisal and appraisal review, negotiation, property management, and relocation. Planning is the first phase and mainly involves environmental assessments, location and design studies, and public involvement activities. During the planning phase the laws require environmental assessments that mainly measure the social, economic, and environmental impacts of a project's R/W acquisition and any relocation it might require (FHWA 2001). Public involvement is also critical during the planning phase. The purpose of initiating public involvement is to notify a community of the agency's intentions and to communicate the necessity of a project and the possible social and environmental impacts. This can be done through meetings, newspaper, television advertisements, and letters (TxDOT 2004).

Appraisal is the second phase and is the process of having a parcel appraised and having the appraisal reviewed to establish the amount of just compensation. Prior to parcel appraisal, there should be a pre-appraisal contact with the property owner. This contact should be in the form of a direct meeting with the property owner. In this meeting, the owner is given information regarding the overall R/W acquisition process, the general type of facility to be constructed, and the appraisal procedure that will ensue. A commitment must not be made on value nor should any offers be made before approved values are received. Once the pre-appraisal contact has been made, an appraiser is assigned the task of determining the market value for each parcel. It is the district's responsibility to determine that the appraiser assigned to a parcel is qualified to appraise that particular type of property. After that, the fair market value and just compensation are determined. The fair market value is an appraisal based on an estimate of what a buyer would pay a seller for any piece of property. The amount of just compensation will not be less than the approved appraisal. The approved appraisal takes into account the value of allowable damages and enhancements to any remaining property. Lastly, the agency reviews the appraisal in preparation for establishing an approved value for the property. A review appraiser will examine the report for completeness, consistency in land values, variances in component values, appraisals of any remainders, compensability, and leased properties. Upon completion of the review, the review appraiser will recommend that the appraised value be approved. The approved value will be used as the basis of the state's offer to acquire a property (TxDOT 2004).

In the negotiation phase, agencies make offers to property owners for acquisition of real property and improvements. They also make payments for properties and give notice to property owners to vacate. When all reasonable efforts to negotiate the written offer of just compensation

have failed, an administrative settlement can be pursued (FHWA 2006). If an agreement cannot be reached, condemnation proceedings typically follow.

In the property management phase, the clearing of the R/W takes place. This phase can also be time consuming and full of unexpected, sometimes extensive, schedule delays. However, agents who are good property managers can partly recover the large investments made during acquisitions by maximizing the revenue from the sale of excess property purchased during the R/W acquisition process.

Finally, in the relocation phase, residences, businesses, farms, and non-profit organizations are displaced due to federal or state programs designed to benefit the public. However, the law specifies that the displaced persons should not undergo disadvantage as a result of projects done for the good of the public. According to the *Real Estate Acquisition Guide for Local Public Agencies* (FHWA 2006), the relocation process is divided into four parts. Relocation planning comes first and requires the analysis of the location, size, and schedule of the displaced residents. Secondly, the Uniform Act requires supplying the affected residents with general information on their eligibility for relocation, and on the 90-day minimum notice provision that guarantees that they do not have to vacate their property without a 90-day written notice. Next, an advisory service is provided to ensure that relocated owners are fully informed and that they have access to counseling and advice. Finally, payments must be made to affected residents.

REVIEW OF PERTINENT LAWS AND STATUTES

To gain a better understanding and assessment of R/W negotiation practices, the authors conducted a review of the pertinent laws and statutes that affect the valuation and negotiation processes. Federal and state laws were both found to greatly affect those processes.

The principal laws for R/W acquisition on federal projects are Public Law 91-646 and *The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*, as amended, also called The Uniform Act. The Uniform Act protects property owners whose property and/or improvements are acquired or who are displaced from R/W acquisition by federal or federally assisted state projects (FHWA 2006). Three sections (or titles) comprise the Act. Title Three, the “Uniform Real Property Acquisition Policy,” governs acquiring real property for federal and federally assisted projects (42 USC). The provisions of Title Three encourage agencies to acquire real property through negotiation, and to minimize the possibility of litigation (FHWA 2006). The bulk of this section of the paper addresses this part of the Uniform Act.

For valuation in particular, there are federal and state laws that influence these practices:

- State laws allow the acquisition of private property for public projects, given that the owner is entitled to just compensation (TxDOT 2006). Though the agency must offer the amount that the property owner is entitled to, state law prohibits paying more than the agency is required to pay.
- The *Real Estate Acquisition Guide for Local Public Agencies* (LPAs) suggests that a detailed appraisal should reflect standards that are nationally recognized (FHWA 2006) such as the *Uniform Appraisal Standards for Federal Land Acquisition* (The Appraisal Institute 2000) and the *Uniform Standard Practices for Appraisal Professionals* (The Appraisal Foundation 2006). Complying with federal regulations, the state requires that the appraisal report include certain items, such as a statement of purpose for the appraisal, a description of the physical characteristics of the property, and a description of comparable sales. A parcel can be waived from the requirement for an appraisal if the parcel is donated, or if the proposed acquisition is uncomplicated and low-valued as stated in the Uniform Act.
- The Uniform Act requires that the appraiser give the property owner the opportunity to accompany him or her during any investigation of the property made in preparation of the appraisal. This requirement allows property owners to advise the appraiser or indicate

features of the property that might affect the valuation of the property, or that might not be obvious to the appraiser.

- The state laws also require that the invitation be made in writing, with sufficient lead time for the owner to arrange to be present or to request an alternative time.

Similarly, the R/W negotiation process is restricted by federal and state laws and regulations:

- The Uniform Act states that when the agency moves to obtain necessary R/W properties it should attempt, “to the greatest extent practicable,” to do so by negotiation rather than through its condemnation authority (42 USC). A qualified member of the agency’s staff should be assigned to conduct the negotiations. However, fee negotiators may be hired when the agency’s negotiation staff is insufficient.
- The Uniform Act requires the presentation of a written offer to the property owner explaining the amount of just compensation (including damages) and the basis for that amount (49 CFR Part 24). Delivery of this offer constitutes initiation of negotiations and is the principal date for determination of relocation assistance entitlements (FHWA 2006).
- The acquiring agency must make “all reasonable efforts” to contact each real property owner in order to give an explanation of the negotiation process and the responsibilities of both the acquiring agency and the property owner. The *Real Estate Acquisition Guide for Local Public Agencies* (FHWA 2006) encourages the agency to contact the owners, explaining that the contact can promote good rapport with the property owner.
- The Uniform Act also prohibits agencies from using coercive actions to make an agreement. It forbids advancing the time of condemnation, or deferring negotiations or condemnation.
- The *Real Estate Acquisition Guide for Local Public Agencies* (FHWA 2006) recommends that the negotiator should not imply that the negotiation is a “take it or leave it” proposition, nor should condemnation be used as a threat. In case the landowners refuse the initial offer, an administrative settlement is set in motion as the last effort made before the agency involves its condemnation authority (FHWA 2006). To initiate the administrative settlement process, the property owner’s written counteroffer is required and must include his or her signed proposal for full settlement setting forth a specific value with information to support the proposal. The R/W acquisition team would decide either to accept or decline this amount that is typically more than the initial offer of just compensation (due to the consideration of the even larger cost of litigation and project delays).
- If partial property acquisitions leave the property owner with a remainder that has no value to the property owner due to a partial taking, the Uniform Act obliges the agency to make an offer to acquire the remainder along with the portion of the property necessary for the project (FHWA 2006).

IDENTIFICATION OF BEST PRACTICES

In order to identify the best practices in R/W valuations and negotiations in the state of Texas, data were compiled from two different sources: interviews with R/W office personnel in TxDOT, and a survey about the practices and problems encountered by the R/W personnel in TxDOT in the valuation and negotiation processes. Results from the analysis of each data source are discussed in the following.

Analysis of Right-of-Way Personnel Interviews

In an effort to get an insight of the current problems, issues, and any inconveniences associated with the R/W valuation and negotiation processes in Texas, interviews were conducted with the R/W agents in the TxDOT at the Bryan and San Antonio district offices. The issues that agents believed

were important to the R/W valuation and negotiation processes were divided mainly into three categories: staff constraints, time constraints, and counteroffers from property owners.

The R/W personnel described that staff constraints are one of the major issues that impede the efficiency and effectiveness of the R/W valuation and negotiation processes. The ratio of projects to personnel is too large which necessitates that each staff member works with various projects at the same time; thus dedicating insufficient time to each project. In spite of the fact that the more often contacts are made with property owners the better, the work load does not allow the staff to meet with property owners more than one or two times.

Time constraints were also identified as an important issue. Property owners, given their least experience in dealing with land acquisition and land value, usually want to take their time to think about the presented offer from the DOT. However, TxDOT allows them only a short time, usually thirty (30) days, to accept or present a counteroffer; otherwise the agency will proceed with condemnation. Moreover, district offices usually aim to make pre-appraisal contacts and work with the owners to establish good relations. This step is usually hindered because of the short time allocated to the negotiation process.

With respect to issues related to the counteroffers from property owners, the interviews revealed TxDOT is usually reluctant to approve counteroffers in which values exceed the approved appraisal amount of just compensation by a constant value, irrespective of the size, location, and usage of the land. This is due to the fact that the agency tends to consider the appraisal value as the best estimate, regardless of other factors that might have been ignored during the valuation process. In some cases, the counteroffer is only a few percentage units of difference from the initial offer, but still exceeds the constant approved amount, and is usually rejected. Furthermore, the 30-day time requirement for counteroffers is not enough for owners to present an acceptable counteroffer in writing, since many have never written a counteroffer before. Though this period is extendable, the extension request requires paper work and approval from the division office.

The agents also made some recommendations during the interviews that would help improve the R/W valuation and negotiation process. The agents thought that negotiators should be encouraged to personally assist property owners to write counteroffers. Assistance can also be presented in the form of a simple document or guidebook explaining how to write a counteroffer. Moreover, the agents pointed out that the time, cost, and effort of acquiring a title of an inexpensive property is unnecessarily too great and inefficient; thus the R/W title waiver should be allowed for small properties in order to save time and cost.

Analysis of Right-of-Way Personnel Survey

This survey permitted deeper insight into the problems/issues that are currently experienced by R/W personnel in relation to valuation and negotiations and shed light on their favorite practices. A total of 35 surveys were received from 18 of the 25 district offices in Texas (representing 72% of the state of Texas). The 18 TxDOT districts from which surveys were returned are: Abilene, Amarillo, Atlanta, Brownwood, Bryan, Corpus Christi, Dallas, El Paso, Fort Worth, Houston, Lubbock, Lufkin, Odessa, Paris, San Angelo, San Antonio, Wichita Falls, and Yoakum. The participants' identities were kept strictly confidential but they, on average, have over 15 years of experience in R/W acquisition (the shortest term was two years and the longest was 33 years) ranging from occupations such as R/W agents, appraisers, administrators, appraisal reviewers, and directors. Furthermore, the respondents have, on average, been involved in 600 parcel acquisitions during their TxDOT tenure, with the least number of acquisitions at 15 and the most at over 2,000. The survey included 12 questions. Multiple choices were provided with the majority of the questions, and respondents were asked to rank them according to their rate of occurrence or importance.

In the first question of the valuation section, participants were asked how often they experienced certain problems during the valuation process. Since the results were close, the ranking for this question was made based on the addition of the percentages of "often" and "sometimes." The two

problems most frequently reported as “often” or “sometimes” were the property owner’s distrust of the agency and/or disagreement with the appraised value (94.1%) and R/W plan and changes and revisions affecting the nature and extent of acquisition on many parcels (94.2%). Another problem experienced by more than 50% of the respondents was delays in the delivery of appraisal reports. Table 1 summarizes the results of this question.¹

Table 1: Summary of Responses to Question 1

1. Please indicate the approximate frequency in which you have experienced the following problems during the valuation process.				
	Often	Sometimes	Rarely	Never
1-i. Property owner distrust of agency and/or disagreement with appraised values	38.2%	55.9%	2.9%	2.9%
1-a. Right-of-way plan changes and revisions affect nature and extent of acquisition on many parcels	32.4%	61.8%	5.9%	0.0%
1-e. Delays in the delivery of appraisal reports	29.4%	55.9%	14.7%	0.0%
1-b. Insufficient right-of-way staff to obtain appropriate appraisals in a timely manner	17.6%	23.5%	44.1%	14.7%
1-c. Lack of qualified fee appraisers	14.7%	29.4%	41.2%	14.7%
1-f. Inconsistencies among appraisal reports (e.g., significantly different values for the same parcel)	8.8%	35.3%	55.9%	0.0%
1-d. Poor quality of appraisals produced by fee appraisers	5.9%	38.2%	55.9%	0.0%
1-g. Appraisers do not have time to meet with property owners personally	2.9%	14.7%	55.9%	26.5%
1-h. Disagreement over prioritization criteria used by outsourced appraisers to select which parcels will be appraised first	2.9%	14.7%	50.0%	32.4%

Participants were also asked to rank the importance of given actions during the valuation process. According to the respondents, the most important issue was the way R/W plan changes and revisions affect the nature and extent of the acquisition of parcels (70.6%). The second most important issue was the poor quality of appraisals produced by fee appraisers (67.6%), and the third was delays in the delivery of appraisal reports (52.9%). Although the most frequent problem identified in question 1 (Property owner distrust of agency and/or disagreement with appraised values) was ranked low for question 2, question 1’s second and third most important issues (Right-of-way plan changes and revisions affect nature and extent of acquisition on many parcels, and delays in the delivery of appraisal reports) were also found to be among the top three most frequent problems associated with question 2. Table 2 summarizes the results.

Table 2: Summary of Responses to Question 2

2. In your experience, what is the importance of the following actions during the valuation process?				
	Highly Important	Important	Less Important	Not Important
2-a. Right-of-way plan changes and revisions affect nature and extent of acquisition on many parcels	70.6%	23.5%	5.9%	0.0%
2-d. Poor quality of appraisals produced by fee appraisers	67.6%	26.5%	5.9%	0.0%
2-e. Delays in the delivery of appraisal reports	52.9%	41.2%	5.9%	0.0%
2-g. Appraisers do not have time to meet with property owners personally	50.0%	41.2%	8.8%	0.0%
2-c. Lack of qualified fee appraisers	47.1%	50.0%	2.9%	0.0%
2-f. Inconsistencies among appraisal reports (e.g. significantly different values for the same parcel)	44.1%	35.3%	20.6%	0.0%
2-h. Disagreement over prioritization criteria used by outsourced appraisers to select which parcels will be appraised first	32.4%	41.2%	26.5%	0.0%
2-b. Insufficient right-of-way staff to obtain appropriate appraisals in a timely manner	29.4%	50.0%	17.6%	2.9%
2-i. Property owner distrust of agency and/or disagreement with appraised values	23.5%	41.2%	29.4%	5.9%

The respondents then were given the opportunity to write in any problems or issues not addressed by the questionnaire. Among the answers were the shortage of qualified review appraisers and property owners not cooperating with the appraiser by not providing the needed information.

Table 3 summarizes the results of the fourth question, which asked respondents to indicate the frequency with which given practices are used during the valuation process. The practice most frequently used is the invitation of the property owner to accompany the appraiser during the appraiser's inspection of the property (100%). The second and third most frequently used practices based on the addition of the rankings "often" and "sometimes" are to encourage fee appraisers to meet property owners in person (100%) and to assign projects according to appraiser's experience (100%). Since all three practices received 100% ratings when combining the two classifications, the rankings were based on the higher value for the "often" category.

Table 3: Summary of Responses to Question 4

4. Please indicate how often the following practices are used during the valuation process.				
	Often	Sometimes	Rarely	Never
4-i. Give the property owner an opportunity to accompany the appraiser during the appraiser's inspection of the property	100.0%	0.0%	0.0%	0.0%
4-h. Share copies voluntarily and routinely of complete appraisal reports with property owners	94.1%	0.0%	0.0%	5.9%
4-d. Encourage fee appraisers to meet property owners in person	88.2%	11.8%	0.0%	0.0%
4-j. Assign projects according to appraiser's experience	82.4%	17.6%	0.0%	0.0%
4-c. Encourage R/W staff to meet property owners in person	82.4%	14.7%	2.9%	0.0%
4-e. Provide the outsourced appraisers with pre-appraisal information obtained by district personnel	78.8%	12.1%	3.0%	6.1%
4-b. Evaluate outsourced appraisers annually on their performance	67.7%	12.9%	16.1%	3.2%
4-m. Reduce the time-lapse between appraisal valuation date and the initiation of negotiation	62.5%	31.3%	6.3%	0.0%
4-g. Share and discuss the project's preliminary R/W map with all property owners	55.9%	20.6%	17.6%	5.9%
4-k. Prioritize parcels according to complexity/appraisal difficulty and contract appraisals for those that are most complex first	50.0%	35.3%	11.8%	2.9%
4-l. Utilize most appropriate technology (e.g., mobile device, GIS) to expedite appraisal production	31.0%	34.5%	27.6%	6.9%
4-f. Use the same agent (e.g., consultant) for the valuation and negotiation process	12.9%	9.7%	12.9%	64.5%
4-a. Offer training courses for staff, fee appraisers, and appraisal reviewers	8.8%	50.0%	38.2%	2.9%

The following question asked participants whether they recommended certain practices. The most highly recommended practice is to encourage fee appraisers to meet property owners in person (94.1%). It is apparent that this practice is believed to be very helpful during the valuation process. The second most highly recommended practice is to give the property owner an opportunity to accompany the appraiser during the inspection of the property (91.2%). The third most highly recommended practice is to assign projects according to the appraiser's experience (88.2%). Table 4 presents the results. In the next question, which allowed respondents to address any further comments or issues on the topic, respondents recommended that complex parcels or parcels with greater difficulty be assigned to appraisers with greater experience to avoid delays resulting from mistakes and confusion.

Table 4: Summary of Responses to Question 5

5. Please indicate if you recommend the following practices based on their effectiveness to improve the valuation process.				
	Highly Recommend	Recommend	Not Recommend	Oppose
5-d. Encourage fee appraisers to meet property owners in person	94.1%	5.9%	0.0%	0.0%
5-i. Give the property owner an opportunity to accompany the appraiser during the appraiser's inspection of the property	91.2%	8.8%	0.0%	0.0%
5-j. Assign projects according to appraiser's experience	88.2%	11.8%	0.0%	0.0%
5-c. Encourage R/W staff to meet property owners in person	76.5%	23.5%	0.0%	0.0%
5-e. Provide the outsourced appraisers with pre-appraisal information obtained by district personnel	75.8%	21.2%	3.0%	0.0%
5-h. Share copies voluntarily and routinely of complete appraisal reports with property owners	73.5%	14.7%	8.8%	2.9%
5-m. Reduce the time-lapse between appraisal valuation date and the initiation of negotiation	70.6%	29.4%	0.0%	0.0%
5-b. Evaluate outsourced appraisers annually on their performance	70.6%	26.5%	0.0%	2.9%
5-k. Prioritize parcels according to complexity/appraisal difficulty and contract appraisals for those that are most complex first	67.6%	29.4%	2.9%	0.0%
5-a. Develop training courses for staff, fee appraisers, and appraisal reviewers	64.7%	35.3%	0.0%	0.0%
5-l. Utilize most appropriate technology (e.g., mobile device, GIS) to expedite appraisal production	51.6%	45.2%	3.2%	0.0%
5-g. Share and discuss the project's preliminary R/W map with all property owners	47.1%	32.4%	20.6%	0.0%
5-f. Use the same agent (e.g., consultant) for the valuation and negotiation process	12.5%	9.4%	25.0%	53.1%

The negotiation section of the survey began with a question addressing problems experienced during the negotiation process. Again the percentages for responses of “often” and “sometimes” were added to identify the top problems. The result indicates that the majority of the district office personnel regularly experience the following three top issues: distrust from the public (94%); complaints of low payment (93.9%); and complaints of insufficient time for counteroffers (72.7%). Table 5 presents the seventh question’s results.

Table 5: Summary of Responses to Question 7

7. Please indicate the approximate frequency in which you have experienced the following problems during the negotiation process.				
	Often	Sometimes	Rarely	Never
7-a. Property owners complaining of low payment	51.5%	42.4%	6.1%	0.0%
7-h. TxDOT time limitation (i.e., 30 days) for property owners being insufficient in order to present a counteroffer	42.4%	30.3%	15.2%	12.1%
7-i. All administrative settlements over \$50K being reviewed by the Division office, even when the counteroffer differs by only a few percentage points	28.1%	34.4%	21.9%	15.6%
7-b. Property owners distrust of agency and/or appraisal methods	27.3%	66.7%	6.1%	0.0%
7-c. Property owners complaining of a slow negotiation process	9.1%	57.6%	30.3%	3.0%
7-d. Property owners complaining of R/W brochures being too technical and hard to understand	3.0%	9.1%	54.5%	33.3%
7-e. Negotiator not contacting the property owners in person	0.0%	18.2%	36.4%	45.5%
7-g. Negotiator not keeping owners updated of the status of the process	0.0%	12.1%	60.6%	27.3%
7-f. Negotiator not being courteous or professional	0.0%	3.0%	57.6%	39.4%

Next, the participants were asked to judge the importance of certain problems or issues that occur during the negotiation process. The results, presented in Table 6, show that most R/W agents consider the following issues as important or highly important: agent not being courteous (100%), not keeping property owners informed (96.7%), no personal contact with property owners (90.4%), and distrust from the public (83.9%).

The ninth question gave respondents the opportunity to write in any problems or issues not addressed by the above two questions. Responses included: “getting title commitments in a timely manner;” “when a negotiator can be too aggressive at the first meeting, the agent should attempt to uncover the owner’s concerns and then attempt to ease or solve these concerns to advance the acquisition;” “it is very difficult to explain the need for the property to the owner without a set of construction plans.”

The tenth question asked participants to report the frequency with which given practices are used during the negotiation process. In the course of conducting the survey, these practices were selected as candidates for the best practices for successful negotiations. However, only three practices (out of 12) were used “sometimes” or “often” by over two-thirds of the district offices staff. These practices were: personal contact with property owners (100%); an “open-house” event explaining the project (80.6%); and assistance in writing counteroffers (68.8%). The results are summarized in Table 7.

Table 6: Summary of Responses to Question 8

8. In your experience, what is the importance of the following problems during the negotiation process?				
	Highly Important	Important	Less Important	Not Important
8-f. Negotiator not being courteous or professional	83.9%	16.1%	0.0%	0.0%
8-g. Negotiator not keeping owners updated of the status of the process	67.7%	29.0%	3.2%	0.0%
8-e. Negotiator not contacting the property owners in person	58.1%	32.3%	9.7%	0.0%
8-h. TxDOT time limitation (i.e., 30 days) for property owners being insufficient in order to present a counteroffer	45.2%	19.4%	32.3%	3.2%
8-i. All administrative settlements over \$50K being reviewed by the Division office, even when the counteroffer differs by only a few percentage points	35.5%	12.9%	48.4%	3.2%
8-b. Property owners distrust of agency and/or appraisal methods	32.3%	51.6%	16.1%	0.0%
8-a. Property owners complaining of low payment	22.6%	38.7%	38.7%	0.0%
8-c. Property owners complaining of a slow negotiation process	22.6%	35.5%	38.7%	3.2%
8-d. Property owners complaining of R/W brochures being too technical and hard to understand	9.7%	12.9%	58.1%	19.4%

Table 8 summarizes the results of question 11 where the respondents were asked to indicate whether they recommended certain practices. Only six practices (out of 13) were characterized by more than two-thirds of the district office personnel as effective in the improvement of the negotiation process (by combining “highly recommend” and “recommend”). Those are: personal contact of negotiators with property owners (100%); higher limit of approval without TxDOT review (90.9%); an “open-house” event explaining the project (80.6%); streamlined payment process (75.8%); creating guidebook to help property owners prepare counteroffer (75.8%); and encouraging agents to assist property owners preparing counteroffers (69.7%).

Table 7: Summary of Responses to Question 10

10. Please indicate how often the following practices are used during the negotiation process.				
	Often	Sometimes	Rarely	Never
10-d. Require negotiators to present and discuss the offer in person	87.9%	12.1%	0.0%	0.0%
10-f. Conduct an “open-house” event explaining the right-of-way acquisition process for a specific project to the public	64.5%	16.1%	6.5%	12.9%
10-c. Require negotiators to meet owners prior to the beginning of the negotiation process, in order to discuss the project, the R/W acquisition process, and justification of valuation results	33.3%	18.2%	15.2%	33.3%
10-j. Encourage negotiators to assist property owners on preparing and negotiating a counteroffer	25.0%	43.8%	21.9%	9.4%
10-i. Allow more than 30 days for owners to present a counteroffer	21.2%	42.4%	36.4%	0.0%
10-h. Create a guidebook to assist property owners on writing an appropriate counteroffer	6.1%	12.1%	3.0%	78.8%
10-b. Use incentive programs for early completion of the negotiation process (e.g., incentive payments for early completion and penalty for late completion)	3.1%	0.0%	6.3%	90.6%
10-g. Use a streamlined process to provide immediate payment to property owner for low value property rights	3.0%	9.1%	6.1%	81.8%
10-l. Employ land exchange, which is exchanging previously purchased property outside the acquisition area for the needed parcel	0.0%	18.2%	45.5%	36.4%
10-k. Employ land consolidation (which is when remainder parcels are purchased on either side of a new highway leaving the owner with a consolidated property)	0.0%	6.5%	16.1%	77.4%
10-e. Use a closing manual which lists pertinent contacts, phone numbers, and directions to and inside the courthouse	0.0%	0.0%	22.6%	77.4%
10-a. Allow the same person to perform the valuation and negotiation for any given parcel	0.0%	0.0%	3.0%	97.0%

Table 8: Summary of Responses to Question 11

11. Please indicate if you recommend the following practices based on their effectiveness to improve the negotiation process.				
	Highly Recommend	Recommend	Not Recommend	Oppose
11-d. Require negotiators to present and discuss the offer in person	78.8%	21.2%	0.0%	0.0%
11-f. Conduct an “open-house” event explaining the right-of-way acquisition process for a specific project to the public	41.9%	38.7%	16.1%	3.2%
11-i. Increase the limit on the value of the property that is not subject to review by the Division office	39.4%	51.5%	9.1%	0.0%
11-g. Use a streamlined process to provide immediate payment to property owner for low value property rights	36.4%	39.4%	21.2%	3.0%
11-j. Allow more than 30 days for owners to present a counteroffer	33.3%	27.3%	27.3%	12.1%
11-c. Require negotiators to meet owners prior to the beginning of the negotiation process, in order to discuss the project, the R/W acquisition process, and justification of valuation results	29.0%	32.3%	29.0%	9.7%
11-k. Encourage negotiators to assist property owners on preparing and negotiating a counteroffer	27.3%	42.4%	21.2%	9.1%
11-h. Create a guidebook to assist property owners on writing an appropriate counteroffer	18.2%	57.6%	18.2%	6.1%
11-b. Use incentive programs for early completion of the negotiation process (e.g., incentive payments for early completion and penalty for late completion)	9.4%	46.9%	31.3%	12.5%
11-m. Employ land exchange, which is exchanging previously purchased property outside the acquisition area for the needed parcel	9.1%	36.4%	30.3%	24.2%
11-l. Employ land consolidation (which is when remainder parcels are purchased on either side of a new highway leaving the owner with a consolidated property)	6.5%	25.8%	38.7%	29.0%
11-e. Use a closing manual which lists pertinent contacts, phone numbers, and directions to and inside the courthouse in order to reduce staff time at courthouse	3.3%	50.0%	40.0%	6.7%
11-a. Allow the same person to perform the valuation and negotiation for any given parcel	0.0%	6.1%	36.4%	57.6%

The last question of the survey provided the respondents with room to describe any other negotiation practices that they consider helpful and effective. Some examples of these comments are: “If possible, use more than one title company on a project to expedite title services. On projects located far from the home district office, we had a laptop computer with small printer to instantly prepare conveyance documents for owners’ signatures—saved time and travel;” “The counteroffer has been very helpful; it provides the owner/TxDOT the ability to settle acquisitions and avoid condemnation, reducing the cost of acquisition and cost of the project;” and “The administrative settlement process has been helpful. It is best to settle a dispute over a small amount than go to condemnation.”

SYNTHESIS OF BEST PRACTICES FOR RIGHT-OF-WAY VALUATIONS

To synthesize the best practices of valuations based on the analysis done and the collected surveys, the research team formulated five guidelines that include best practices for negotiation.

The first guideline requires the regular training, monitoring, and evaluating of the expertise of R/W staff, fee appraisers (appraisers assigned from outside TxDOT), and review appraisers (appraisers who double-check appraisals). Several practices can help establish this guideline. First, R/W staff, fee appraisers, and review appraisers should be offered opportunities to attend training courses to ensure their up-to-date understanding of laws and procedures relating to R/W valuations (FHWA 2002; AASHTO 2003; NCHRP 2000). This practice improves the quality and timeliness of appraisals. It is also recommended that the R/W staff, fee appraisers, and review appraisers take refresher courses periodically, or develop an ongoing, in-house employee development program. Moreover, it is essential to monitor the time required to deliver appraisal reports in order to expedite the R/W acquisition process (AASHTO 2003). This can be done by establishing monitoring procedures, especially when using fee appraisers and reviewers. Because appraisers can have different levels of difficulties, it is important to assign projects according to the appraiser’s experience. Complex and “problematic” cases should be assigned to experienced appraisers, thus reducing the error rate of the agency’s reports. It is also important to periodically evaluate the appraisers’ performance to ensure highly skilled and professional development of appraisers. Outsourced consultants should strive to do quality work and to engender property owner satisfaction in order to ensure TxDOT’s goals related to public satisfaction and good rapport with property owners.

The second guideline is to involve and contact the property owner personally, early in the acquisition process. This can be done by encouraging R/W staff and fee appraisers to meet property owners in person. This increases the likelihood of better valuations and successful negotiations and establishes good relationships with the property owners. Inviting the property owner (or the owner’s designated representative) to accompany the appraiser during the inspection of the property is of paramount importance in implementing this guideline (AKDOT 2001; TxDOT 2006; TxDOT 2000; ILDOT 2004). Also, the offer to purchase the property should be explained to the property owner by including the appraisal basis for the offer and the agency’s real property acquisition policies and procedures (TxDOT 2005). However, R/W staff and fee appraisers should not attempt to answer any questions outside their area of expertise to prevent misunderstandings and the communication of incorrect information to the property owners.

The third guideline emphasizes streamlining the valuation process to maximize production time, cost, and efficiency benefits. Several practices can help implement this guideline. First, it is beneficial to prioritize parcels according to complexity/appraisal difficulty, and to conduct appraisals for those that are most complex first. According to one of the interviewees, prioritization was an issue, particularly when outsourced consultants are used. Moreover, the appraisers would be able to save time if they are provided with pre-appraisal information. This practice relieves the appraisers of the need to search for relevant information already accessible through the district office. In addition, obtaining and storing electronic copies of appraisal reports would provide records for future reference that would emphasize the efficiency of the process. Appropriate technology such as

cell phones, pagers, and digital cameras would improve the speed and accuracy of data collection by enhancing communication between staff in the field and the central office. It is important to note that outsourced appraisers may sometimes prioritize properties to be acquired according to ease of doing instead of difficulty, especially when the same fee applies to all types of parcels. If these more complex properties are valued at the end of the time schedule window, the process can consume valuable schedule floats (ability to delay certain tasks without affecting the completion date of the project) or cause project delays.

The fourth guideline is to simplify value determinations, reporting protocols, and review procedures and streamline appraisal review procedures (FHWA 2002; AASHTO 2003). For low-value and uncomplicated appraisals, a short form review should be developed, and the reviewer should be involved in the project scope meetings and in the pre-acquisition meetings (FHWA 2005; TxDOT 2006). The FHWA Appraisal Guide encourages agencies to allow the use of the Value Finding Appraisal Format when appropriate (FHWA 2005). It is important to emphasize compromising on issues related to just compensation. Such techniques are recognized for effectively resolving acquisitions in a timely and cost effective manner (FHWA 2002). This practice is recommended by the International Right of Way and Utilities European Scan Team (FHWA 2002).

The last guideline in the valuation of best practices is to inform property owners of what will take place at each step of the entire acquisition process. This can be done by furnishing the property owner with information on the overall anticipated timing of the acquisition process, the general type of facility to be constructed, and the appraisal procedures that will follow (AASHTO 2003; TxDOT 2000). Moreover, it is important to share and discuss the preliminary R/W map for the project with all property owners (TxDOT 2000). Also, informing the property owners of the method for selecting qualified appraisers and estimating values would increase their trust in the coming appraisal (TxDOT 2000). If the property owner knows the process and feels themselves to be a part of it, he or she will be more willing to give helpful information to the appraiser. This cooperation will result in better appraisal reports.

SYNTHESIS OF BEST PRACTICES FOR RIGHT-OF-WAY NEGOTIATIONS

Based on all information obtained from the literature review and data analysis, the research team formulated best practices grouped in five guidelines which are described below.

The first guideline is to frequently and regularly contact property owners in person to promote confidence in the agency and to reduce delays and negotiation costs. Encouraging the agency to perform in-depth interviews with property owners and discussing several project issues (e.g., property usage by the owner and how the project will influence his/her property) can help implement this guideline (FHWA 2006; AASHTO 2003). Furthermore, conducting an open-house event at public meetings and hearings is also beneficial. The potential sellers may have a better understanding of the project by attending an agency sponsored event explaining to the public the project's R/W acquisition process. At this event, agency personnel should make clear which properties the agency would like to acquire, and the potential impact of the project after the acquisition takes place. Also, a R/W agent should be present at the event to answer questions. This type of good communication with property owners is known to be effective in cultivating public trust.

The second guideline emphasizes conducting simplified and efficient negotiation processes, including the title acquisition process, in order to minimize negotiation schedule delays. This can be made possible by requiring negotiators to meet owners prior to the initiation of the negotiation process in order to discuss the project, the R/W acquisition process, and to justify the valuation results. These early meetings reduce the questions, calls, and visits later in the process (AASHTO 2003). Moreover, using a streamlined process to provide immediate payment to property owners for low-valued property rights is essential in improving the efficiency of the negotiation. To save time, a sketch map, if the final map is pending, can be used to accompany the offer on administrative

settlements of just compensation. Proper management of the R/W negotiation process can be implemented by keeping track of its key milestones, leading to better efficiency.

The third guideline encourages negotiators to execute negotiations in a manner that builds good rapport with property owners and that increases owners' confidence in the agency. Practices for this guideline include requiring negotiators to present and discuss the offer in person to acquire benefits such as obtaining more information from the owner about the property, explaining the payment to the property owner during negotiation, and establishing a good relationship with the owners. Furthermore, emphasizing the importance of getting to know the property owner at the beginning of the negotiation process would allow room to share common interests and hobbies that makes discussing matters easier. It is a beneficial practice to furnish each property owner with a "folder" that includes comprehensive information on the project, including the written offer of just compensation, a copy of the final appraisal report, plans/maps of the area to be acquired, legal descriptions, and other pertinent information.

The fourth guideline encourages minimizing the possibility of proceeding to condemnation to the greatest extent possible. An important practice is to give the property owner's file to a condemnation specialist or a legal expert before entering the condemnation proceedings in order to assess risks and to determine whether to enter into litigation. It is also essential to encourage negotiators to assist property owners in preparing and negotiating a counteroffer, with no assistance in reaching a specific amount. The owners usually have difficulty preparing a proper counteroffer because it involves gathering all relevant information and presenting it professionally. Some owners complain that the 30-day period allowed to them to present a counteroffer is too short. In many cases, these owners feel so frustrated that they opt instead to bring the case to litigation. If the negotiator can assist the property owners in preparing a suitable counteroffer, the acquisition may not lead to time-consuming condemnation proceedings.

The last guideline is to emphasize the significance of providing property owners not only with legally required information but also with any pertinent information that may enhance public trust. This can be done by ensuring that all information required by law is provided to the property owner when delivering the written offer to initiate the negotiation process. Moreover, the agency should provide notice to property owners of its intention of acquiring the property in discussion, the function of the acquisition, the need for the property to be acquired, the possible impact of the improvement on the property, the capability of the agency to accomplish the project, the right to donate the property to the agency, and the owner's legal protections. However, it is important to make sure that the materials provided to property owners are not too technical and difficult to understand.

CONCLUSIONS

Considerably increasing requirements for upgraded and new infrastructure projects have caused the need for the rapid acquisition of necessary R/W, while simultaneously maintaining good relations with property owners. Valuation and negotiation play critical roles in the R/W acquisition process. This research synthesizes in guideline form the best practices for successful valuations and negotiations in Texas.

To this end, the research team conducted a review of pertinent literature and laws, analyzed relevant databases, and interviewed and surveyed TxDOT R/W personnel. These methods allowed the realities and problems experienced by property owners and agents in TxDOT to be articulated. The best practices and guidelines presented in this paper were drawn from the results of these research methods and are offered to help R/W agents reduce the time and cost of the R/W acquisition process, and to promote public satisfaction with TxDOT's valuation and negotiation processes.

The practices and guidelines include regularly training, monitoring, and evaluating the expertise of R/W staff, fee appraisers, and review appraisers. It also emphasizes involving and contacting the property owners personally early in the acquisition process and on streamlining the valuation process to maximize production time, cost, and efficiency benefits. Simplifying value

determinations, reporting protocols, and review procedures is another important factor in addition to informing property owners of what will take place at each step of the entire acquisition process. Other practices include promoting frequent communications with property owners for better coordination and to minimize time, using a simplified and efficient negotiation process in order to reduce time/cost and enhance quality of the negotiation process, and encouraging the agent to perform negotiations in a manner that inspires owner confidence. Lastly, minimizing the possibility of proceeding to condemnation and emphasizing the significance of providing property owners with all the information required by law are also considered best practices.

RECOMMENDATIONS

This research focused on determining the best practices of R/W valuations and negotiations in Texas. It is encouraged that a similar process be followed in different states to obtain related best practices. Moreover, further research can be conducted by building on the above results. The scope of best practices can be extended to processes preceding and following valuation and negotiation, such as project planning, appraisal review, and relocation. In view of the fact that the R/W acquisition process immediately precedes the construction and utilization of the transportation infrastructure, it causes increased pressure for the agencies to acquire land and deliver projects as soon as possible for construction to start. While the different DOTs have been doing an admirable job with the acquisition process, there are several areas in which practices could be enhanced, and therefore the research team encourages the implementation of the practices recommended in this paper.

Endnotes

1. Per a referee's comment, a ranking system based on an index was constructed. In this index, since there were four different responses ("never," "rarely," "sometimes," and "often"), the coefficients of 1-4 were multiplied to the different categories in terms of importance and then a summation of all values for each sub-question was done. As an example, question 1-i had the following response rates: 38.2% (often), 55.9% (sometimes), 2.9% rarely, and 2.9% (never). Applying the index to these numbers, question 1-i received a rating of 3.29 because of the following calculation: $4(0.382) + 3(0.559) + 2(0.029) + 1(0.029)$. This calculation was done for each sub-question for all tables in the paper and the top responses were the same as those obtained by adding the percentages for "often" and "sometimes." Since it is easier to understand the latter, the index was not used.

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