

MAKINGS OF A WINNER

IRWA's Project of the Year: Utah Transit Authority Frontlines Program

BY BARBARA BILLITZER

Earlier this year, Forbes magazine named Salt Lake City one of the best cities in the United States for commuters. The magazine credited the state's investment in transportation infrastructure for the top ranking.

An integral part of this investment is the Utah Transit Authority (UTA) Frontlines 2015 Program, which has met the challenges of a skyrocketing population and heavy traffic demand. Cited as one of the biggest and most aggressive rail expansion programs in the country, the \$2.8 billion program consists of 70 miles of rail comprised of five different lines, all of which are planned to be fully operational by 2013.

As one of the fastest growing states in the nation, Utah projected their population would grow by another one



Project team leaders, from left, Todd Hopkins, PB Appraisal Manager/Co-Lead Agent; Wayne Larsen, PB Director of Right of Way Services; Mike Grodner, UTA/PB Frontlines 2015 Program Director; and David Serdar, UTA Real Estate Manager.

million people by 2030. To accommodate the anticipated growth, UTA developed a long-range transportation plan scheduled for completion in 2030. However, the local elected officials decided to compress the schedule by 15 years. Once underway, the high-performing project teams started to exceed their goals. Before long, they decided to trim another two years off the schedule. The new target completion date was moved up to 2013.

BUILDING THE RIGHT TEAMS

For this joint effort between UTA, the lead agency, and Parsons Brinckerhoff (PB), who managed the program oversight, assembling the right team was crucial to the project's success.

The right of way team approach was modeled after the Utah Department of Transportation's (UDOT) Right of Way Department led by Lyle McMillan, SR/WA and Karen Stein, SR/WA, RW-RAC, R/W-URAC. Each of the five transit lines was assigned its own project leads, all of whom had many years of acquisition, appraisal and relocation experience. Similar to the UDOT right of way model, the lean and mean philosophy ensured that the UTA right of way teams remained small but highly qualified.

With five separate lines, the project would require project teams who could work independently, while recognizing that they were part of the bigger picture. Fortunately, the project leads were up for the task. They included Layne Schaugard, Gale Padgett, SR/WA, R/W-RAC, R/W-NAC, Jon Cluff, Wayne Larsen, SR/WA, R/W-AC, R/W-URAC, Todd Hopkins and Spencer Burgoyne. With a collaborative attitude and unparalleled synergy, the project teams took ownership of their responsibilities and recognized they were part of a much bigger picture.

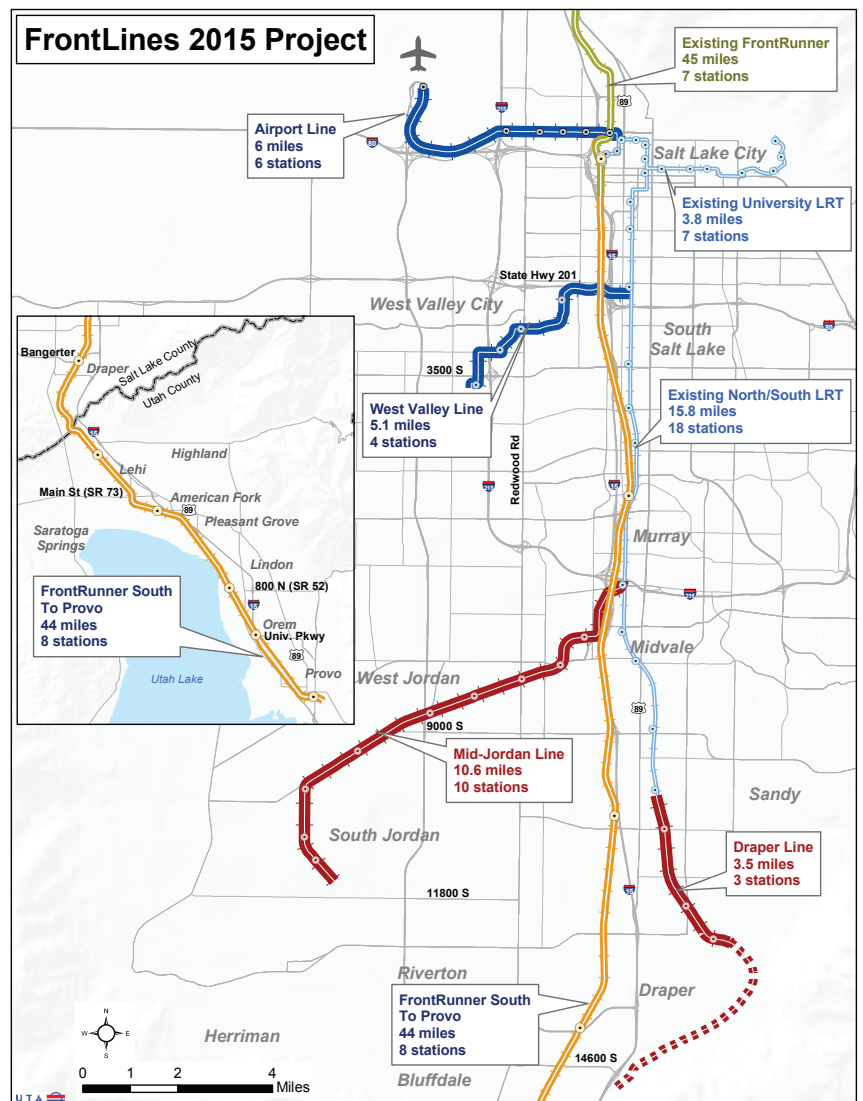
“For this project to succeed, the team objective became more important than any individual goals,” explained Wayne Larsen. His philosophy about teamwork has become a personal slogan. “It takes more than an engineer to drive this train,” is the way he describes it. And Wayne knows first-hand what it means to be team focused. Carrying two cell phones at all times, Wayne worked for both UTA and PB throughout the entire project. In his role with PB, he served as the Director of Right of Way Services, assisting the UTA in staffing and training the right of way personnel. At UTA, Wayne acquired the right of way for two lines before transitioning to managerial oversight, which allowed others to move into lead roles with greater responsibility.

PB Project Manager Mike Grodner believes that a highly skilled and motivated team—one that values a collaborative approach where all the parties work toward a common goal—is the most efficient way to ensure that the right of way process is completed ahead of construction. “Right of way is always front-and-center on all public works projects. If you make them part of the total team early on, then one of

the most critical components will go smoothly,” he said. “If only more people recognized the value of keeping right of way involved every step of the way.”

The right of way teams were comprised of seasoned professionals, many of whom had already worked together on a comprehensive range of transportation, transit and utilities infrastructure projects. Each team member brought unique qualifications and experiences to the project. Those with less experience were given continuous on-the-job training and encouraged to take IRWA educational courses, both of which strengthened the Frontlines team's effectiveness.

Early on, the project leaders recognized the importance of having an attorney and a real estate professional on their team. So they engaged UTA's attorney, Ruth Hawe, who



The \$2.8 billion project included 1,350 different ownerships across 70 miles.

would add significant clout in contractual negotiations between property owners and the agency. UTA's Manager of Property Acquisition, David Serdar, also joined the team to help expedite the just compensation approval process and facilitate issues requiring alternative dispute resolution. Both proved to be instrumental in resolving unexpected issues that surfaced along the way.

The UTA right of way team also included more than just the core employees. They utilized independent right of way agents and fee appraisers, appraisal reviewers, relocation specialists, right of way engineers, environmental specialists, designers, legal staff and public involvement.

THE IRON TRIANGLE

With five separate right of way teams, purchasing the land required immense coordination, and ensuring process consistency presented a huge challenge. As a result, the plan placed cooperation and coordination among the stakeholders as the primary goal.

The first major challenge involved acquiring the necessary right of way from 1,350 different ownerships and relocating 35 affected property owners. The parcels were spread over a wide area encompassing the five separate proposed light rail and commuter rail lines. All of the acquisition had to be completed up front and simultaneously. Each line had several ownerships, so acquiring the needed right of way to keep construction on schedule and within budget was a race against time.

Weekly meetings with the UTA/PB teams played a vital role. The collaborative effort enabled the teams to solve specific issues that had come up during the week. Using and understanding the correlation between schedule, budget and scope, often referred to as the "Iron Triangle," the team successfully reduced the private property impact from 1,350 ownerships to 940.

As the project's Acting Chief Development Officer, Ralph Jackson was responsible for managing all capital construction, including the acquisition of all right of way required for the project. "With all of the different parcels required, coordinating



The Mid-Jordan Light Rail Transit Line was the first project to get funding and begin construction.

the timing of right of way acquisition with contractor construction schedules was my single greatest challenge,” said Ralph. “A critical step was obtaining accurate descriptions of the right of way needed early in the design process and then prioritizing parcel acquisition with the construction schedules.” Since the UTA did not have the power of eminent domain, the agency needed to borrow that authority from either a local government or the UDOT. This added more processing time to every condemned parcel. To help minimize these roadblocks, UTA adopted a strategy of creative problem-solving in hopes of avoiding condemnation. The team’s willingness to think creatively proved to be highly effective, and there was an extremely low condemnation rate despite the aggressive schedule.

The team made the equitable treatment of affected property owners a priority. Of all affected properties, less than three percent required a formal filing of condemnation. Currently, the team is working with these property owners using alternate dispute resolution and other settlement techniques. As of July 2010, 92 percent of the required parcels had been cleared for construction.

UNEXPECTED HURDLES

Any major transportation project comes with a unique set of inherent challenges. However, with five projects packaged under a single umbrella, one would expect five times the number of challenges. As it turned out, each line faced its own distinct set.

“One of the greatest challenges was managing the differences,” noted David Serdar, Manager of Property Acquisitions for UTA, “Different project types, different managers, different schedules and contractors. Each project takes on its own life and culture. Some were federally funded, while others were locally funded. Several used a design-build project management approach, and others used a construction manager/general contractor approach.”

A project team was assigned to each line and included the FrontRunner Commuter Rail, the Mid-Jordan Light Rail Line, the West Valley Light Rail Line, the Airport Light Rail Line and the Draper Light Rail Line.

The Mid-Jordan Light Rail Transit Line was the first to get funded and begin construction. It was a design-build project, and the contractor was responsible for much of the design. Shortly after being selected, the contractor was anxious to get to work, even though the right of way team wasn’t finished. There was not adequate time in the schedule to keep property off the



For over a year, a viaduct over the rail yard severed Temple Square, a popular tourist destination, from downtown Salt Lake City.

critical path. As a result, weekly meetings were required with the contractor and designers to facilitate and prioritize design so the right of way team could stay ahead of the contractor. On the West Valley Light Rail Transit Line, third-party utilities posed a problem. Getting the design from the utility took months longer than anticipated. The utility easements were far more restrictive than the original easements, so the right of way team had to go back to the property owners a second time. With patience and persistence and a willingness from the design teams to meet with property owners, the right of way team was able to resolve issues before they escalated.

Unfortunately, no one could have predicted the issues that would surface for the Frontrunner Commuter Rail South Line. Union Pacific Railroad required UTA to locate its track further away than originally anticipated. This led to a 40 percent increase in the original estimate for property acquisitions. Not only was the budget affected, a redesign of nearly 50 percent of the parcels was needed after the right of way process had already begun. Then there were utility easements and irrigation rights that were not uncovered until negotiations had been initiated. This required numerous alterations in the field by the engineering staff and right of way agents. Another surprise came when the team learned that some properties were already in development, requiring quick research to determine their legitimacy.



Easements proved to be far more restrictive for the West Valley Light Rail Transit Line.

The coordination between the right of way team, the design team and the property owners enabled these unforeseen obstacles to be resolved on-site.

As of late 2010, the UTA had not received a record of decision to begin property acquisition for the Draper Light Rail Transit Line. Rather than wait, the right of way team actively pursued opportunities to move the process along through advanced acquisitions in compliance with the Uniform Act and FTA guidelines. Roughly 23 percent of the anticipated right of way was acquired through UTA/PB's proactive approach. The biggest challenge was local community apprehension, where residents knew about the project for several years, but had to wait for construction to begin. Property owners requested informal meetings with UTA about the potential impact on their property, and the right of way team has been proactively communicating with these owners, especially those who will likely require relocation. Lessons learned from this line led to established best practices that have now become procedural policy.

EVOLVING TO A GRAND SCHEME

For the Airport Light Rail Transit Line, which runs from Salt Lake International Airport to downtown Salt Lake City, nearly every acquisition was a commercial property. Many of the property owners were either owner-occupied or businesses with tenants holding long-term leases. This required UTA to appraise both the fee interest and the leased fee interest of the properties.

Approval of the right of way contract was required by both the tenant and the owner and often involved attorneys. In these cases, it was the coordination between the right of way team and UTA legal counsel that facilitated a quick resolution.

As the legal counsel for UTA, Ruth Hawe's role extended far beyond writing contracts. She was instrumental in negotiations where property owners chose to retain their own legal counsel, and she served as a liaison between the project team and the right of way team.

“In projects that are under time constraints, the greatest challenge is the time pressure in acquiring the right of way. Design changes came through at what seemed to be the most inconvenient times, and the right of way staff was called on time and again to make adjustments mid-negotiation,” said Ruth. “Through it all, our professionals continued to work with property owners and other stakeholders in solving whatever problems that arose.”

Another complication was the removal of a viaduct over the rail yard that severed the popular Temple Square area from downtown Salt Lake City for 18 months. Many of the impacted properties were retail, motel and fast food businesses that attracted drive-by traffic. They were understandably disgruntled about the loss in business, but since state law does not allow UTA to compensate for loss of business, many of them sought damages that the authority could not pay. This required the right of way team to obtain

second appraisals, and when necessary, third appraisals were ordered by the Office of the Private Property Rights Ombudsman. This achieved resolution on many properties and helped avoid condemnation.

Initially, the Airport Light Rail Transit Line included only 20 impacted properties. However, during the design phase, Salt Lake City officials expressed a desire to create a prestigious “Grand Boulevard.” This increased the required acquisitions to more than 175 properties. Salt Lake City agreed to fund a portion of the additional property acquisitions needed for street widening, sidewalks and park strips. To track Salt Lake City and UTA costs separately, the UTA/PB right of way team implemented project controls and created a tracking system for sharing the cost of the improvements. This was instrumental in monitoring the budget on a monthly basis.

INTEGRATED TEAM APPROACH

The designers and contractors selected for the program were chosen using a best-value process, as opposed to a low-bid process. This allowed the UTA/PB program management team to select firms who were committed to partnering on all aspects of the program, including acquiring right of way. The result was a fully integrated project team comprised of owner/designer/contractor components, able to capitalize on the group synergy for improved communications, daily operations, decision-making and solutions.

To accelerate the entire process, the project delivery method included both design-build and construction management/general contractor contracts. The right of way teams were integrated into these design/construction teams to jointly deliver the right of way. This teaming approach resulted in all projects being completed ahead of schedule, with no acquisition-related delays.

Specific benefits of the integrated team approach included:

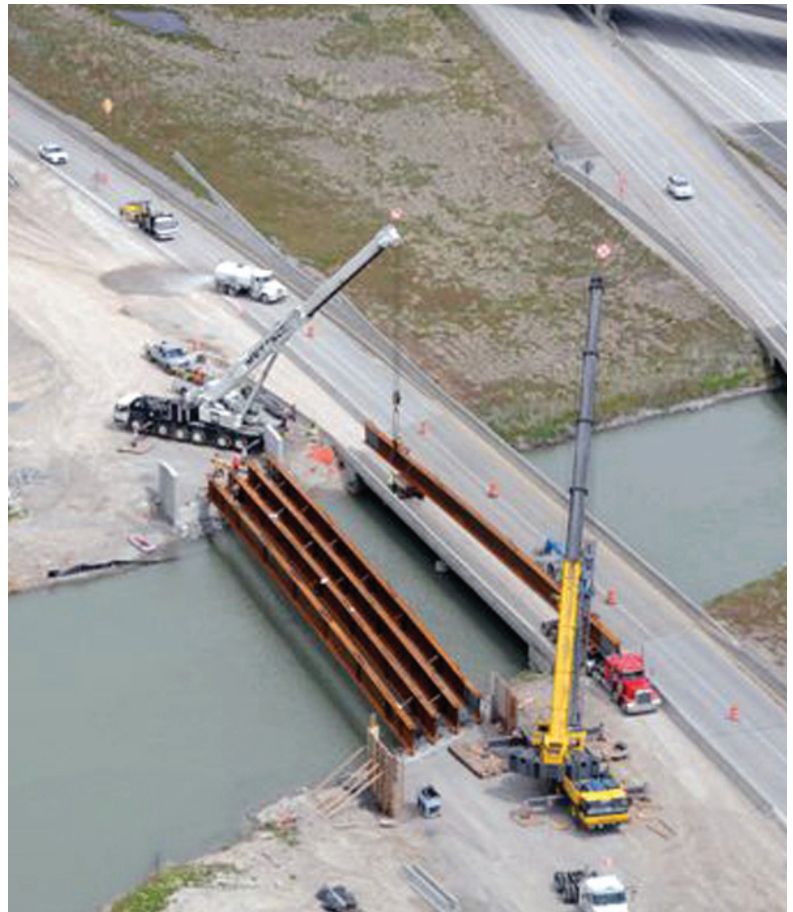
- Quick response to design changes/modifications and contractor scheduling issues inherent in the design-build and construction management/general contractor process.
- Efficient coordination with the design team and contractor to anticipate design and construction related right of way issues and provide feedback to mitigate the issues.
- Flexibility in the design and construction schedule to facilitate the most beneficial use of resources and faster project delivery.

UTA established a contractor incentive program to help ensure the goals would be met. The program, in turn,

focused the right of way team on obtaining property to help support contractor success. Consequently, the contractors established “reverse incentives,” which provided monetary incentives from the contractors back to UTA if the right of way team met certain milestone goals. This was a key component of the focused and sustained approach used to deliver the most important right of way work to advance the project milestones.

LESSONS LEARNED

Wayne attributes the project’s success to teamwork and consistency in doing the right thing for the right reason. “The atmosphere of teamwork did not just happen overnight; this was a step-by-step process. We have taken the lessons learned and best practices from earlier projects and by applying them, projects are progressing smoother than before,” he noted. What I have learned is that no one person can have all the solutions to every problem; it truly takes a team effort. I have been amazed with the value and synergy of UTA’s teamwork. When there is truly a high level of communication between design, environmental, right of way, public involvement, utilities, and the contractor, nothing seems impossible.”



Contractors worked quickly to construct the necessary structures for the Airport Light Rail Transit Line, which connects travelers to downtown Salt Lake City.



Front row from left: Todd Hopkins, Mike Grodner, PE, David Serdar, Layne Schaugaard, Wayne Larsen, SR/WA, R/W-AC, R/W-URAC and Maurine Bachman, SR/WA. Middle row: Mike Grodner, PE, Sarah Bugby, Rick Padgett, Matt Van Drimmelen, Spencer Burgoyne, Shelley Nielsen and Wendy Hanson. Back row: Valerie Sergi, Gale Padgett, SR/WA, R/W-RAC, R/W-NAC, Jean Eckersley, Ruth Hawe, David Goeres and Mailia Lautoo. Gale Padgett and Layne Schaugaard, who both managed right of way acquisition, were the only contractors who were involved with the project from start to finish.

The UTA prides itself on keeping projects on schedule and under budget, and the agency accomplishes this by having a very aggressive construction schedule. David attributes their success to three things: “Teamwork, teamwork and more teamwork. We were very lucky to have right of way, legal, design and construction staff working together on a daily basis. This easy access allowed the group to get together and discuss solutions.”

David strongly encourages more people to talk verbally one-on-one. “Email is always a one-way communication. No matter how hard you try, something can always get misinterpreted. If the option for face-to-face discussions is there, use it. It really helps parties resolve conflicts quickly,” he said. UTA purposefully co-locates the designers and right of way team to make it easy to communicate in person.

The team’s success has been publicly recognized by both its client and peers. In July, UTA General Manager Michael Allegra thanked the PB right of way team for its efforts, noting, “UTA is so lucky to have such a great team working for us. You’re making an impossible task doable.” This comment comes on the heels of the Frontlines 2015 Program team receiving the 2009 PB Americas Award for client success.

TRANSPORTATION TRANSFORMATION

The UTA 2015 Frontlines Program creates a complete transformation of the transportation infrastructure network

serving the area. The program also serves as a jumping off point for Utah’s goal of an efficient, region-wide transit system that will be readily accessible to the majority of its residents. As one component of a comprehensive plan, the program plays a vital role in helping Utah achieve its vision of greener, more sustainable communities and a better quality of life for residents. When fully completed, the five lines will serve more than two million residents.

The investment in more sustainable transportation infrastructure — which will act as an impetus for additional transit-oriented development, more high-density residential development and additional travel options, such as bus rapid transit — is one of the main reasons why Salt Lake City has become known as the best city for commuters.

The project has had a substantial impact on how UTA approaches its projects, and the potential to affect how other transportation infrastructure projects will be designed and built in the future. The UTA/PB approach to a fully-integrated staff, including designers, contractors and other agency stakeholders, has demonstrated dramatic and effective results.

Recognized in the region and throughout the transit industry as a model of how to do business, the Frontlines 2015 project’s success has inspired other agencies, both local and national, to model procurement and delivery methods to achieve similar results. As goes the successful right of way program, so goes the entire project.