

New Terminal at Garden City Regional Provides Modern Gateway for Western Kansas BY KRISTEN RINDFLEISCH

Garden City Regional Airport (GCK) in Garden City, KS, has replaced its terminal, more than doubling the square footage and adding another gate. In addition to increasing capacity to 100,000 annual passengers, the updated two-gate terminal can accommodate larger aircraft, with room to spare for an additional airline. (Currently, the airport has casino charters and flights from American Airlines via Envoy Air.) Intuitive wayfinding and updated signage were added to guide passengers from check-in through the security checkpoint and to their gates, which now have holdroom seating for 100% of passengers. Landside, there's a new restaurant and event space.

Despite renovations over the years, the original 11,250-square-foot terminal, built in 1959, had long outlived its useful life. As the only commercial service airport within a 200-mile radius, GCK struggled to keep up with demand from 50,000 passengers annually. American Airlines had expressed interest in bringing larger aircraft to serve

the market, but GCK's previous terminal could not physically accommodate such aircraft. Additionally, there was an increasing need to modernize and improve the passenger experience.

After the need for a new facility was established, funding took center stage. In the end, the \$31 million project was paid for with \$22 million in federal funds (via the CARES Act and FAA Airport Improvement Program) and \$9 million of local funds from a 0.15% sales tax initiative.

To design and build a new terminal to fit its unique needs, GCK partnered with HNTB, a national infrastructure solutions firm, and Crossland Construction of Wichita, KS. HNTB provided planning, architectural design, structural design, civil engineering, interior design and landscape architecture. As the general contractor, Crossland Construction provided site prep and demolition, structural and mechanical work, finishes, coordination and design implementation and logistics. Crews broke ground in June 2022 and completed the new terminal this May—on time and under budget.

Planning and Phasing

The project vision was ambitious but clear: create a facility that could accommodate

GCK's growth now and for years to come. "The airport and community goals were to build a building that will last 50-plus years," comments GCK Director of Aviation Rachelle Powell, "Our



RACHELLE POWELL

previous terminal served us very well, and so we wanted to be able to build something that's going to be substantial, low-maintenance, efficient, functional and sustainable."

After determining that a greenfield site would have been cost-prohibitive, the team opted to build a new two-story facility on the same site as the existing

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terminal. That meant a phased approach would be crucial to keep the airport operational during construction. "The most critical strategy was minimizing disruption by



managing site logistics efficiently," recalls Crossland Construction Vice President - Division Manager DJ McClenny. Temporary facilities were built to ensure passengers could safely access the TSA checkpoint and waiting areas. Utility work and structural sequencing were carefully coordinated to create a smooth transition between construction phases.

Phase 1 of the project covered all aspects of the departure sequence: check-in, TSA security, the passenger holdroom, restrooms, Gate 1, airline ticketing offices and the outbound baggage inspection and makeup areas on the ground floor. Upstairs, the airport added a landside restaurant and event space. To keep things running smoothly during construction, all departure activities (except security) were temporarily relocated to a modular trailer on the terminal apron. The security checkpoint stayed in place, with crews working around it, and arrivals continued to use the existing baggage claim area.

Phase 1 began on June 6, 2022, and ended on schedule by Sept. 5, 2023, before winter set in. Phase 2 demolition began shortly after, and the terminal was fully completed by May 29, 2024. By completing Phase 2 infrastructure during Phase 1, the team avoided potential delays later in the project.

Phase 2 focused on the arrival sequence and delivered Gate 2, which includes the airport's first enclosed passenger boarding bridge. Other key components of Phase 2 included a baggage carousel, restrooms, a service animal relief area, a meet-and-greet space, rental car counters and offices, and back-of-house spaces for tenants and employees. While Phase 2 was underway, the modular trailer that had served as a temporary departure holdroom was repurposed into a temporary baggage claim area.

New Features, Improved Favorites

Transforming from a 1959 terminal to a 2024 facility meant significant upgrades in



Project: New Terminal

Location: Garden City Regional Airport, in KS

Size: 29,250 sq. ft.

Cost: \$31 million

Funding: \$22 million in federal funding (CARES Act & FAA Airport Improvement Program); \$9 million in local funds from 0.15% sales tax initiative

Construction: June 2022–May 2024

Key Components: Landside restaurant & airfield observation deck; intuitive wayfinding; holdroom seating for 100% of passengers; large-format feature walls inspired by local artwork

Planning, Architectural Design, Structural Design, Civil Engineering, Construction Services, Interior Design & Landscape Architecture: HNTB

General Contractor: Crossland Construction

Communications Special Systems & Security Engineering Design: Burns Engineering

Mechanical/Electrical/Plumbing Engineering: Professional Engineering Consultants

Code Consulting: FSC Consulting Engineers

Baggage Handling System: Logplan

Passenger Boarding Bridge: JBT

Document Controls: LSG

Geotechnical: Terracon

Food Service: YoungCaruso

Access Control System, Video Surveillance System Installation: Pinnacle Security

Audio Paging, Video System, Internet Protocol TV Installation: Heartland AV

Network Equipment, Wi-Fi Infrastructure Installation, Telephones, Communication Cabling & Communication Room Infrastructure Installation: Vison Communications

Electric Visual Information System (EVIDS) Installation: Heartland AV and INFAX

Communal Charging Equipment: Power Bar & Power Table by AGATI

Holdroom Seating: Bernu Aero by Arconas

Holdroom Furniture Dealer/Installation: Scott Rice

Restroom Sink System: AER-DEC[®] Integrated Sink AD-82000 BASYS[®] by Sloan

Mechanical/Electrical Contractor: The Waldinger Corp.

Electrical Contractor: Atlas Electric

Key Benefits: Enhanced passenger experience; additional passenger capacity; ability to accommodate larger aircraft





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technology and systems, including GCK's first baggage carousel. "A baggage carousel is nothing new, but it was a new addition to our terminal," Powell notes. Previously, airline staff manually passed passengers their bags through a small garage door.

The airport also received a major upgrade to its TSA equipment and procedures. "Prior to our new terminal, TSA hand-checked 100% of checked luggage, and now they have X-ray machines," Powell comments. "Pretty much everything is new."

Along with adding space for the security queue, sterile holdroom and gate areas, GCK also modernized its safety and security systems. Burns Engineering was selected by HNTB to provide low-voltage IT infrastructure, communications spaces, cabling, conduit, communication room layouts and hardware. This included a new telephone system, paging system, electronic visual information display system and active network system (e.g., network switches and Wi-Fi). The project also added an all-new Motorola/Avigilon access control system and video surveillance system platform, with badge credential production for access cards by HID.

Even though GCK is a relatively small airport, the project team tapped some big players for technology elements. Mark Adams, senior systems manager with Burns Engineering, explains that a performance-based specification enabled the team to develop a responsive solution for technologies such as the airport's flight information display system. "Our specification made sure that the project systems use technology that would support a small twogate airport just as well as a larger facility," Adams says. "Despite a larger cost per gate, we identified an Electronic Visual Information



MARK ADAMS

Display System (EVIDS) that offers the standard range of flight information expected by the traveling public."

One of the standout public amenities is a restaurant and observation deck. It was a non-negotiable feature for the project because the landside restaurant in the previous terminal had long been a favorite gathering spot for locals. The new upstairs space features expansive windows that provide even better views of the airfield than the former ground-level restaurant.

HNTB made the kitchen as flexible as possible for serving different types of foods, while the dining area was designed to look and feel similar to the rest of the terminal. The observation deck was added to cater to the high number of non-ticketed visitors who come to pick up or drop off passengers.

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GARDEN CITY



A colorful feature wall is the backdrop for new Arconas holdroom seating and communal charging tables and bars from AGATI.

Incorporating Local Elements

The expanded terminal doesn't just meet functional needs; it also reflects the spirit and diversity of Garden City. The HNTB team worked closely with the community to add local elements and imagery.

Designers created large, colorful feature walls where passengers spend most of their time: the ticketing lobby and departure lounge. These backdrops feature acoustic properties to reduce noise and can be seen through the clear glass as passengers approach from either side. "They bring a lot of life to the space," says Allison Hawk, senior aviation project designer with HNTB.



ALLISON HAWK

The wall in the new departure lounge features imagery of a western Kansas sunrise and sunset. Winning entries from a photo contest sponsored by the airport were pixelated to create a vibrant mosaic effect that is both abstract and literal. "When you're up close, right against the feature wall, it just looks like a colorful surface, but when you're standing back...you can actually read the original image," explains Hawk.

A welcome wall in the baggage claim area greets arriving passengers with "Welcome to Garden City" in 26 different languages. It was inspired by the local school's diverse student body and aligns with Powell's vision of creating a terminal that is comfortable and welcoming to all.

"That was really exciting and rewarding for our team to include in the design," Hawk remarks.

Challenges and Opportunities

The terminal project was not without hurdles. One of the biggest was maintaining airport operations throughout construction. Powell recalls the pressure to get the important project done right, and says she appreciates partners like HNTB and Crossland finding creative solutions to move the project forward smoothly, with minimal disruptions.

"The tight footprint and logistical constraints meant that we had to be meticulous in managing material deliveries and work schedules to ensure public areas remained safe and functional," notes Scott Fry, projects site superintendent with Crossland Construction.



During Phase 2, a key challenge was synchronizing construction of the new terminal with ongoing airport operations, especially regarding TSA procedures and passenger safety. The teams addressed this by modifying Conex shipping/cargo containers to create a sterile walkway so passengers could move safely through the terminal and checkpoint during construction.

Crews from Crossland also built 30-foot-tall temporary walls to cover large openings while the curtain walls were fabricated offsite. The temporary walls protected the project and workers from harsh winter weather that included wind gusts up to 87 mph.

Despite the project's challenges, teams were able to take advantage of opportunities as well. The observation deck and local art elements allowed design choices that enhance

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functionality and community engagement. "That's not a hard and fast design criteria that you're going to see in a design manual somewhere," remarks Ryan Shropshire, project manager with HNTB. "Don't be afraid to go outside of the norm and factor in those kinds of things into your design criteria."



When selecting materials for the new

terminal, designers considered both constructability and longterm maintenance because they were creating a building that will be around for decades to come. Understanding the local labor and materials market helped avoid delays and cost overruns, adds Shropshire.

Glowing Feedback

The new terminal is receiving praise from passengers, staff and local leaders and residents alike. "Our community is very appreciative of this opportunity, with the funding that we received through the federal funds and our local sales tax to build such a beautiful and functional building," Powell reports. "People are overwhelmed by the design of it, the beauty of it and the functionality of it." The project has greatly improved the passenger experience especially the new JBT boarding bridge. Previously, travelers often had to brave harsh winds, cold temperatures or extreme heat while boarding their flights on the tarmac. "People are very thankful for the facility," Powell remarks.

What Was Learned

Looking back on the new terminal project, Powell stresses the importance of communication and collaboration. "We had a lot of meetings, but we had an open communication style," she says, noting that team members shared insights and experiences to form solutions together. "We all took pride in this project."

Crossland Construction maintained daily communication with the airport to ensure smooth operations and prioritize passenger safety. This was particularly important when the new TSA scanners and baggage systems were brought online while the existing manual operations continued. "Our teams coordinated to install critical equipment seamlessly, ensuring minimal disruption to airport operations," says Crossland's McClenny. "Close collaboration with the Garden City Airport team and HNTB was essential." Regular communication with air traffic controllers ensured construction did not interfere with runway operations.





Shropshire, with HNTB, notes that having staff on-site from his firm, Burns Engineering (for communication/IT systems) and Professional Engineering Consultants (for low-voltage communication systems) allowed constant communication, kept management. "A big part of that was having those folks on site, teaming and partnering with the contractor and with the owner, so that when issues did arise, we could get them resolved quickly and early and not have that domino into a lot of cost," he explains. The proactive, hands-on approach eliminated lag that typically occurs during the Request for Information process, he adds.

the project moving forward and fostered efficient change order

For Crossland, the GCK terminal project reinforced the importance of early site assessments, particularly existing buildings. "Completing in-depth surveys well in advance of construction can reveal discrepancies between drawings and on-site conditions, allowing adjustments before work begins," Fry advises.

He also highlights the value of having subcontractors with extensive experience on phased projects. Crossland specifically selected subs that could maintain safety, minimize disruptions and coordinate with ongoing airport operations.

Adams, with Burns Engineering, agrees that the right subcontractors can make a big difference, whether an airport project involves one gate or 100 gates. Together, the team on the GCK project embraced a shared goal to provide the airport with the best systems to support efficient airport operations, optimal passenger experience and future-proofed IT infrastructure, he notes.

"Make sure you've got experienced design staff," Adams continues. "And they have to multitask. We dodged a lot of the challenges typically encountered on an airport construction

project. The prime contractor selected the right airport systems and specialists who in turn delivered quality throughout the project—they all stepped up and did a great job."

Powell encourages airport leaders who are planning a terminal replacement (or renovation) to thoroughly research and leverage all available resources—their design team, engineers, architects and contractors. Additionally, don't hesitate to reach out to other airports for their insights, she adds.

More to Come

Looking ahead, GCK has several improvement projects in the works, including a taxiway reconstruction. It is also in the process of acquiring new aircraft rescue and firefighting (ARFF) vehicles and snow removal equipment.

Additionally, the airport is planning to expand its parking lot to accommodate the increase in passenger traffic it has experienced since opening the new terminal in May. During peak travel times this summer and fall, the airport exceeded the capacity of its current parking lot. "It's a great problem to have," Powell notes.

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