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Crossfield Taxiway Program at Dallas Love Field Finds Enhancing Efficiency and Plans for Growth

Project improves safety while opening up economic opportunity for the future

Joe Petrie

Dallas Love Field (DAL), one of the busiest medium-hub airports in the United States, has undergone a major airfield transformation with the completion of its Crossfield Taxiway Program.

This project, completed in early 2025, is designed to improve operational efficiency, enhance safety, and prepare the airport for future expansion. Through a collaborative effort between the City of Dallas, engineering firm Garver, and program management consultants HNTB, the project has successfully reconfigured the airport's airfield layout while leveraging federal funding to reduce financial burdens.

Need and Scope of the Project

The Crossfield Taxiway Program replaces an outdated midfield taxiway with two new dual crossfield taxiways that align perpendicular to Runways 13R-31L and 13L-31R. Vincent Lewis, assistant director for capital and infrastructure development at the City of Dallas Department of Aviation, explained that the previous layout was based on an old closed runway, leading to a convoluted taxiway system.

"This project allowed us to clean up that space and create a more symmetrical airfield, making it easier for aircraft to move between runways," Lewis said. "It

reduces taxi times, improves situational awareness for pilots, and creates space for future developments."

Beyond operational enhancements, the project also frees up 14 acres of on-airport property for commercial use and infrastructure development, including a centralized Aircraft Rescue and Firefighting (ARFF) station and a new deicing facility. The improvements were designed with long-term growth in mind, ensuring that Love Field can efficiently manage increased traffic demand while optimizing land use.

Design, Construction, and Execution

Garver led the design and engineering of the Crossfield Taxiway Program, navigating complex logistical and operational challenges. The project began at the height of the COVID-19 pandemic, requiring virtual collaboration among multiple stakeholders.

"Getting everyone on the same page during COVID was a challenge, especially for a project that completely transformed the middle of the airfield," said Mitchell McAnally, aviation regional leader at Garver. "We used an online dashboard with data analytics to simplify decision-making, allowing stakeholders to visualize different alternatives and their impacts."

Garver developed seven layout alternatives, ultimately selecting an option that balanced terminal expansion needs with future hangar and maintenance space. McAnally noted that the new configuration improved safety by eliminating nonstandard taxiway angles that previously required pilots to make awkward turns and visibility adjustments.

During construction, HNTB served as the program management consultant, ensuring seamless execution and coordination among stakeholders. Justin Planasch, program manager for HNTB, emphasized the importance of early planning and constructability reviews.

“We strengthened specifications based on lessons learned from previous projects,” Planasch said. “By introducing more stringent schedule requirements and improving coordination between contractors and airport officials, we kept the project on track.”

HNTB also played a key role in refining bid specifications to ensure a competitive process for construction contracts. Planasch noted that the firm worked closely with the City of Dallas to create a more structured and transparent procurement process, helping to attract more contractors to bid on future projects.

Lessons Learned and Funding Sources

The Crossfield Taxiway Program benefited from strategic funding efforts, with 75% of the project costs covered through the Bipartisan Infrastructure Law (BIL). Lewis credited the City of Dallas’s ongoing coordination with the Federal Aviation Administration (FAA) for securing this financial support.

“We were prepared to move forward regardless, but the FAA recognized the efficiency gains and provided more funding than anticipated,” Lewis said. “It was a strong partnership that allowed us to stretch our budget further.”

Planasch noted that improving the transparency of the bid process and ensuring equitable contractor competition were key takeaways for future projects.

“Leveling the playing field for contractors is always a challenge, especially at an airport where certain companies have an established presence,” Planasch said. “We’re working on bid strategies that attract a wider range of competitors for future developments.”

Another key lesson learned from the project was the importance of advanced coordination with stakeholders. McAnally explained that incorporating feedback from airlines, general aviation operators, and airport officials early in the design phase

helped minimize disruptions during construction and ensured a final layout that met the diverse needs of airport users.

“Bringing everyone into the conversation early made a significant difference,” McAnally said. “By understanding their priorities, we were able to design a taxiway system that balances safety, efficiency, and future development opportunities.”

A Vision for the Future

With the taxiway reconfiguration complete, Love Field is better positioned to handle future growth. The additional land created through this project will enable expanded maintenance, repair, and operations (MRO) facilities, as well as general aviation developments that contribute to the airport’s revenue.

“This was a transformational project,” McAnally said. “It’s not just about the taxiways—it’s about Love Field reinventing itself again. The changes we’ve made will drive future development and ensure the airport remains a critical asset for Dallas.”

The airport is also focusing on terminal improvements, parking expansions, and better access infrastructure to accommodate growing passenger numbers. While Love Field remains capped at 20 gates under the Wright Amendment restrictions, the modernization of airfield operations ensures it can maximize efficiency and safety within those constraints.

Future projects include enhancements to airport roadways and parking facilities, with a focus on improving passenger flow and minimizing congestion. The planned ARFF station, which will be located in the newly developed area, is expected to significantly improve emergency response times. Additionally, the centralized deicing facility will provide a more efficient and environmentally responsible solution for winter operations.

“This was just one step in a broader effort to future-proof Love Field,” Lewis said. “We’re making sure we can meet increasing demand while maintaining a safe and efficient airfield. The lessons we’ve learned here will guide our approach to future infrastructure investments.”

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