

Appendix F

# PASSENGER Transport

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# The Bus Stops Here: Driving Pierce Transit's Future

BY ARTHUR SCHURR

## DEGREE OF DIFFICULTY MATTERS.

For example, replacing an entire bus operations base and maintenance facility is not inherently challenging. But doing it while keeping the entire bus transit system fully operational is a very different story. Yet that's exactly what Pierce Transit, Lakewood, WA, is doing with its Maintenance & Operations Base Improvements (MOBI) project.

"Our maintenance building was built and designed for technology from the 1970s," explains Pierce Transit Project Manager Douglas Dickinson. "So, we had to decide. Do we spend tens of millions of dollars upgrading our old facility to current standards or spend more money and create a new facility that could take us 40 years into the future? That sounds like an easier decision than it was, though. Remember, we're stewards of the tax dollar and a new facility does cost more. But we realized fairly quickly that a band-aid solution wasn't the right answer.

"Think about it. If you had an old car from the 1970s, try to remember what that engine looked like. Compare it to a car engine today. Well, the same is true for buses, except they're even more technologically sophisticated. And mobility is changing at an extremely rapid pace. We wanted our new building to be able to fit and handle all types of coaches: double-deckers, articu-



An aerial view looking east of the Pierce Transit Maintenance & Operations Base Improvement (MOBI) project site.

lated, electric, CNG, etc. If they even go to hover buses, we want to be able to handle that."

Pierce Transit Chief Financial Officer Brett Freshwaters agrees. And as keeper of the Pierce Transit purse strings, he would know. "Our old infrastructure could not meet our current needs, let alone our evolving needs for the next 40 years. Originally, we planned to refurbish the old structure, but we determined that the cost differential for a new facility was worth it. A new facility gave us greater value for the money."



A key element of the new MOBI facility, here are Pierce Transit electric buses parked and charging.

The new \$225-to-\$250 million MOBI project will expand Pierce Transit's Lakewood base and headquarters to enable it to meet significant projected bus fleet growth through 2040. Involving demolition, new construction and refurbishment in a series of phased steps, the MOBI project team will also optimize buildings and land use to expand and improve Pierce Transit's core functions including bus maintenance, vehicle

parking, safety, fuel-and-wash capacity and transit vehicle circulation. In addition, adjacent land acquired by Pierce Transit since 1986 will be expanded and reconfigured to achieve these aims and provide critical space for phased construction and operational needs during construction. A highly complex ballet balancing design, construction and operations during construction, the MOBI project illustrates one compelling feature beyond the challenge of the project itself. It needs to happen.

"They have one operations and maintenance facility and it's pretty tired," relates Francis Wall, Huit-Zollars vice president and MOBI project manager. "From the outset, the most important thing was to fully understand their entire program and make sure that all of the project participants were on the same page. But we also didn't necessarily have a static goal. We wanted to look at their system now and project where it would be in the future. So, we met with all of the different departments and gained their input. That also helped the project team establish relationships early on with all of the agency stakeholders like maintenance, operations, IT, admin, security, etc. Then we came up with a program that fit everything they needed into the project.

"Then we identified a preliminary sequencing delivery methodology, putting it into 14 bite-sized pieces. And those 14 pieces were based on existing operational functions, how the buses flowed, what got worked on—and then we overlaid that with what we needed to construct. That's how we determined

a construction sequence that would allow the project to be constructed with minimal disruption to ongoing operations. And that was the launching point for the GC/CM contract."

Wall refers to the Construction Manager/General Contractor (GC/CM) process, an accelerated alternative delivery methodology wherein the project owner hires a contractor during the design phase and before the start of a construction, creating an integrated project team. For the MOBI project, Pierce Transit brought on Dallas-based design firm Huit-Zollars as prime consultant, and Washington-headquartered Absher Construction as contractor. Pierce Transit opted for GC/CM as it presents considerable advantages for a project like MOBI. Effective at fostering innovation, mitigating risk, improving design quality, advancing efficiencies and value, and optimizing construction schedules, GC/CM can prove extremely beneficial methodology for all parties concerned, if two critical elements are established and fostered at the outset.

"Decisions on the owner's side must be made fast and decisively," adds Dickinson. "But even more important than that is the collaboration between the owner, the architect/engineer and the contractor. That communication must be absolutely clear, professional and productive, as that's the only way this type of project works. And that's exactly what we have here. I count my blessings that we have such a good team and work so well together. But that's something we built, something we worked at. This is a multi-year project. Without that kind of communication, respect and camaraderie, it just wouldn't work."

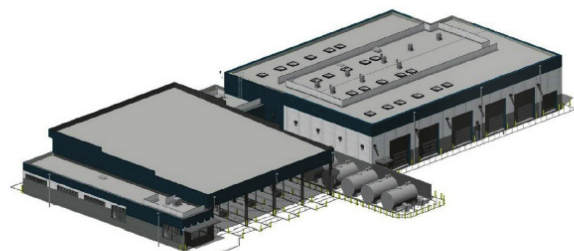
"Everyone on the project is humble," explains Wall. "Everyone checks their egos at the door and really looks for the best solutions for the project. And people are encouraged to make suggestions they might not normally make. Every idea is welcome. A great idea can come from anywhere and we want to take advantage of that."

Despite a wealth of curve balls thrown—from a COVID delay to adjusting to Pierce Transit sister agency's (Sound Transit) schedule changes for contracted buses—the MOBI project team gets together and figures out ways to solve them.

**PIERCE TRANSIT FACILITY**  
CONTINUED ON PAGE 34



An aerial view of the Pierce Transit MOBI project featuring parking improvements west of Building 4 and site preparation for the new fuel and wash building north of Building 4.



A rendering of the new fuel and wash building for the Pierce Transit MOBI project.

# Tolar Manufacturing Connects Communities With Technology

**CELEBRATING 30 YEARS, TOLAR** Manufacturing Company leverages its experience and forward-thinking functional design to continually develop new ways to connect passengers with buses. "Our mission is to connect communities throughout North America by creating a unique, at-stop experience that creates a connected sense of place for passengers," says Patrick Merrick, Tolar executive vice president. The company's SmartPlace™ shelters connect communities and people with at-stop digital solutions that address growing passenger expectations. Passengers can connect through real-time signage, digital displays, free-standing kiosks, USB charging stations, cameras, two-way communication, wi-fi and remote monitoring—all powered by

either 110V batteries or solar.

In Corpus Christi, TX, SmartPlace technology is connecting communities through a 32-inch ePaper display with self-adjusting brightness based on sunset, sunrise and ambient light detected via photosensor. The agency-branded display connects passengers to the next three bus arrival times, with ADA-compliant large tile numbering. A QR code provides quick access to real-time information on mobile devices to keep passengers connected well after departing the bus stop.

In San Bernardino, CA, SmartPlace shelters are connecting OmniTrans passengers with their community. Solar power is incorporated into a radius roof, providing energy to a media kiosk displaying two-line, low-draw, real-time

information. Passengers feel further connected through the sense of place the shelter provides displaying the agency logo directly on the metal perforated back wall and stop location banner on the roof line. These amenities, paired with the technology, provide comfort to passengers as they confirm where they are and where they are headed.

Tolar Manufacturing has the experi-



ence and ability to connect clients with cutting-edge technology found in its SmartPlace transit shelters that create a smart solution to connect passengers with their communities across North America. We call it *The Tolar Difference*.



## PIERCE TRANSIT FACILITY CONTINUED FROM PAGE 32

"We also had a workshop called, Buses. Buses. Buses., where we basically got together and talked about buses, buses, buses," jokes Wall. "And that was to make sure we were covering all of the latest changes and possibilities with vehicle configurations. For example, is it better to move 40 25-foot buses somewhere else and put 25 regular buses in their stead? Those are the kinds of issues we deal with a lot, but they can get more significant as well. Once again, it all comes down to communication and respect. If you establish that early and work to maintain it, it actually makes the process kind of fun, no matter what problem you're dealing with on any given day."

Wall reports that of the four major project components that comprise

MOBI, the project team is halfway through the second one. Brett Freshwaters adds that project completion will most likely take from six to 10 years, depending on funding availability and design choices.

Degree of difficulty matters. And while it's no walk in the park, replacing an entire bus operations and maintenance facility is not inherently the greatest challenge. However, constructing that while maintaining a transit systems' full operation is a very different story. Fortunately, for Pierce Transit's MOBI project, it's a story being well told.

*Arthur Schurr is a New York-based freelance writer who reports on transportation infrastructure.*



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