

Jackson Airport Runway Improvements



At the Jackson Municipal Airport, aging pavement and preserving airport building infrastructure required collaboration with the airport, neighboring landowners, city officials, the Minnesota Department of Transportation (MnDOT) and Federal Aviation Administration (FAA). The airport's last major pavement construction occurred in 1995. Since then, FAA standards and requirements changed, and the airport had noncompliant elements that needed correction to meet funding eligibility. The biggest concerns were direct access to the runway, roads through the runway protection areas (RPZs) and County Road 34 obstructing the Runway 31 approach surface.

The direct access could meet FAA standards by constructing a partial parallel taxiway. However, the existing apron was narrow and removing additional pavement from it for the partial parallel taxiway would make it unusable if any aircraft parked on the apron. Additionally, to clear the Runway 31 approach would require raising the south end of the runway. Reconstructing the runway in the existing location was not a viable long-term solution for the Jackson airport.

HDR's team completed a triggering event master plan and airport layout plan to find alternative options. The goals of the project were to:

- Meet applicable FAA standards.
- Maintain a minimum operational length of 3600 feet in all directions.
- Preserve building and apron infrastructure.
- Minimize land acquisition requirements.

The preferred alternative included constructing a runway on a new alignment, utilize declared distances to minimize land acquisition requirements, maintain clear RPZs and meet the 3600-foot operational length. Additionally, this option allowed for construction of a full-length parallel taxiway and apron expansion.

Funding restraints required the project be completed in phases. The first phase was construction the new runway alignment. The project was bid in April 2022 with concrete surfacing as the chosen alternative. All earthwork, geotextile fabric, underdrains and aggregate base was completed in the summer/fall of 2022. Construction crews came back in the spring to complete concrete paving, pavement markings and lighting. The runway was completed and open to traffic on August 10, 2023.

The HDR team updated the airport's master plan and layout and completed an environmental assessment for the project prior to design. They garnered community support with open, transparent communication to ease historic negative feelings toward airport expansion. Throughout construction, HDR's team provided project administration and observation, verified contractors' adherence to plans and specifications, and coordinated with the materials testing firm and surveyor. Additionally, the team completed daily construction logs, pay applications and coordinated with the sponsor on FAA required submittals.

