



Kickoff Meeting Summary

Airport Master Plan

Madison Municipal Airport

Date: 5/28/2026

Time: 2:00 PM

Subject: Airfield Alternatives Meeting

Facilitator: KLJ Engineering

Attendees: Kenny Johnson, Tim Peters, Ryan Hegg, Heather Lee, Morris Riggan, Roy Lindsay, Danny Frisby-Griffin, Teresa Mallet, Brian Schuck (FAA), Brodie Glanzer, Jon Becker (SDDOT), Andrew Zielike (KLJ), Aaron Storm (KLJ), Kent Penney (KLJ), Jack Vogt (KLJ)

Agenda Topics

A project meeting for the Airport Master Plan (AMP) was held on May 28th, 2026, at Madison Municipal Airport (MDS) with members of the Planning Advisory Committee (PAC). The purpose of the meeting was to provide an update on project status, and present airfield alternatives. The following presents a synopsis of the agenda items discussed.

Progress to Date

- Critical Design Aircraft approval was received from the FAA in March 2026
- FAA/State Comments received for Chapter 1, 2 and 3, revisions have been made and chapters resubmitted
- Exhibit A/Airport Property Map deeds and easements have been drafted, research on encumbrances is underway
- Airspace obstacles have been analyzed and Airport Layout Plan drafted for existing conditions.

Aviation Activity Update and Critical Design Aircraft

- An additional 4,000 annual operations were added to include SDSU flight training operations at Madison bringing the total baseline annual operations estimate to 24,000
- Based Aircraft was updated to include 1 jet and 1 turboprop for a total of 50 aircraft based at Madison
- Critical Design Aircraft
 - Primary Runway: B-II Large, TDG-1B for existing and future
 - Crosswind Runway: A-I Small, TDG-1A for existing and future
 - The parallel taxiway is designed to meet TDG-2A standards (35 feet width) and it is recommended to continue to maintain that width to accommodate occasional larger aircraft, however federal funding may not be justified for a 35 foot wide taxiway when the pavement needs to be reconstructed

Airfield Needs and Deficiencies

- Runway 15-33 Obstructions
 - The aeronautical survey identified trees within the Part 77 approach surface on both ends, as well as trees within the Departure Surface. These obstructions could impact nighttime instrument approaches and departure procedures. Possible mitigations could be tree trimming, removal or placing obstruction lights in the trees

- FAA noted that the trees will need to be uploaded to OE/AAA for an airspace study to determine whether they are a hazard and create an obstacle action plan
 - It was noted that the trees off the Runway 33 end have been trimmed before, FAA funds were not used – FAA will only participate in tree removal or trimming one time so full removal is advised when using FAA funds.
 - The trees penetrating surfaces off both runway ends are surrounding private residences and trimming or full removal would be impactful to those residences.
- A Runway Visibility Zone (RVZ) is a surface created for intersecting and converging runways to ensure aircraft have sufficient line of sight of the other runway to see and avoid potential collisions. The current RVZ impacts the north apron and prevents aircraft from being able to park there. Possible solutions to decrease the impacts of the RVZ would be to shift the Runway 3 threshold 125 feet to the edge of the Taxiway A pavement or 60 feet to the edge of the Taxiway A Object Free Area. Aircraft are prohibited from parking within a TOFA so this would be an option to preserve as much length for the crosswind.
 - There is also terrain between Runway 21 and Runway 33 which blocks line of sight. This will need to be fixed during the next runway or grading project
- Runway Length
 - Runway 15-33 currently has a length of 5,000 feet. The recommended length is based on the most demanding aircraft that meet the regular use threshold of 500 or more annual operations. The Air Tractor 802 requires 5,200 feet of runway to take off during the hottest summer days. There are constraints with the two roads and with the current runway length at Madison, the AT-802 operates with a slightly reduced load during hot summer days. 5,000 feet would remain the existing recommended runway length.
 - There has been a steady increase in turboprop activity at the airport, and a hangar tenant has spoken about acquiring a larger jet such as a Cessna Citation X which would demand more length than the existing runway. A future extension will be evaluated to determine a logical maximum limit.
 - Runway 3-21 is currently 2,380 feet long. Additional length was a key objective of this master plan study. Various single engine flight training aircraft takeoff lengths were evaluated in SARLAT to determine a recommended future length of 3,100 feet for the turf runway.
 - The committee decided that 3,000 feet would be a cost-effective future turf runway length and would meet the needs of the Piper Cherokee and Apache which were not in the current SARLAT system.

Airfield Alternatives

- An exhibit was shown which depicted the distances the primary runway threshold would need to be displaced to clear protective services such as the RPZ, Part 77 Approach surface and the Departure Surface. Displacement is only one option and would reduce the utility of the runway. Other mitigation options including tree trimming/removal or obstruction lighting were discussed. Property interest and road realignment could also be considered.
- Four crosswind runway alternatives were presented to the group and provided as handouts.
 - The committee preferred to maintain the same crosswind runway alignment as depicted in Options 1, 2 and 3 but with a length of 3,000 feet.
 - Option 4, which is a new 10-28 alignment and decoupled from the primary runway was presented as a way to remove constraints in the terminal area and resolve RVZ

issues. The committee noted that the current 3-21 alignment works best for crosswind conditions and a 10-28 alignment would result in the crosswind runway not being utilized. This option was dismissed.

- FAA suggested evaluating a 3-21 crosswind runway alignment that is shifted to the east, decoupling from the primary runway, which would alleviate the current RVZ issues. Significant land acquisition and new constraints from residential property limit the viability of this option.
- 232nd Street is an incompatible use within the RPZ. A future crosswind runway extension may require the closure of a portion of the road. It was noted 232nd Street is a low volume road with two residences served.
- While all crosswind runway alternatives were shown at a width of 200 feet to match the current crosswind runway width. Future alternatives will be shown at the FAA standard width of 120 feet.

Airfield Taxiway System

- A new connector taxiway was shown at approximately 2,500 feet down the runway. This is to remove the current connector taxiway which allows direct access from the north apron to the runway. This location was selected based on the landing distances of a majority of the aircraft that operation at MDS.
- By-pass taxiways were shown on each runway end. This is a possible solution to allow aircraft to conduct runups without impeding traffic. The PAC decided they would not like to preserve space for bypass taxiways.
- Aircraft run-up pads were shown near each runway end. It was noted that MDS would not likely meet the operations threshold for federal funding participation for run-up pads. The PAC decided they would like to preserve space for these run-up pads. It was proposed that they could be constructed as turf for a lower cost and then could be paved in the future if deemed necessary.
- The angle at which the parallel taxiway crosses the turf runway must be within 0°-15° of perpendicular and does not meet standard. A reconfiguration of the parallel taxiway so that it crosses the crosswind runway near perpendicular into the apron was proposed. This will need to be done when the taxiway needs a major reconstruction.

Terminal Area

- MDS is a higher activity with constrained development space. Efficient utilization of the airports “prime real estate” is important. Key development areas were identified and optimum hangar layouts will be presented during the next meeting.
- Potential sites for aerial application operations were discussed and will be presented at the next meeting.

Action Items

- KLJ will revise airfield alternatives prior to the next meeting
- KLJ will submit airspace evaluations for trees