TRK Master Plan Phase 1 – Draft Runway Feasibility Study

Board and TRK staff comments – March 2023

TTAD Comment	Response	Action	
Feb 16, 2023			
Executive Summary: Add Alt 5/No Build as an option for consideration.	 TTAD may continue to propose ways to encourage pilot behavioral changes to shift use to Rw 02/20 in existing condition. 	 Study updated Text added to Executive Summary Should be removed for FAA submittal if Alt 1 selected 	X
Note that Alts 1 and 2 move operations away from town	• N/A	 Study updated Text added to Executive Summary and Alternative Summaries 	X
Note that Alts 1 and 2 improve safety	 We cannot assume safety will increase or improve with either alternative. FAA will eventually judge any safety impacts. Suggest update with softer language on safety margins but avoid assuming overall safety will improve: Improves operational margins, improves flight performance. 	 Study updated Text added to Executive Summary and Alternative Summaries 	X
Pilot data: reiterate the number of pilots interviewed for runway use surveys.	Aprox 5,800-5,900	 Study updated Text added on page 4-9: Pilot and Operator Interviews section 	X
Why were no local piston operators interviewed?	 Discussed that direction from the Ad Hoc committee was to limit interviews with local piston pilots. The pilots interviewed represent charter operators of aircraft that this Study is looking to move to Rw 16/34. 	No change to Study	X
LPV approach potentially resulting in more operations at TRK	 Be more specific in how many more operations (tone down that there may be more operations) Aircraft may use LPV during conditions that are unable to today (low visibility with properly equipped aircraft) The window of time and conditions is relatively minor. Under these low visibility conditions, it may be assumed that runway is contaminated (rain/snow) therefore adding another deterrent and requiring more Rw length, forcing aircraft to divert Counter that the LPV will: improve operational margins, improve flight performance, improves efficiency, and eliminates the step-down approach. Crew resource management is improved with LPV stabilized approach 	 Study updated Section added on page 4-10 that adds more discussion on the LPV approach. 	X
		•	
Pg 4-21 text edit	 Change to " therefore might not be eligible for FAA funding" Change last sentence: " or being pursued by TTAD." 	Study updated	X
Pg 4-22 text edit	 "wide this" change to "widening" 	Study updated	X
Concern about Alt 2 ROM cost	 Noted that M&H are not engineers at TRK and used best available data. Rechecked cost data with M&H engineers and ROM cost was reverified. Suggest sharing M&H ROM cost estimates with Brandley Eng if needed. 	 No change to Study 	X

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Alt 4: Why not move calm wind jet ops to Rw 16 arrivals with displaced threshold on Rw 11, instead of circle to land (CTL) on Rw 29? Or just use Rw 16 LPV?	 The operations not moved to Rw 16 (or any other runway) in the Alt 4 'operations moved' scenario are aircraft that need >6,000 feet runway length. Aircraft in this scenario are using Rw 11 under calm winds and clear conditions. In calm wind and clear conditions, runway length will likely dictate runway use for landing. This condition is rare (~80 annual operations in this scenario). Rw 16 would not offer length required for these aircraft to land safely. Aircraft in this scenario would likely CTL on Rw 29 under calm winds to access runway with >6,000 landing length. However, occasional conditions may dictate need for these aircraft to use Rw 16 LPV: If aircraft performance allows aircraft to land on 5,900' runway. If low visibility and no possibility for CTL on Rw 29, then aircraft would be forced to use Rw 16 LPV and these aircraft would still need to be able to land on 5,900' (weight / aircraft performance must be met). However, under low visibility, then it may be assumed that runway is contaminated (rain/snow) therefore adding another deterrent and requiring more Rw length, forcing aircraft to another airport. Under this scenario, a fraction of the ~80 operations: would either: use the LPV land on 16 at 5,900', land on 11 at 6,000', or divert to another airport. A fraction of the ~80 annual operations would use the LPV land on 16 at 5,900' 	 No change to Study, beyond clarification provided in this response. 	X
Update 'Tinkers Landing' neighborhood callouts to 'Pannonia Ranchos'	• N/A	 Study updated NA70 graphics updated 	X
Add Prosser Dam Road to graphics	• N/A	 NA70 graphics updated 	X
Feb 21, 2023			
Pg 4-4: Check forecast numbers so these match the 2021 update.	 Numbers show peer airport method, not the turbine (preferred) method. 	 Study updated 	X
Concern over not showing summer operations and patterns, arrivals versus departures, and future operations for noise analysis	 Discussed that direction and scope called for existing / average day data for the baseline / draft analysis. Potential for more noise analysis runs to be discussed with HMMH and TRK. Also discuss whether including additional analysis should be included with FAA submittal, and if this analysis will assist FAA in reviewing Rw 16/34. 	 No change to Study, at this time Effort and cost for additional noise analysis to be provided to TTAD 	X
Concern over showing Rw 11/29 as C-II RDC	 Discussed that impacts for realigned taxiway and larger RSA/RPZ make the airport compliant to FAA design standards. Also discussed that any ALP/MP update will need to show Rw 11/29 as C-II since operation data confirms this. FAA will verify this with any ALP/MP update. Noted that ALP/MP updates should be completed at regular intervals to comply with FAA grant assurances. 	 No change to Study 	X
Why eliminate Alts 3 and 4 from consideration?	 Discussed that displacing Rw 11 threshold: Will decrease safety margin and operational efficiency at TRK, with more CTL on Rw 29, and potential for landing short or overruns on Rw 11 Pilots were unanimously not in favor of this for reasons stated above Does not result in aircraft being significantly higher over residences west of Rw 11 	 No change to Study 	X
Add Rw 29 climb gradient when discussing Rw 34	Rw 29 departure climb gradient = 500 ft/NM	 Study updated 	X
departure climb gradient being lowest at TRK.	Rw 02 departure climb gradient = 415 ft/NM	Climb gradients for Rw 02 and 29 added on page 4-8	
Comment on Rw 16 LPV approach: Could this only be developed as an LP approach, with concern over LPV bringing in more operations?	 Yes TRK may develop this approach as LPV or LP, but theoretically, an LPV approach to Rw 16 will help move aircraft to use this runway over 11/29. An LPV approach helps this alternative meet the goals established in this Study 	 No change to Study, other than adding narrative on how LPV may attract more operations and enhance operations (as noted above) 	X

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TTAD Comment	Response	Action	
Feb 22, 2023 - TTAD Board Meeting	,		
Most comments and questions reflected those previously discussed (listed above).	• N/A	• N/A	X
Appendix C: note that smoke may also contribute to times for low visibility conditions.	 When smoke is present, most pilots prefer an approach from the west on Rw 11 or CTL to Rw 29 Smoke events are difficult to predict. Multiple variables including duration, precise time of year, and annual occurrence make this difficult to predict. 	 Appendix C updated 	X
Table C-5: Why are so many piston aircraft moving in alternative scenario?	 Runway use estimates were vetted with Ad Hoc, TTAD Board, and Tower with Draft Runway Use Estimate Paper (Aug 2022) on use numbers prior to noise modeling. No comments received at that time. Tower commented that estimated operations moving to alternative runways may be accomplished with outreach and tower guidance. 	 No change to Study or noise modeling 	Х
Alt 4: Why not move calm wind jet ops to Rw 16 arrivals with Displaced threshold on Rw 11, instead of CTL on Rw 29? Or just use Rw 16 LPV?	 These are aircraft that need >6,000 feet runway length, therefore Rw 16 would not offer length required for these aircraft to land safely. Therefore, all aircraft considered would CTL on Rw 29. See additional discussion above. 	No change to Study	X
Include the Vector heat maps showing arrival and departure tracks for various scenarios.	■ N/A	 Technical Nose Appendix to be updated 	
Should Study be submitted to FAA as is, or would more noise analysis (summer, forecast operations, arrivals/departures) help with FAA review?	 Potential for more noise analysis runs to be discussed with HMMH and TRK. Also discuss whether including additional analysis should be included with FAA submittal, and if this analysis will assist FAA in reviewing Rw 16/34. 	 No change to Study, at this time 	Х
General comments on how many IFR operations occur and if this is affecting the Study analysis.	 Most aircraft (all turboprop/jet) fly IFR to TRK. Some terminate IFR when airport visual, or fly to airport and land and IFR plan will be canceled Turboprops/turbines are using IFR 100% of time, even under clam winds and clear skies Aircraft flying >18,000 MSL are required to fly IFR IFR operations are independent of weather 	 Study updated New section on IFR operations included under the Alternative Runway Utilization Estimates section, page 4-10 	X