# Teterboro Users Group

6/19/2024

**PANYNJ** Initiatives





### **Current initiatives**

 NextGen - Northeast Corridor Industry Co-lead. Established surface meetings with local airport community for EWR/LGA/JFK to address operational concerns.

FAA CDM workgroup – SWAP 2024 and beyond. 4 focus areas.

TFDM – Electronic flight strips 2027-28

Florida Volume and Management Workgroup

Pathfinder workgroup

Vianair - Surface view

TEB Ramp Gridlock events

GreenLandings

**GreenLandings.Net** 



## **Areas of improvement for 2024**

### 4 key areas

#### We request your feedback on SWAP events

#### 1) Review of SWAP internal/external briefs with industry representation.

Objective – identify areas for increased focus and any potential missing guidance.

- This was a priority and completed expeditiously.
- > It is addressed going forward as well.
- SWAP briefings will be conducted at the April NCF.
- East North Industry Engagement Call will occur 5/15.
- Follow-up call within 60 days.
- TMOs will update facilities.
- > Timing will allow for plan evaluation and aid in identifying areas in need of improvement.

#### 3) Advance Plan/PERTI

Objectives - Tie forecast to schedule peaks.

- Identify regional discussions for next day.
- Focus on airport construction and airports at risk for surface constraints.
- > Look at review process.
- > The regionally focused SPTs have been a success.
- These calls are typically planned during PERTI and have led to more granular discussions when constraints are likely to occur.
- > Better information is being provided on surface issues (surface workgroup by-product).
- > EN DDSO office provides feedback/review.
- > Schedule and timing of weather still something to consider. Will continue to engage industry.

#### 2) Enhance the Forecast.

Objectives - Adding low probability forecasts to properly identify risk.

- Fill in gaps between TAF and TCF through increased collaboration.
- > Long term improvement of the TCF.

This tasking was moved to the service area level.

- TMOs worked with CWSU to develop "hotspots" within airspace; areas where deviations cause significant disruption.
- This mapping will be shared with industry via SWAP briefings.
- To date no improvement has been made with the TCF.
- > Local focus has been upleveled. Meteorologists forecasting on a broader scale need to be addressed.

#### 4) Ad Hoc Routes and Offloads

- > Objectives- Identify availability of traditional offloads and work ad hoc routes in lieu of
- Earlier interaction with NAVCANADA
- Memorialize successes and add to playbook
- Provide re-route guidance in SWAP statements
- > SWAP statement enhancement to include route guidance and increased frequency has occurred.
- NAVCANADA has been engaged and outlook provided for upcoming season (similar to 2023).
- Several playbook routes have been added or updated
- Creation of ad hoc routes maybe be limited by range (destination).



# Vianair ADSB Receiver

Multi function program

Procedure design

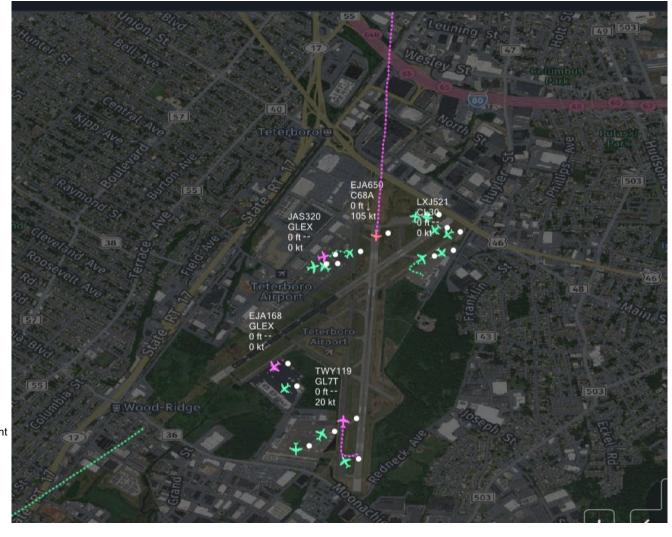
Noise analysis

Performance metrics tracking

Airspace efficiency

Allows for system replays

Combines FAA System Wide Information Management (SWIM) with real-time surveillance





Sustainability, Quality, Safety and Profits

## **TEB GreenLandings® Initiative**

### Phase 1 (Dec 28, 2022 - Apr 30, 2023)

- Data collection
- TEB airport, traffic, CO2, noise, etc. analysis
- GreenLandings.Net web site, GreenLandings® video
- TEB GreenLandings ® Phase 1 Report

### Phase 2 (May 15, 2024 - Nov 15, 2024) Passive Flow Management

- Expanded analysis of GreenLandings® initial values and starting parameters
- Educate TEB operators, pilots and local community about GreenLandings® operation and benefits
- Secure TEB GreenLandings® Phase 3 funding
- Dynamic, real-time passive landing queue information available to pilots and dispatchers on the web.

### Phase 3 (Dec 1, 2024 forward) Pilot Centric Active Flow Management

 Fully functional, active GreenLandings® operation with RTA sent to participating pilots, automated daily data collection and reports

## TEB Hourly Arrivals – May 2024



Data provided by **PANYNJ** 

## Capacity Available

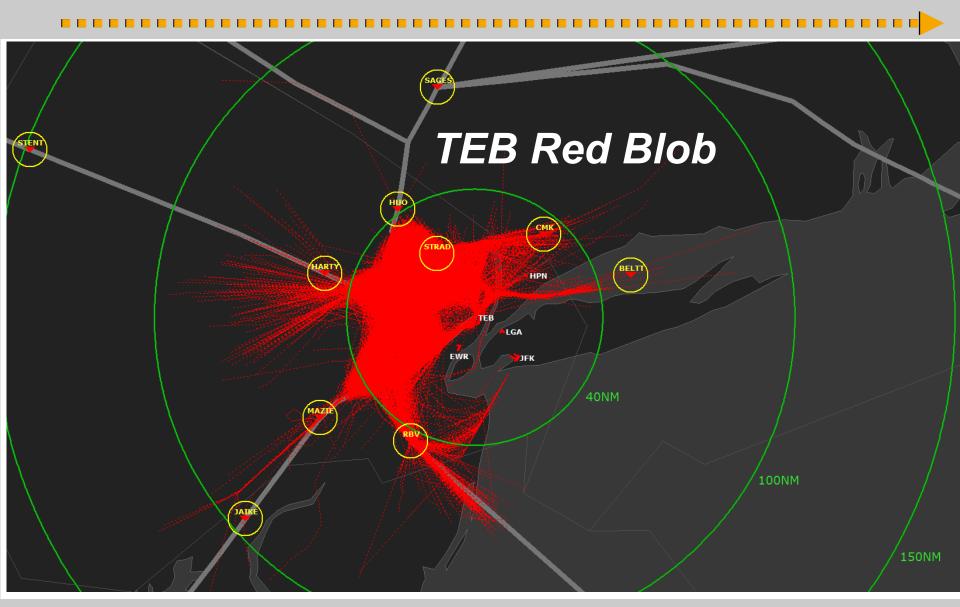
### Newark 2024-06-16





Data provided by <u>AERA Air Ops View</u> and <u>FAA AADC Web Sites</u>

### **TEB Current Noise Footprint At or Below 5,000'**



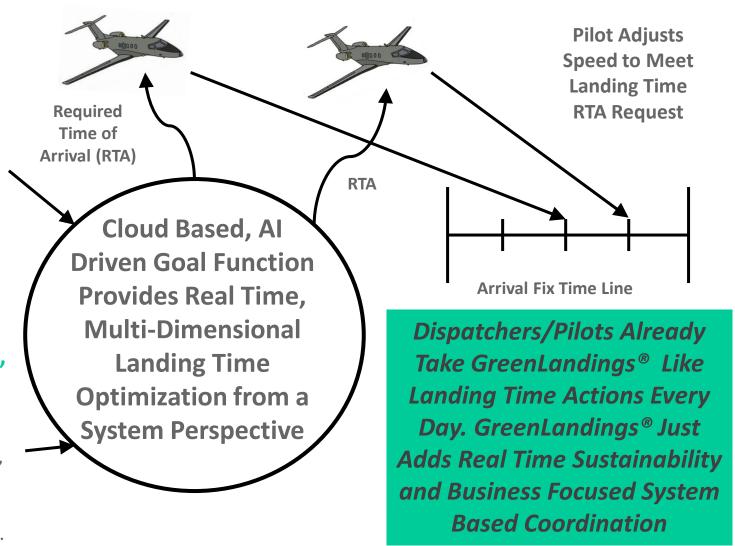
### **Ops Concept for Pilot Centric Delay Solution**

# Big Data "Day of" Predictions

Cornerpost, landing and gate ETA, enroute speed, altitude and path, weather, etc. (SWIM, Flt Plan, FMS, ADS-B/C, airport capacity, runway direction, etc.), starting hours prior to landing.

# Operator "Day of" Business Goals

CO2 Reduction, schedule, connections, gate availability, maintenance, crew legalities, weather, etc.



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### **TEB GreenLandings® Phase 3 Benefit Potential**

Potential annual reductions of Flight Distance, Flight Time, Fuel, CO2 and Noise from 150 NM to landing, much of the noise at relatively low flight levels (5,000' and below) in the terminal area, includes:

- Excess Distance 799,490 NM
- Excess Time 2,529 hours
- Excess Fuel 989,885 gallons
- Excess CO2 19,797,695 pounds
- Excess Noise 368 square NM (5,000' and below, 79% of current TEB arrival noise footprint)

### Sustainability, Quality and Productivity

## **GreenLandings® Benefits**

- Increased on time arrival
- Reduced flight time
- Reduced fuel burn and CO2
- Reduced ramp congestion
- Improved product quality
- Less passenger stress
- Reduced ATC complexity and costs
- Defect Prevention

The rapid benefits make GreenLandings a huge win for operators, pilots, passengers, PANYNJ, the local community and environment.

## **QUESTIONS?**

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