



SUCCESSFUL PROJECT DELIVERY

Integrating right of way from project inception to completion

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EXECUTIVE SUMMARY

The role that a realty professional plays can have a significant impact during each phase of an infrastructure project. Everything we do affects the project's timing and cost. From the initial planning, schedule and budget to final project completion, a fully-integrated team will be more effective in achieving project success than when individual disciplines work independently.

This paper will address the components of infrastructure real estate and the importance of having the realty professional involved in the project up front, beginning with the initial conceptual stage.

There are both myths and realities that have plagued the realty profession and prevented these professionals from their rightful place at the table. By understanding the current situation, issues and challenges, we can establish the best way to increase the perceived value of the realty professional, maximize their participation and demonstrate how the team philosophy will lead to a project's ultimate success.

REAL ESTATE OVERVIEW

The real estate lifecycle occurs in three phases: buying, using and selling. Although a fairly simplistic view of real estate, these three steps establish the foundation for all the various functions associated with realty. There are four basic types of real estate:

- 1) Commercial Real Estate** applies to property that is used for commerce. It is acquired and developed to create opportunities for generating income and profits; the real estate is used as a means to that end. Some examples include shopping malls, office buildings, retail stores, factories, timber and mining rights.
- 2) Investment Real Estate** is similar to commercial in that the land may have been developed for a commercial purpose, and there is a continuous review of the portfolio to ensure its return on investment (ROI). For example, a Real Estate Investment Trust (REIT) with a shopping mall in its portfolio may determine, after analyzing markets and trends, that a change of use to a condominium development may bring a higher ROI, thereby sparking a redevelopment.
- 3) Residential Real Estate** is the buying and selling of property for homes and residences. A home's main intent is to serve as a dwelling place rather than strictly an investment.
- 4) Infrastructure Real Estate** is the acquisition of property rights specifically required for infrastructure purposes. One example is a large-scale public system, where services and facilities are needed for economic activity and to enhance the quality of life.

Infrastructure projects can include a wide range of categories, as demonstrated in this list of examples:

- Building and improving roadways and railways
- Constructing generating stations and transmission lines for electricity
- Acquiring the rights of way for sewer, water, gas and oil transmission/distribution
- Building dams, reservoirs, wind farms
- Adding/expanding telecommunications systems
- Expanding airports or harbours
- Constructing or expanding mass/rapid transit systems

THE NEED FOR INFRASTRUCTURE

Most infrastructure projects emerge because there is an immediate need to resolve an existing problem or a need forecasted in the near future. An example of an existing problem might be a road in dire need of repair or an airport that is growing too quickly and requires a major expansion. A future need may include upgrading or expanding an old roadway to alleviate gridlock or replacing an insufficient transmission line so electricity or gas can be transported to a growing urban center. There are also those unexpected emergency projects, such as a bridge collapse or damage from an earthquake or hurricane.

When the need is immediate and urgency is paramount, shortened build times will likely be unavoidable. There is a great deal of pressure to move quickly, as some projects may have high public visibility. As a result, the project planning, design and implementation phases are often accelerated so that the work can get done quickly.

For a planned project, the work is usually performed in an organized manner, which means it is scheduled in advance with specific resources allocated and scheduled accordingly. With a stimulus situation, a large infusion of dollars will be allocated when the need is great. This might be necessitated during a critical juncture or to create jobs when the economy is not performing as desired.

By the nature of the rights required, as well as the process involved, infrastructure real estate can be very complex and can include any or all of the following: fee takings (total holdings or partial taking), easements (permanent, temporary, surface, subsurface, air), leases/licences (temporary or long term), and permissions needed to enter, construct and perform investigative reviews.

SOURCES OF FUNDING

Large-scale infrastructure projects are expensive and usually have tight budget constraints. The majority of funding comes from various levels of government with expenditures categorized by a planned budget allocation, emergency response or economic stimulation scenario. Government-sponsored projects can stem from the need to create new services or facilities, repair or replace out dated works, meet increasing demand for services, enhance the quality of life and to stimulate the economy.

Private projects are profit motivated and focus on obtaining a return on investment, however, they are still designed to benefit society and enhance quality of life. It should be noted that even a private sector project would not be viable unless the market necessitated it. No one will build a gas pipeline to a specific location unless there was demand for gas in that area. In the case of a private gas pipeline project, the government may encourage and assist in the construction in order to facilitate a public need.

Private-public partnerships are often formed when it makes sense for the government and the private sector to work together in building the necessary infrastructure. The public benefits from the infusion of cash from the private sector, and the private sector benefits from the return on its investment.

THE PROJECT PROFILE

For every job that is considered shovel-ready, it is important to note that multiple jobs were required to get to that stage using the approval and project planning process. To understand this, we need to look at what is typically needed for a project profile.

- a) **Project Needs Analysis:** addresses whether the project can and should be completed.
- b) **Design and Project Plan:** describes specifications and details of project, including overall scope, budget and schedule.
- c) **Project Approvals:** regulatory, environmental and project funding approval needed.
- d) **Construction Phase:** real estate rights will need to be acquired, followed by the project schedule and construction coordination.
- e) **In-Service Operations:** operations and property management will need to be considered, and this is dependent on the in-service operation phase.

The realty professional can contribute to the success of a project during any one of these phases. During the project needs analysis, there are high-level discussions of issues around the location of project. If the project is planned for an urban center and impacts homes and families, it will likely be an emotional subject that becomes a newsworthy issue. The team must work together to determine how the project will be perceived by the public and the hurdles that must be cleared going forward.

During the project approval phases, input from a realty perspective is needed in the areas of regulatory requirements, impacts of environmental findings and other conditions required for project approval. The realty professional can offer immense value in the area of budgeting and cost projections, route and site selection, especially as the scope of work becomes finalized. Construction issues can impact what's needed in acquiring the necessary real estate rights, and the sooner realty is involved, the better chance there is of maintaining the project schedule.

BRINGING VALUE TO THE TABLE

In analyzing the components of a large infrastructure project and what realty brings to the table, time and money are often referred to as the elephants in the room. That's because most infrastructure projects have huge cost implications and timelines that can span for years. In understanding what can impact a project's overall success, there are actually several significant factors that affect large-scale projects.

Time: Delays in any of the project phases can lead to cost overages, in-service issues and may ultimately threaten the project itself. If delays are of a significant duration or critical path milestones are missed, the entire project may be questioned. This might necessitate determining whether the project is still worthwhile, especially if the perceived benefit or opportunity value is lost.

Money: Large-scale infrastructure projects require a great deal of planning, and the project budget will be based on a certain set of planning principles. If costs rise to a point that the project's value becomes questionable, then the project may be abandoned. In some cases, the burden of paying the incremental costs will be passed on the public.

Scope: Clearly identifying the entire scope of a project is essential, regardless of whether the project is large or small. A clear understanding of the project scope is mandatory, and this includes a comprehensive plan and project analysis. Without this, time and money issues are certain to arise.

Execution: The building phase cannot be planned or scheduled until the project has received all the necessary approvals, real estate rights and funding. Once obtained, the project can move forward at a realistic pace.

ACQUISITION: THE SEVEN MYTHS

Acquiring the necessary real estate rights is a critical step, yet time and time again, developers of large-scale projects end up with compressed schedules and then expect the realty professional to complete complex tasks at the eleventh hour. The more critical the project, the more essential it is to acquire the real estate rights before moving forward. To understand the role realty plays in infrastructure projects, we need to look at the fundamental realities and expose some myths about the profession that are perceived by the uninformed and inexperienced project team participants.

MYTH #1: *You don't need the property rights to launch a new project.*

The reality is that you can start the project but not the work until you have the required real estate rights! This is the most critical step because you cannot step foot onto someone's property without first obtaining the rights to do so. Even if the land is owned by the government, there are still permits and approvals that must be obtained before entry on the property is legal.

Regardless of the need or importance of the project, the government cannot force a landowner to provide the necessary rights without due process. Even if the property is to be taken through condemnation/expropriation, a legal, time-consuming and expensive process needs to take place. For example, in Ontario, Canada, the expropriation process can take 10 to 20 months before possession of the property can be obtained through regulated or legislated means. A nine-month planning window for arms-length negotiations is not unreasonable. In the United States, some states allow access to the property as soon as an amount equal to the final offer is deposited in court. This includes the right to construct. Condemnation in Federal Court is faster than state court in those states that do not allow early access. In South Africa the expropriation process can take up to 24 months.

MYTH #2: *Acquiring real estate is a fairly simple and straight-forward process.*

This is a common misconception. Infrastructure real estate is a complex process that requires integration with many different disciplines, many of which cannot be predicted in advance. There is a fundamental misunderstanding about the number of steps involved in

acquiring real estate for these projects, and an unpredictable number of interactions associated with each step.

When considering the amount of time required for an acquisition, most people will reflect on their own prior real estate experience, which is likely to be the purchase of a house. With a residential purchase, the process is fairly straight-forward and a timeline can be estimated based on some general, well-known factors. These can include the loan application process, home inspection, offers and counteroffers, closing escrow and taking possession. However, with infrastructure projects, the acquisition will typically require a host of unknown variables including the need for partial takings.

MYTH #3: *Realty costs represent a small percentage of the overall project.*

Thinking that real estate costs are minimal in relation to the entire project cost can lead to settlement decisions that are based on time rather than appropriateness. This fallacy can create a range of issues, especially when dealing with linear projects. One of the most significant contributors to project delays and cost overruns occurs when the property owner "holdout" gets the most money.

Realty costs can become a significant portion of the project budget. In the past, the cost has typically been estimated at 5% to 7% of the total project. This means that on a \$500 million project, the estimated realty costs would total \$25 to \$35 million. However, the cost can actually range anywhere from 5% to 20% depending on a number of variables, such as the property's impact on the community, the location, whether it's an urban or rural setting, just to name a few. Costs are relative to the nature of the project, and the trend is moving upward due to the complexity of the projects and the need to service urban centers. There are some projects where the realty costs reached 10% to 20% of total costs. Depending on the project, the percentage may sound low, but once translated into dollars, the amount can be significant. The realty expert can provide input into budgeting, cost control and cost avoidance. The cost of unserved energy on a transmission line which cannot be completed as a result of a hold out from a landowner which is delaying the commissioning of the power line could run into millions of dollars.

MYTH #4: *The schedule should not be impacted by the realty function.*

Once again, you cannot do anything relative to a property until you obtain the right to do so. Unfortunately, on many projects the emphasis is placed on accelerating the design phase so construction bids can be reviewed, contracts signed, and shovels can hit ground. But all of this planning and scheduling is worthless if you haven't first obtained the real estate rights. Delay penalties can be significant. Regardless of the schedule, nothing can move forward until such time as the real estate rights have been acquired. If adequate time has not be allocated in the schedule for this, then the resources, construction and in-service schedule will require revisions based on the actual time that the possession of those rights can take place.

MYTH #5: *You don't need a clear definition of how the property will be used in order to obtain the rights.*

In addition to defining the real estate right, you also need to be aware of what rights you can take. It is imperative for the realty profession to understand the exact nature of the use so that they can negotiate for the appropriate rights. The realty professional needs to be involved up front when initial plans of the project are being reviewed. It is their unique

expertise that enables them to ask the difficult and probing questions about the rights required and the impacts of the use of the property.

For example, let's say a project requires a grading easement due to a road grading change for a bridge widening. After further analysis, it is determined that access to the abutting property is no longer legal or viable. This means the requirement changes from a grading easement to a potential total holding purchase. Another example might involve the need for subsurface fee requirements for a subway tunnel. In this case, realty will know which questions to ask in determining if there are additional rights required above the tunnel in order to protect it.

MYTH #6: *Everyone is an expert.*

For the most part, people use their own experience and frame of reference when they are planning their projects. But in reality, there is little to no comprehension of what it takes to acquire property rights. Every homebuyer believes they have real estate expertise. However, if their experience is limited to residential transactions, in all likelihood, they are not accustomed to dealing with an adversary. With residential transactions, the property is up for sale, and the seller is anxious to accept offers.

Conversely, with infrastructure real estate, the transaction is not initiated by the property owner. In most cases, the owner would prefer to be left alone. As a result, there can be project opposition due to any number of reasons. Even if a project is needed and well received by the community, there are always a limited number of people who do not want their property to be impacted. This is evidenced by the perpetual NIMBY (not in my backyard) issue, as expressed by local residents whenever a new project is proposed. This leads to time-consuming approvals, permits, processes and procedures and a host of other variables that can surface during the acquisition process. In other words, the process, knowledge and expertise needed for infrastructure real estate is virtually unrelated to a residential transaction.

MYTH #7: *Developing relationships with the affected owners and the project team is easy.*

Most of us recognize that relationships can make or break a project. Obtaining the actual real estate rights is not necessarily the challenge. The difficult part is getting all the parties to reach a common conclusion and settle on an agreement. That means the agent's focus must be on establishing a strong relationship that reinforces trust and mutual respect with the parties involved. Since the realty group is tasked with acquiring real estate rights, they will typically have the most contact with an owner. In many cases, the property agent becomes the owner's single point of contact. In this role, they may be the source of information and project updates, and answering questions on behalf of the project team. If the agent doesn't have an answer, it is their role to get the answer.

The public sector considers community relations—in general and with affected owners in particular—to be a high priority. But this can become skewed when the emphasis on the benefits of the project start to overshadow the immediate and long-term impact on those who will be directly affected.

KEYS TO SUCCESSFUL NEGOTIATIONS

There are a few key elements that will help ensure the effectiveness of a realty professional, which include communication, relationship, value, consistency and documentation.

Communication: In every transaction, communication plays an essential role. A seasoned realty professional knows how to speak the language of each of the different parties and is able to bring a common understanding to the situation at hand. Regardless of whether they are communicating with the property owner, the project design/engineering team or other consultants, the ability to articulate one party's requirements and issues to the other party is paramount. A well-known saying for a realty professional is – "a good negotiator is a negotiator with a good general knowledge". With today's growing public sentiment against new infrastructure projects, managing the external and internal communications has become a vital component.

Relationship: The relationship that the agent has with the property owner will go a long way in the negotiations process. The owner must feel that they can trust the agent, so honesty and openness are mandatory components. The relationship with the project team and consultants must be open and collaborative, as the real estate professional must gain the trust of all parties involved so that they can walk in and out of both camps.

Value: The real estate professional needs to understand the value of the impact to the owner beyond the compensation. They need to be cognizant of the value of lost time and inconvenience that the owner incurs as a result of the work to be done, and they need the ability to convey this to the rest of the project team. In addition, the agent needs to be fully aware of the costs of any project delays and the cost implications of any changes, not only to the project, but to the public at large. When dealing with the monetary concerns of one owner, it's critical not to overlook the potential impact any changes would have on others.

Consistency: Although it is often overlooked, consistency is a key factor. It becomes difficult to build a relationship if communications from the project proponent is inconsistent. Mixed messages create mistrust, and this can lead to delays and adversarial positions. Your task is to facilitate cooperation, which leads to attaining your goal. For example, if you are working with a hundred owners and two of them have the same property impact, what should the only difference be? Perhaps the only monetary difference would be size of the area. However, let's say that one owner has settled and the other wants 5% more. Although the dollar amount may be small, the implications of getting a "reward" for holding out can be significant. If the public thinks it can maximize their settlement by holding out, this can impact not only the schedule, but the project budget as well. Giving in to this 5% additional monetary will set a precedent for future land owner hold outs.

Documentation: There is an old saying that goes, "If it is worth talking about, then it is worth writing down." Many relationship and trust issues arise during that very first contact with the property owner. Prior to that first meeting, take the time to talk with the project proponent so you can determine exactly what type of written commitments should be made. For example, in most jurisdictions, reasonable legal fees will be paid upon completion of a settlement. It is fine to say this, but are you prepared to put that in writing? Before your meeting, determine how the legal fees, appraisal fees, damage repairs and restoration will be handled. Have your plan documented in advance and be ready to provide a commitment from the proponent. It will go a long way in establishing credibility and building the trust relationship.

PRIORITIZING THE PROCESS

From a general project perspective, the two areas that provide the greatest challenges are scope and execution. Scope should be viewed as an evolving element that must and will change as the project progresses, information becomes available and issues are identified. For example, if the scope is defined as a design-build project, it becomes difficult to be more specific in terms of what is to be done, by whom and when. The concept of using a general scope at the beginning of the project is fully acceptable, however without continuous review and updates, the issue of scope "creep" can occur, which ultimately impacts timing, costs and relationships.

Execution is closely tied to scope, and carrying out the various project components needs to be well planned. The components need to be executed and synchronized to maximize the schedule and resources, while minimizing costs. If you don't have all your ducks in a row, you may find it impossible to move the project forward because some essential steps were skipped over. Below is an example of the order in which project elements should take place.

Maintaining your priorities in this order can help ensure you achieve the key milestones:

- 1) Project concept
- 2) Needs analysis
- 3) Alternatives
- 4) Investigation
- 5) Approval process
- 6) Approval and funding
- 7) Public communication
- 8) Preliminary design
- 9) Property acquisition
- 10) Detailed design
- 11) Tendering
- 12) Construction
- 13) In-service

ASKING THE RIGHT QUESTIONS

A problem is likely to surface if the project expectations are unrealistic or based on incorrect assumptions. Any public infrastructure project requires approvals that must follow legislative regulations and processes to create immediate "shovels in the ground" work. The approvals must already be in place and dependent on funding.

Before the realty professional can start the process, the project needs to be clearly defined. The following questions are potential contributors to the decision-making process:

- Who** is affected by the project?
- What** is required?
- Where** is the project to be located?
- Why** is the project needed?
- When** will the project start?
- How** will the plan be executed?

PROFICIENCY OF THE REALTY PROFESSIONAL

It's important to understand how each aspect of the realty function works to bridge the knowledge gap. Only realty professionals can truly understand what is required in property acquisition or obtaining possession of the rights needed to construct the project. Since the realty professional has a level of proficiency in multiple disciplines, they are considered a generalist. When needed, specialists may be brought in, and they are relied on for proficiency in a single discipline.

There are five key areas that the realty professional should be conversant in and show reasonable proficiency when working on infrastructure projects. These include negotiations/communications, engineering, appraisal, legal and project management.

1) Negotiations and Communications

Effective communications is an essential skill to master, and it plays a major role in achieving a successful acquisition. Open communication with the owner is the best way to build trust and gain cooperation. This is also true when it comes to the relationship with the project team. The ability to establish the needs and interests of each party and communicate any differences between them enables the realty professional to identify potential gaps and suggest viable resolutions. A strong communicator will have a good chance of becoming a savvy negotiator, as they will understand what's required to problem solve and be able to gain consensus.

2) Engineering

The need to understand a legal description and interpret a drawing or sketch of the project requirement is paramount in presenting your project requirements to an owner. It is important that the owner knows, understands and sees what will be happening on their property. The project team can help if they have a clear understanding of what the real estate professional needs to help the property owner visualize what is happening and where it is on the ground, plus how it affects the rest of the property.

3) Appraisal

The first thing a property owner wants to know is the amount of compensation to be paid. Although professional appraisers will determine that amount, the negotiator needs to be able to explain how that amount was calculated. This means they need to understand the specific valuation challenges before, during and after an appraisal is done. Understanding how an appraisal is done is not sufficient when it comes to answering why something wasn't taken into consideration in the report. The negotiator needs to be able to convey theory and practice for the majority of appraisal situations, especially when it relates to partial takings and the effect on the remainder. An example would be the appraisal and impact of subsurface rights versus a full right. In this case, if one property is affected on the surface and subsurface, whereas the property next door is only affected only by subsurface rights, then the agent needs to be able to explain why the compensation is different.

4) Legal

Matters of law need to be addressed when finalizing an agreement or providing advice to an owner. The realty professional needs to have a basic understanding of the law in terms of documentation, various regulations and legislation. Many landowners are not willing to turn matters over to a realty professional without a clear understanding of the issues and legal impacts. While the realty professional should be prepared to give general information to the owner regarding the proponent's position, it is in the best interest of all parties to fully understand the legal implications through professional legal services

5) Project Management:

Making project management a part of the realty role has greatly enhanced its effectiveness. Adding project management to the realty professional's repertoire will greatly enhance the project team. Project management includes areas such as finance, time management, scheduling, setting priorities and understanding the critical path. By learning these elements, the realty professional can add immeasurable value to the project team.

BECOMING FULLY INTEGRATED

The realty team needs to have its place at the table at the right time and for all the right reasons, especially in light of our multi-disciplined background and skills in communications, team building, consensus building and problem solving. Realty should be conspicuous, but because of its absence, it is not perceived as integral. Educating the project team then becomes the role of the right of way professional.

Understanding how each of these elements work together and separately will improve the process and impact the project's ultimate success. This knowledge applies to planning the work that is performed by individuals, as well as the project team work. When the entire team gets to that point where each of the disciplines understands their role and how their role impacts others, horizontal integration takes place. By understanding the importance of integrating the many different aspects involved with a project, we can determine the best way to educate and communicate. Understanding the elements of the project and the ability to problem solve in a team environment is critical to success.

Horizontal integration leaves no team member out of the loop. In contrast to measuring success in terms of each individual discipline, a fully integrated team will effectively achieve project success. The difference is winning the war, not just a battle.