Memorandum

To: Sean Scanlon, Tweed Airport **Date:** March 24, 2021

From: Ron Gautreau, FHI Studio

Subject: Tweed Airport Master Plan Update

Community Advisory Committee Meeting #4

Summary of March 8, 2021 Meeting

The fourth, and final, Community Advisory Committee (CAC) meeting for the Tweed New Haven Airport (HVN) Airport Master Plan Update (AMPU) was conducted from 6:30 PM to 7:10 PM on March 8, 2021. The meeting was held virtually due to COVID-19. The CAC meeting was attended by three CAC committee members along with several members of the project team and HVN staff.

Sean Scanlon, Executive Director of HVN, provided a brief greeting to the CAC members. Mr. Scanlon stated that the end of the CAC for the AMPU is not the end of the discussion in that there will be further opportunities for public involvement in the process as it moves forward. Jeff Wood, with McFarland Johnson (MJ), went over the general organization/logistics for the virtual meeting and introduced the team members. Mr. Wood went over the agenda for the evening that included the master plan process, key issues and goals, recommended alternatives for the Airport Layout Plan (ALP), noise, and next steps. Questions and discussion with CAC members followed the presentation. The presentation is attached.

Mr. Wood presented the status of the master plan process. He then introduced the key issues and goals: 1) Runway 2-20 length, 2) terminal area improvements, and 3) future of Runway 14-32. The recommended runway and taxiway preferred alternative and recommended terminal alternative was presented followed by the recommended general aviation alternative and landside alternatives. An overview of the ALP sheet set was then discussed. Mr. Wood presented the existing and proposed obstruction overview.

Ms. Kate Larson (HMMH) provided a discussion on noise including the day/night average (DNL) model, aircraft noise modeling, modeled runway use, and existing and proposed DNL noise contours. Mr. Wood then presented the next steps and steps after the AMPU including the National Environmental Policy Act (NEPA) process. Lastly, Mr. Wood discussed how comments and questions on the AMPU can be submitted and that the presentation can be viewed on the AMPU website.

CAC members were then invited to ask questions or share comments related to the presentation. A summary of the questions posed by the CAC members is provided below:

- A member of the CAC asked about the timeframe of FAA's ALP approval. Mr. Wood responded
 that the FAA review process is relatively fast and should take three to four months for FAA
 approval.
- A question was raised about the timeframe of when construction would start. Mr. Wood
 responded that it is anticipated that the NEPA process would take about a year followed by
 design/permitting so at minimum there might be 18 months before groundbreaking after the
 NEPA process.
- A member of the CAC commented that they encourage the project team to be realistic in regard to time frames of the project (e.g., NEPA timeframe). Mr. Wood responded that there are new

federal regulations in regard to NEPA and if the federal government issues a grant for a project, the NEPA process must be done within a year.

- A member asked if there has there been any preliminary talks with the Town of East Haven, specifically the mayor? Mr. Scanlon responded that he has spoken to the East Haven mayor and the communications will continue throughout the process.
- A member asked if the noise contours produced by the new noise modeling replace the previous noise study contours. Ms. Larson responded that they did if they get adopted by the Airport as the official noise contours. Mr. Scanlon added that HVN was about to complete the final phase of the noise insulation program which was delayed due to Covid.
- Are there houses that are eligible for sound proofing under the new noise contours that were not
 eligible under the old noise contours? Ms. Larson responded that there are no new houses eligible
 for the noise insulation program based on the existing 2019 noise contours; the 2019 contours
 are fully contained within the previous contours. This is because Runway 14-32 is closed, newer
 aircraft are quieter than old aircraft, and there are fewer operations.

Mr. Wood finished by saying that the public meeting is on Wednesday, March 10th and the team has enjoyed engaging with the CAC members.

Attendees:

- Sean Scanlon, HVN
- Jeremy Nielson, HVN/Avports
- Felipe Suriel, HVN/Avports
- David White, Tweed Board of Directors
- Susan Godshall, New Haven Resident
- Scott Luzzi, Yale University
- Kevin Rocco, New Haven Resident
- 1-2**-***-**23
- Jeff Wood, MJ
- Laura Canham, MJ
- Steve Bourque, MJ
- Kate Larson, HMMH
- Dominic Scarano, HMMH
- Laurel Stegina, FHI Studio
- Ron Gautreau, FHI Studio



MASTER PLAN UPDATE

Tweed-New Haven Airport Authority



Logistics

- Meeting recording
- Please mute your microphone
- Sign-in sheet please send a chat with:
 - Name
 - Affiliation
 - Email address
- Questions will be addressed at the end
 - Send a chat any time during the presentation
 - Open mic Q&A at the Conclusion

Introductions

- Sean Scanlon, Executive Director
- Jeremy Nielson, Airport Manager
- Consulting Team:
 - McFarland Johnson
 - FHI Studio
 - ASM Americas
 - Harris Miller Miller & Hanson, Inc.
 - Woolpert
- Attendees

Agenda

- Introductions
- Master plan process
- Key issues and goals
- Recommended alternative for ALP
- Noise
- Next steps
- Conclusion/questions

Master Plan Process







Key Issues and Goals



- (1) Runway 2-20 length
- (2) Terminal area improvements
- (3) Future of Runway 14-32
- Opportunities for economic sustainability
- Phasing and implementation plan
- Public engagement throughout
- Planning flexibility for future aviation

Recommended Runway & Taxiway Alts



- Meets FAA design and geometry standards
- Provides best flexibility for existing and future operations
- Balances safety, community, environmental, fiscal, regulatory, and operational



Recommended Terminal Alternative

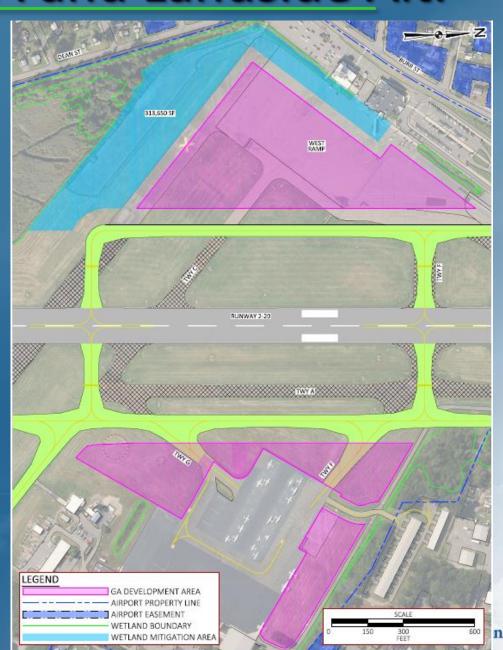
- Meets FAA design standards
- Meets Facility Requirements
- Provides high flexibility
- Improves roadway access
- Eliminates incompatible land uses
- Reduces runway/safety area crossings





Recommended GA and Landside Alt.

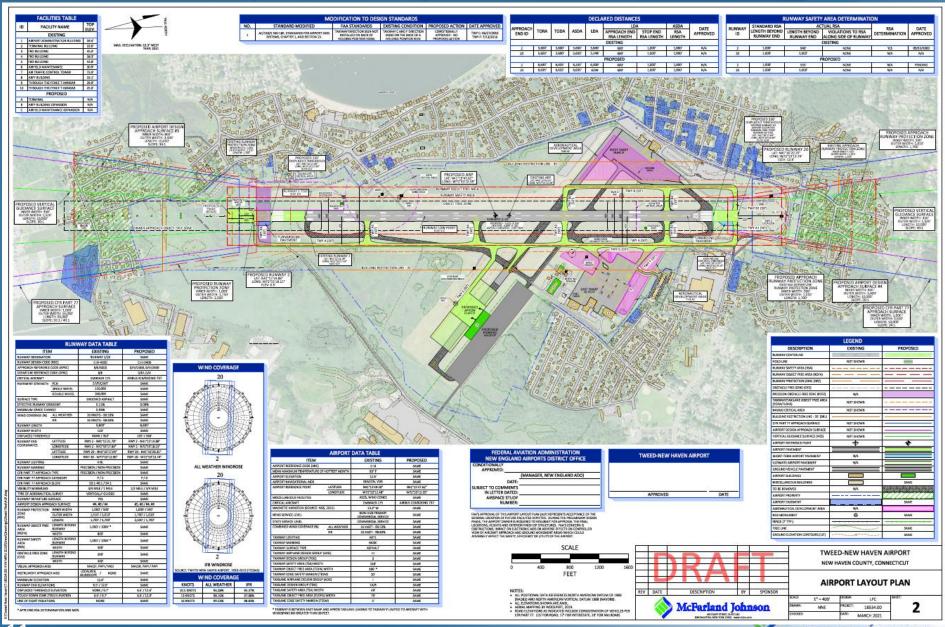
- Aeronautical/general aviation development areas
- Wetland mitigation opportunity
- Expansion of maintenance building
- Expansion of fire station building



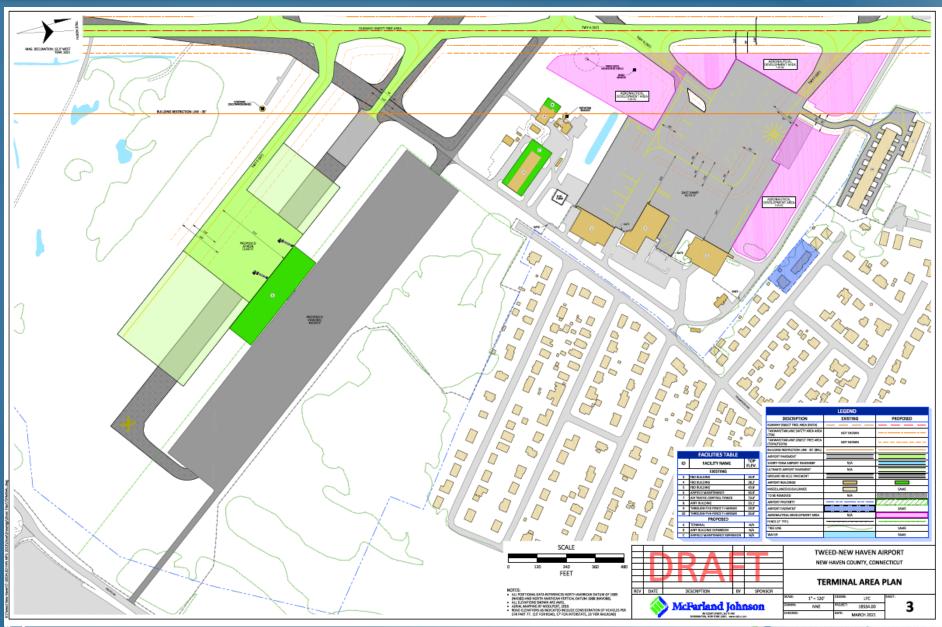
ALP Sheet Set

- Existing Airport Layout Plan
- Proposed Airport Layout Plan
- Terminal Area Drawing
- Airport Airspace Drawing
- Inner Portion of the Approach Surface Drawing
- Runway Departure Surfaces Drawings
- Land Use Plan
- Airport Property Map
- Airport Environmental Inventory Map

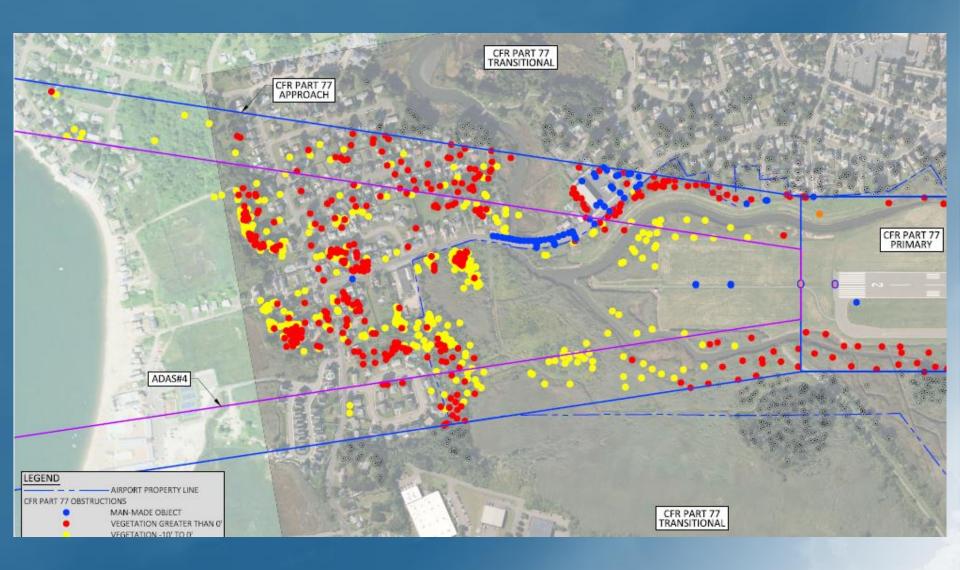
Future Airport Layout Plan



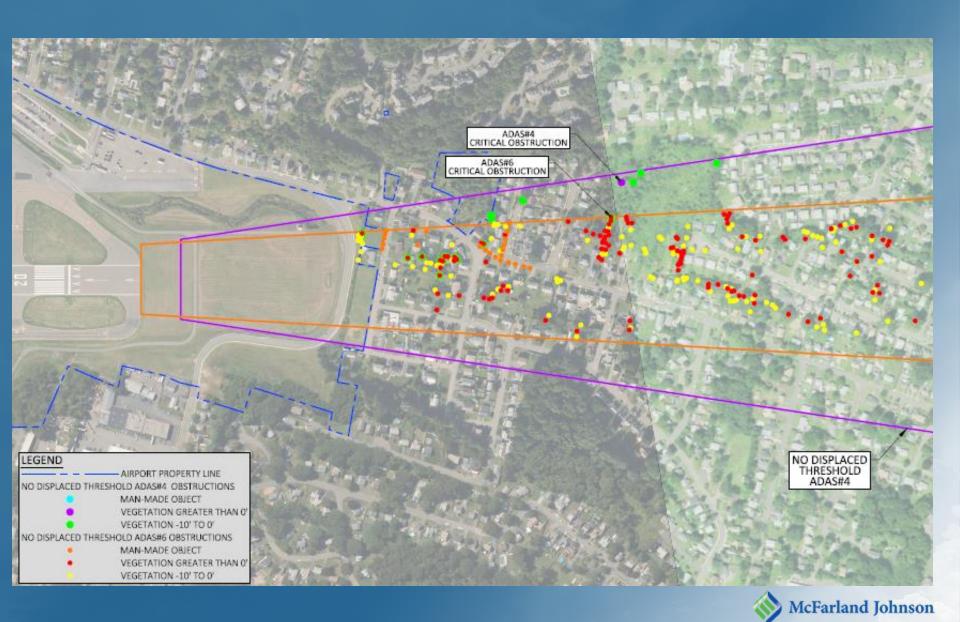
Terminal Area Plan



Obstruction Review – Existing RWY 2

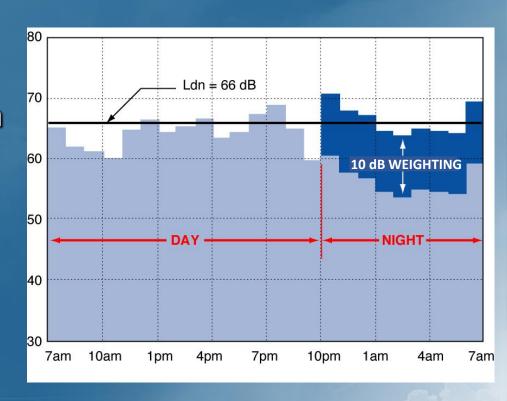


Obstruction Overview – Proposed RWY 20



Cumulative Exposure: Day Night Average

- DNL day night average
- Describes 24-hour exposure
- Noise from 10 pm to 7 am is factored up by 10 dB
 - Equal to 10-fold multiplier
- FAA requires annual average DNL for land use compatibility assessment





Aircraft Noise Modeling

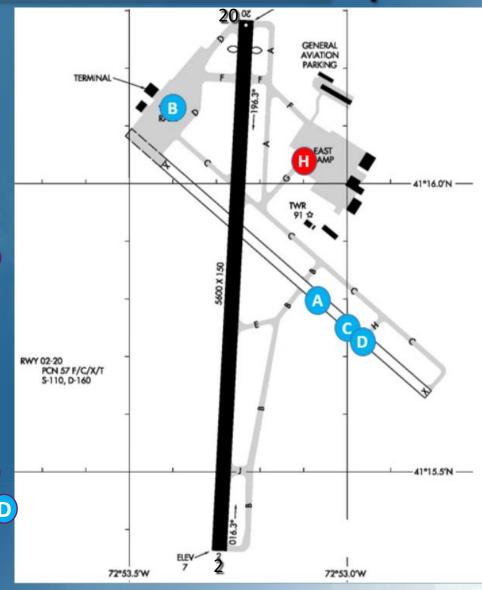
- We must use FAA-approved model
 - FAA's Aviation Environmental Design Tool (AEDT)
- Required noise modeling inputs
 - Airport layout
 - Annual average meteorological data
 - Terrain
 - Aircraft operations by day/night for existing conditions and forecast 2040
 - Runway utilization rates by aircraft categories
 - Flight track geometry and use by aircraft categories





Airport Layout Plan Noise Model Inputs

- One runway
 - Runway 2/20
 - Extended 699' south and 336' north for Approved Forecast 2040
- Modeled helipad location •
- Modeled engine runup locations
 - Piston-engine aircraft
 - Jets idling at terminal
 - Existing jet bridge location B
 - Future jet bridge locations CD







Modeled Aircraft Operations

Annual Operations							
Scenario	Air Carrier Size Jet	Small Jet	Turboprop	Piston	Helicopter	Total Operations	
Existing Conditions	2,908	5,064	1,863	15,227	157	25,219	
Approved Forecast 2040	3,944	5,322	1,959	16,240	166	27,631	
Annual Average Day Operations							
Scenario	Air Carrier Size Jet	Small Jet	Turboprop	Piston	Helicopter	Total Operations	
Existing Conditions	8.0	13.9	5.1	41.7	0.4	69.1	
Approved Forecast 2040	10.8	14.6	5.4	44.5	0.5	75.7	

Scenario	Day	Night
Existing Conditions	94.0%	6.0%
Approved Forecast 2040	93.7%	6.3%



Modeled Runway Use



Jet Aircraft

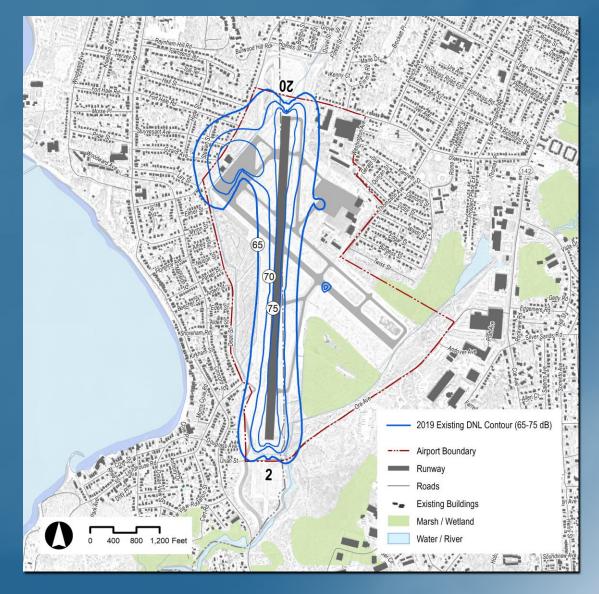


Non-Jet Aircraft

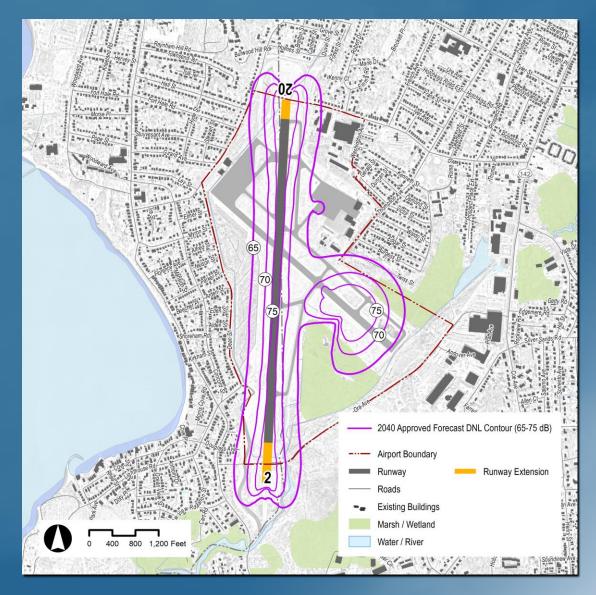




Noise Exposure – Existing Conditions

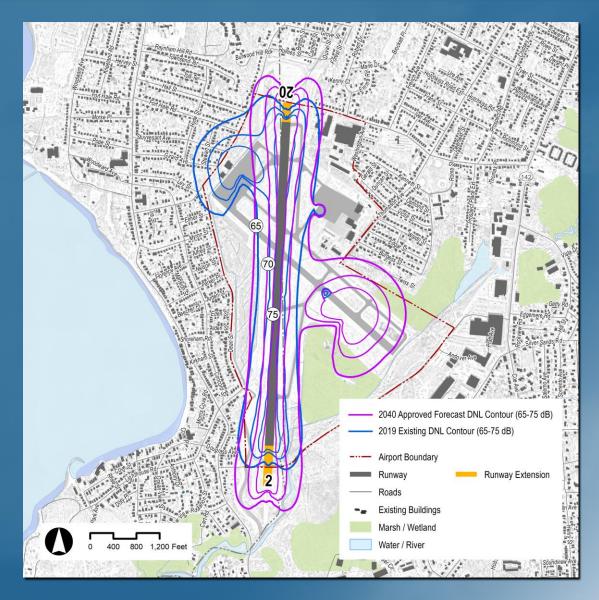


Noise Exposure – Approved Forecast 2040





Comparison of Existing & Forecast DNL





Next Steps

- Airport Layout Plan FAA Approval
 - Projects must be shown on the ALP for funding eligibility
 - Approval of the ALP is conditioned upon National Environmental Policy Act (NEPA) completion
 - Design and construction is subject to funding availability
- Financial and implementation plan
- Master plan completion

After the Master Plan

- National Environmental Policy Act (NEPA) process
 - Project purpose and need is the foundation of NEPA documents
 - FAA will carefully review the purpose and need
- Continued public involvement
- Final design and permitting
- Begin implementation



Conclusion / Questions / Comments

 Master Plan Website: TweedMasterPlan.com

 Email: HVNMasterPlan@mjinc.com

