

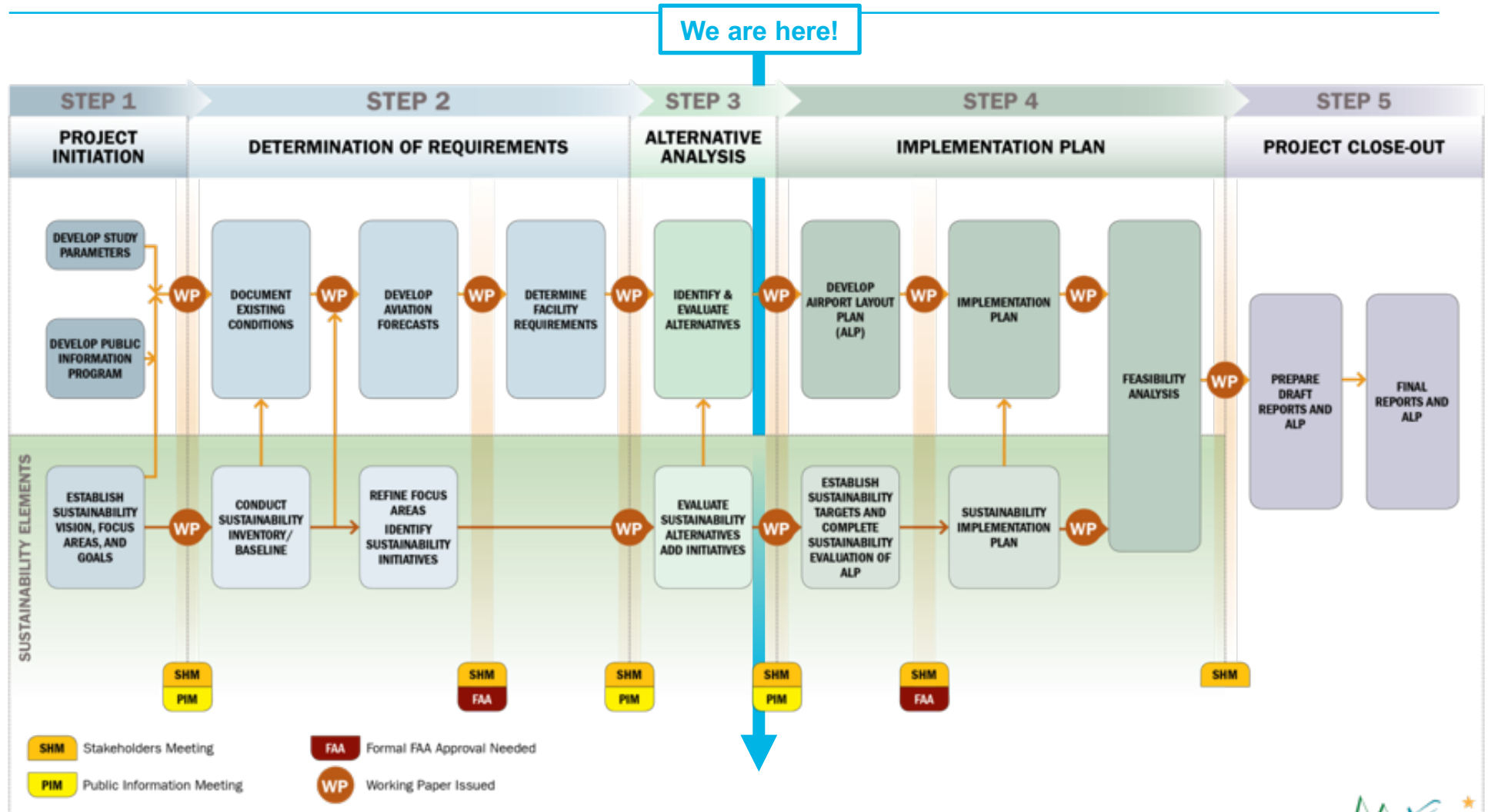


# Juneau International Airport

## Sustainability Master Plan

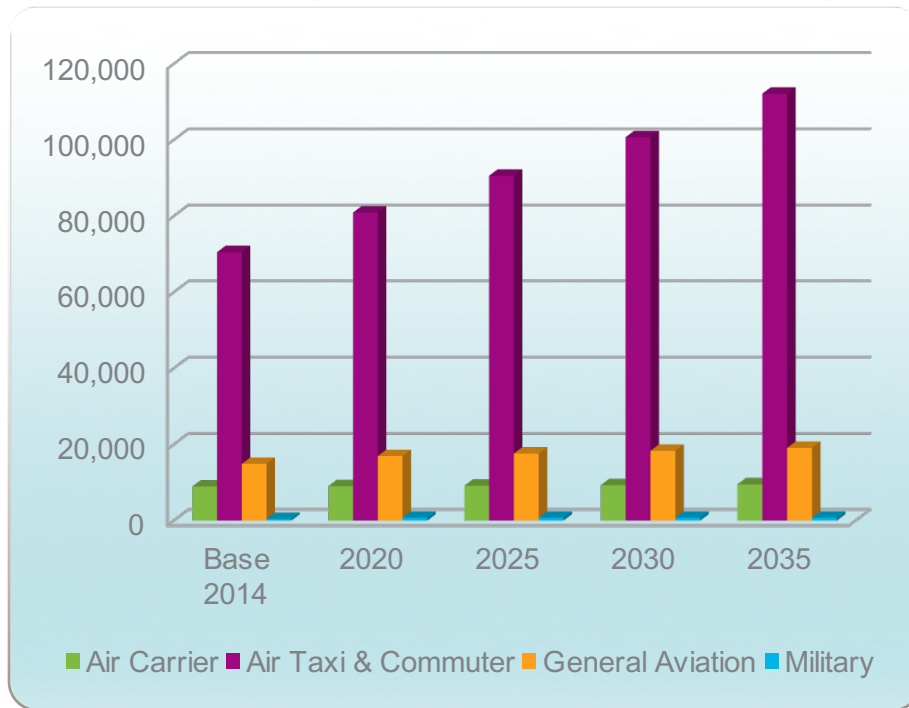
May 2016

# The SMP Process

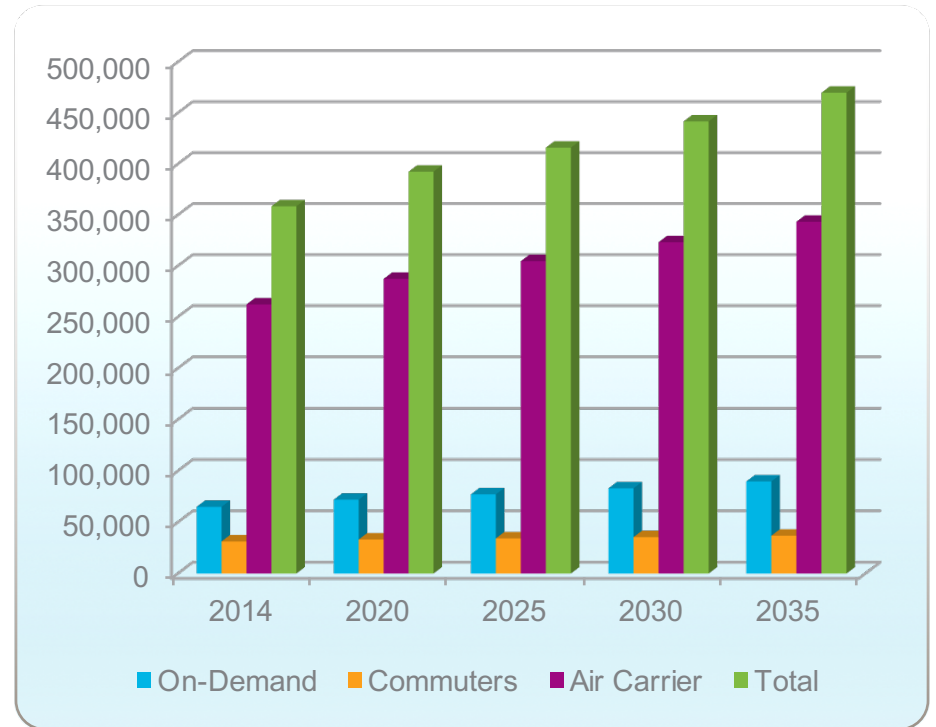


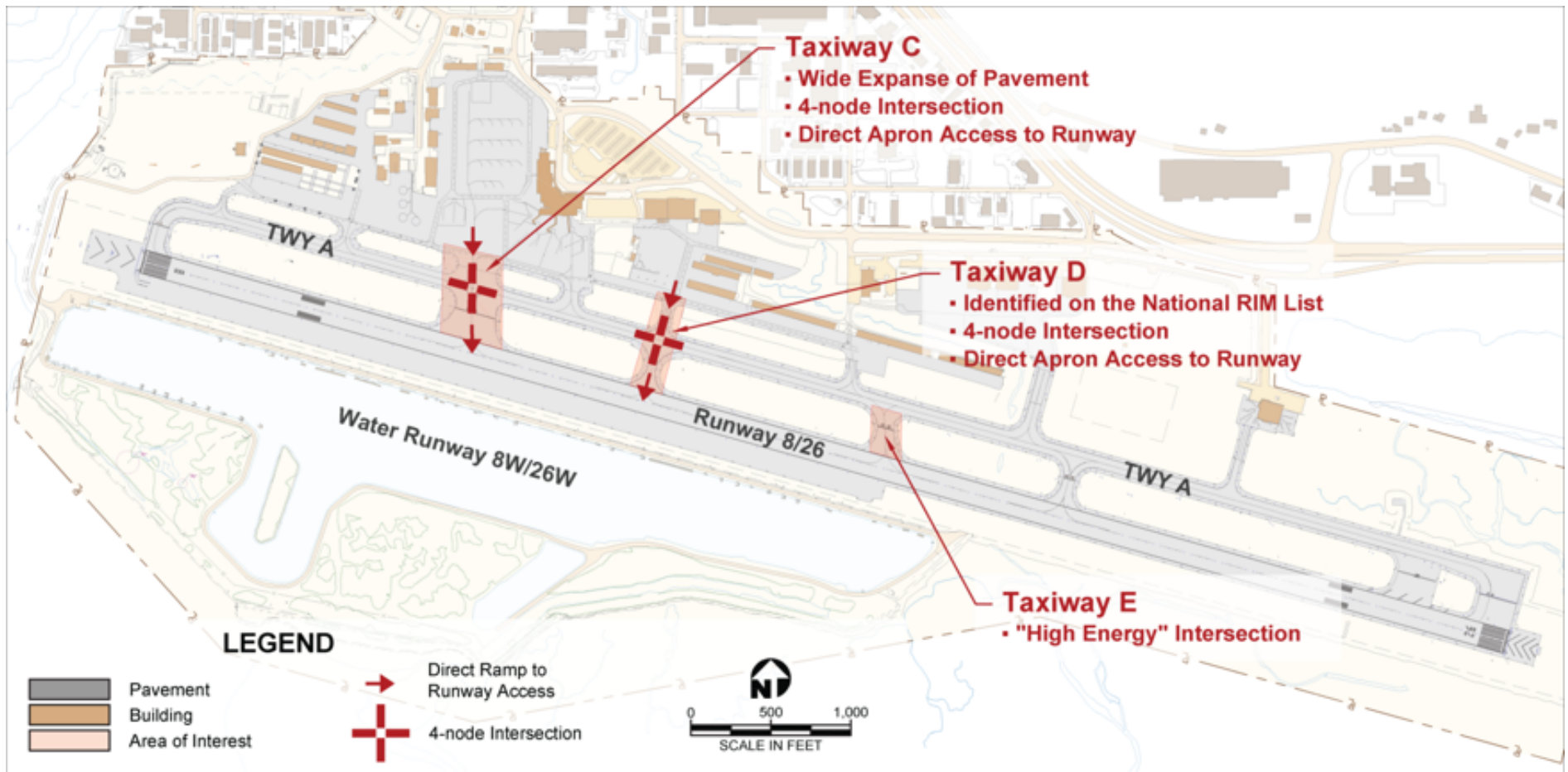
# Forecasts of Aviation Demand

## Forecast of Annual Operations



## Forecast of Annual Enplaned Passengers





## Identified Taxiway Issues at JNU

## 46 Incidents Recorded at JNU between 2004 and 2015

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Taxiway C – 5 incidents (4 involved pilots crossing the hold line without clearance)

Taxiway D – 7 incidents – enough to be included on FAA’s RIM high priority list

Taxiway E – 2 incidents

*Remaining 32 incidents involved:*

*Failure to comply with ATC instructions or failure to communicate with ATC – 14*

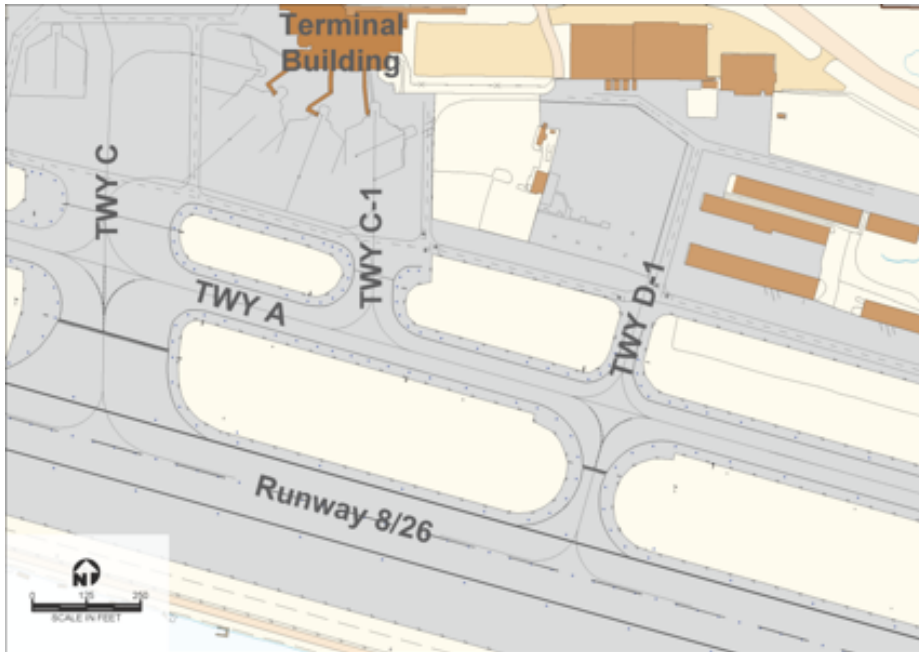
*Runway incursion by vehicles, snow removal equipment or pedestrian – 7*

*Incidents related to construction project - 11*

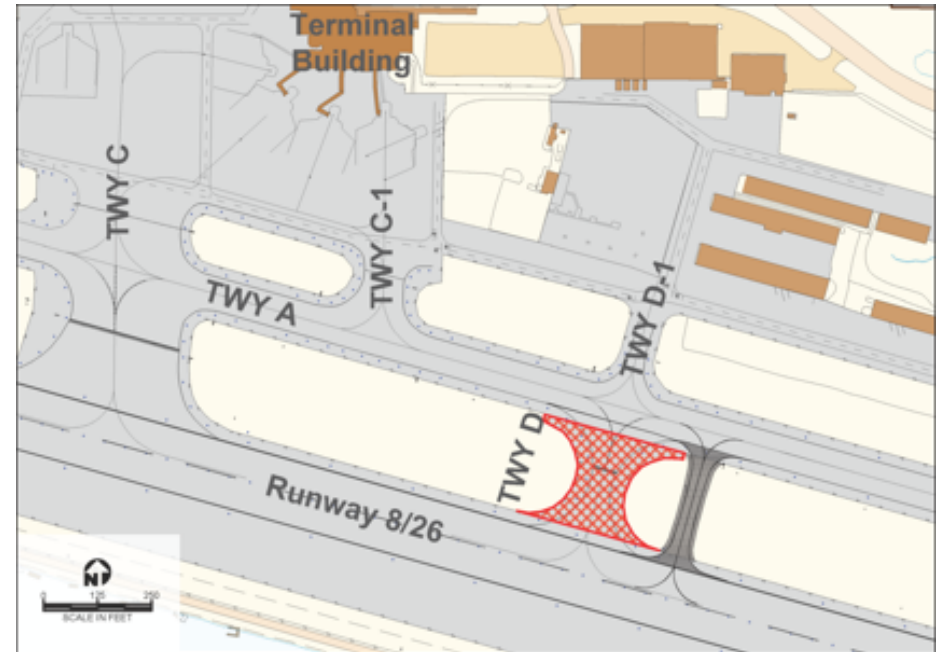




# Taxiway D Identified in FAA's Runway Incursion Mitigation Program

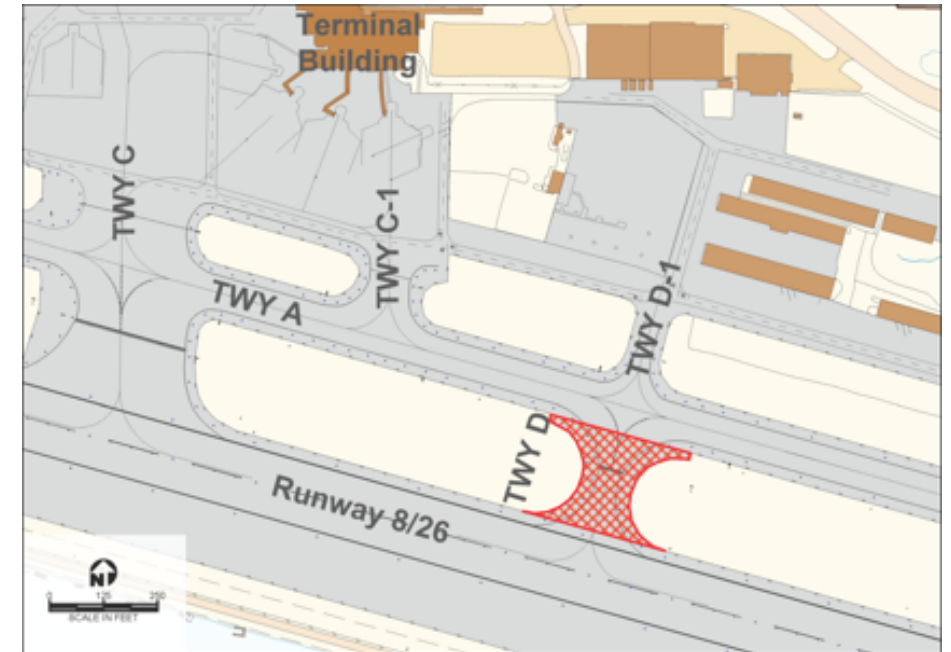
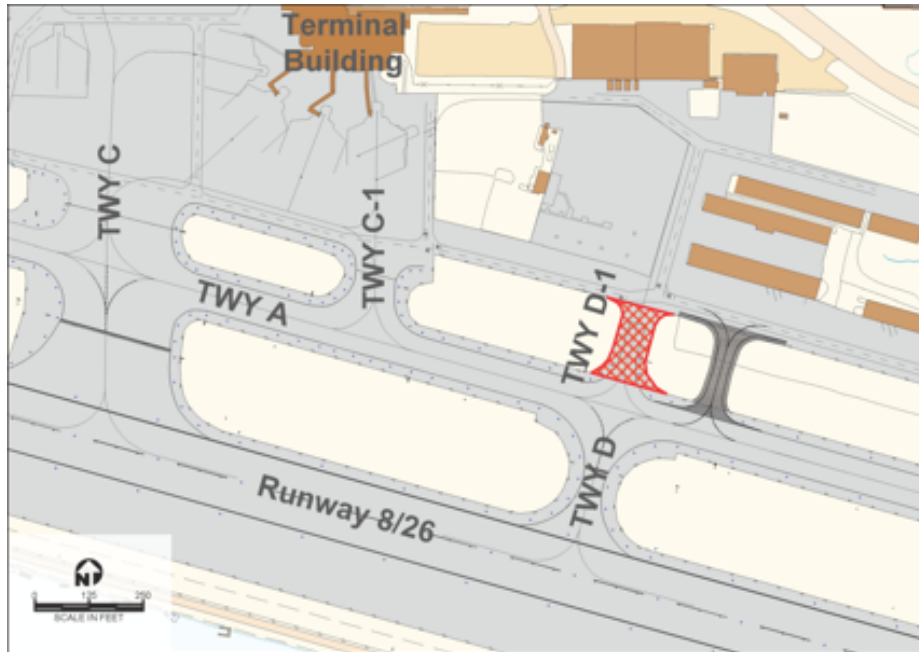


Alternate 1 – Do-Nothing



Alternate 2 – Reposition Taxiway D

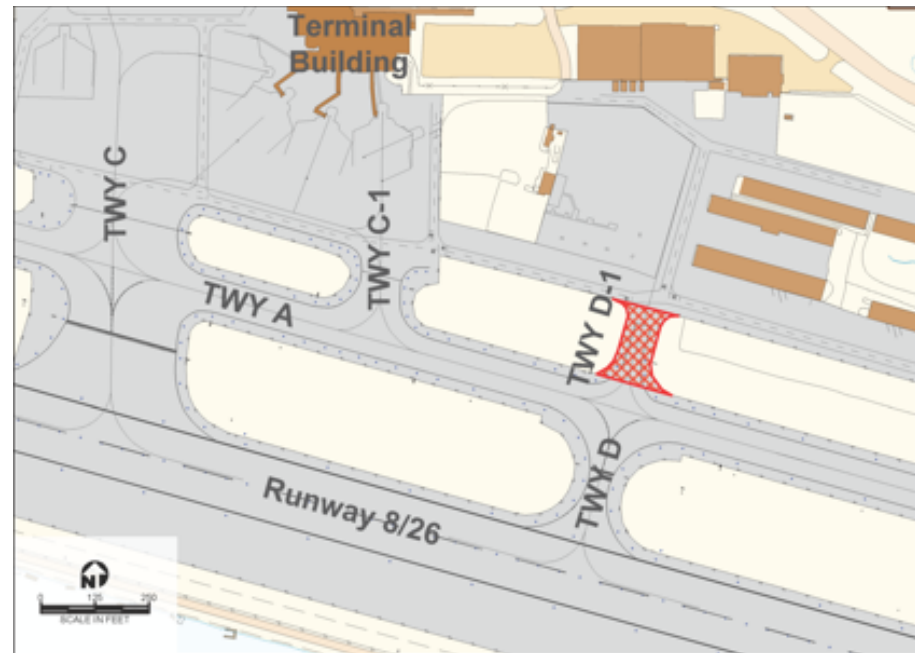
# Taxiway D Identified in FAA's Runway Incursion Mitigation Program



Alternate 3 – Reposition Taxiway D-1

Alternate 4 – Close Taxiway D

# Taxiway D Identified in FAA's Runway Incursion Mitigation Program



Alternate 5 – Close Taxiway D-1



# Taxiway D Recommendation

	Alternative 1 Do Nothing	Alternative 2 Reposition TW D	Alternative 3 Reposition TW D1	Alternative 4 Close TW D	Alternative 5 Close Taxiway D-1
Improve Safety	No	Yes	Yes	Yes	Yes
FAA Criteria	No	Yes	Yes	Yes	Yes
Operational Impacts	No	Yes	Yes	Yes	Yes
Cost	None	\$2,039,333	\$1,018,057	\$36,400	\$36,400
Environmental Factors	None	None	None	None	None
Impact on Sustainability	None	None	None	None	None

## Recommendation

- Relocate Taxiway D1 to address the primary safety concern.



# Taxiway E

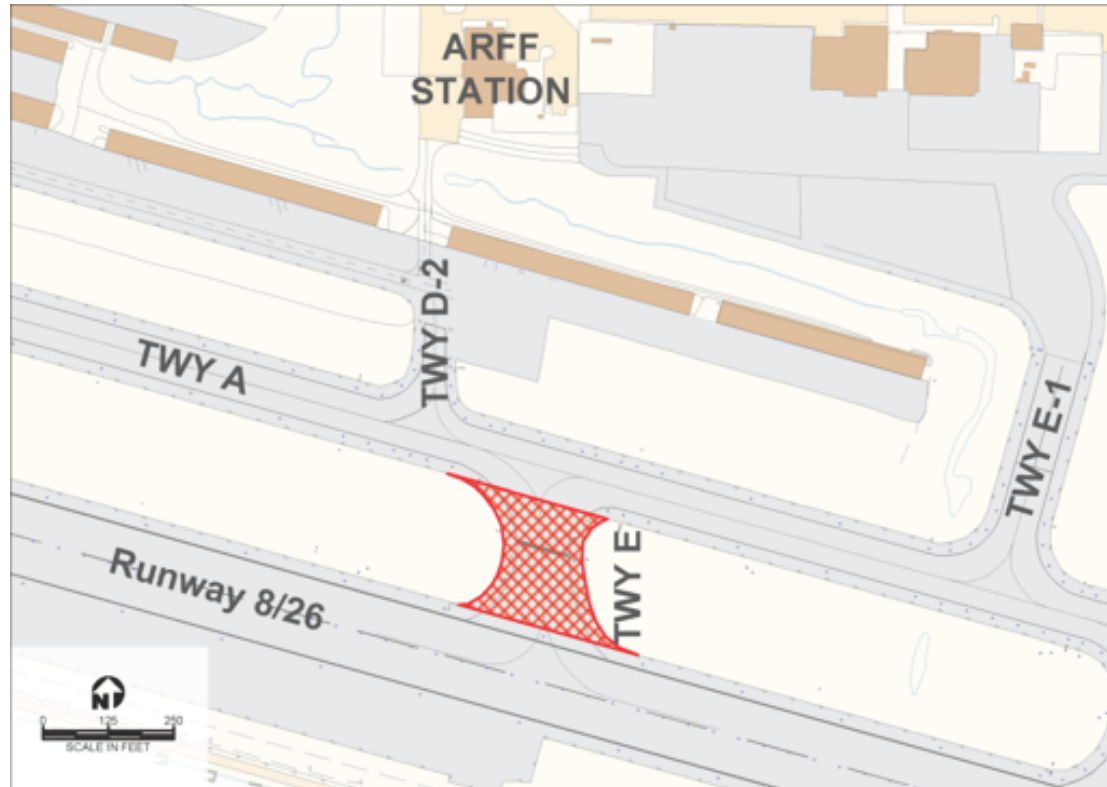


Alternative 1 - Do-Nothing



Alternative 2 – Realign and Remark Taxiway

# Taxiway E



## Alternative 3 – Close Taxiway E

# Taxiway E Recommendation

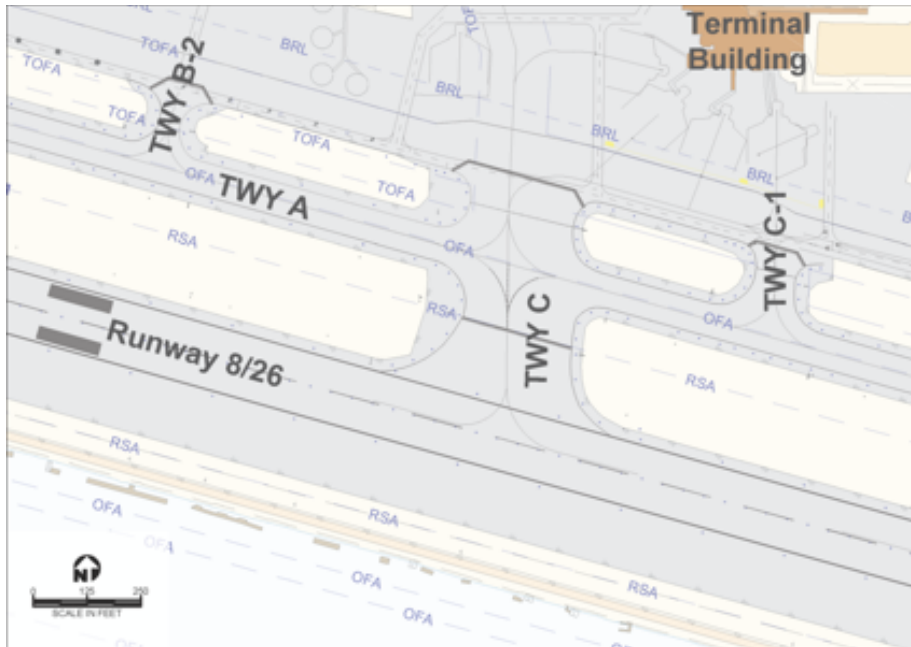
	Alternative 1 Do Nothing	Alternative 2 Realign and Remark Taxiway	Alternative 3 Close Taxiway E
Improve Safety	No	Yes	Yes
FAA Criteria	No	Yes	Yes
Operational Impacts	No	Yes	Yes
Cost	None	\$2,039,333	\$36,400
Environmental Factors	None	None	None
Impact on Sustainability	None	None	None

## Recommendation

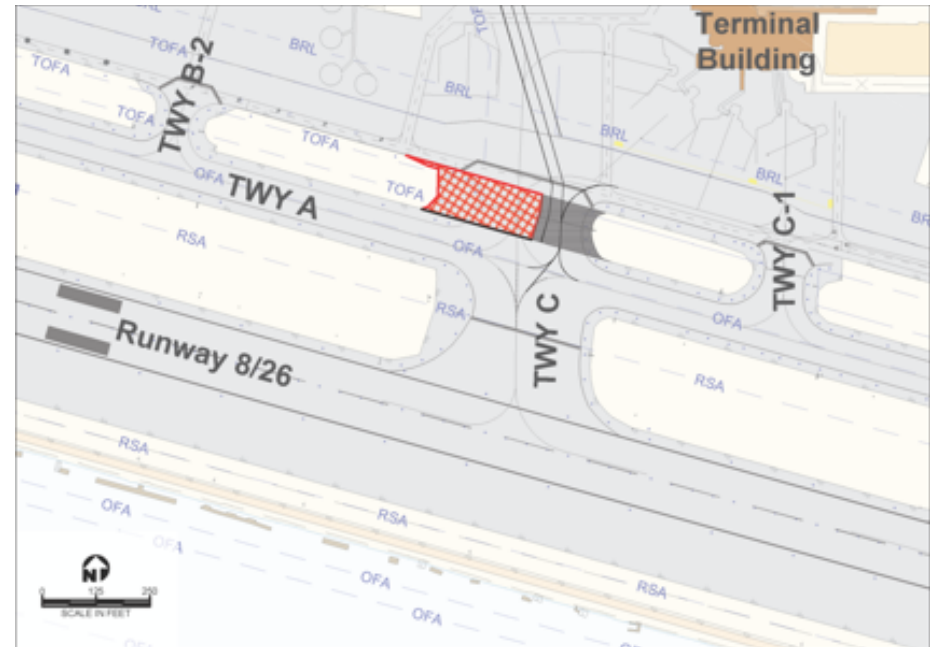
- Realign Taxiway to standard configuration.



# Taxiway C



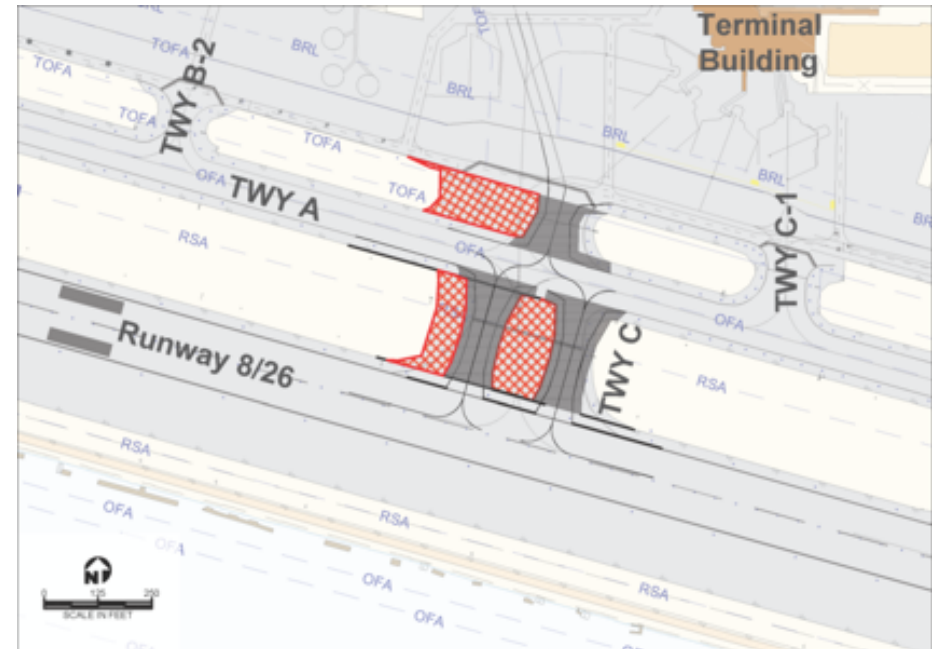
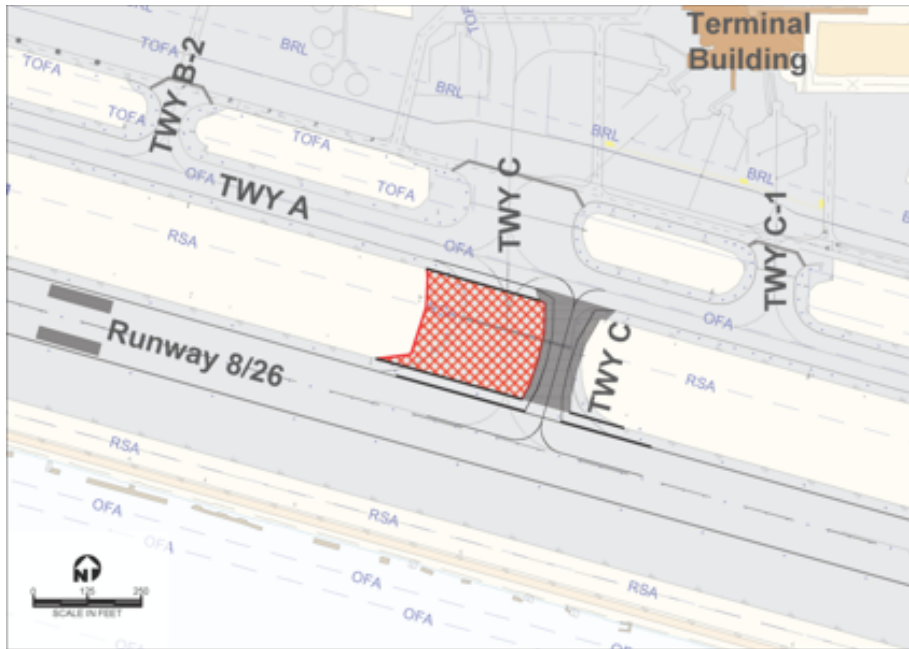
Alternative 1 - Do-Nothing



Alternative 2 - Realign Ramp Connection



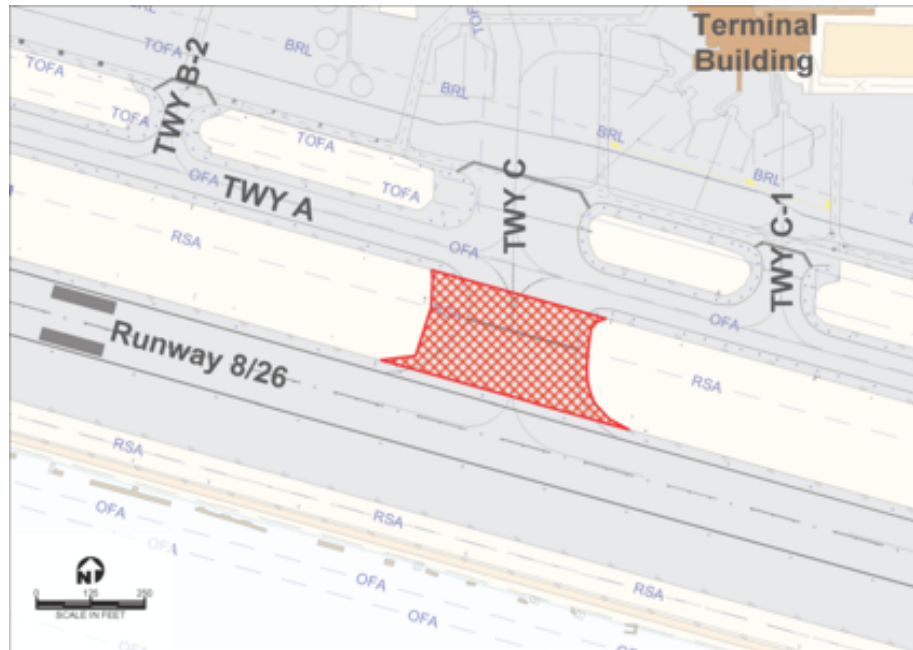
# Taxiway C



Alternative 3 - Realign Runway Connection

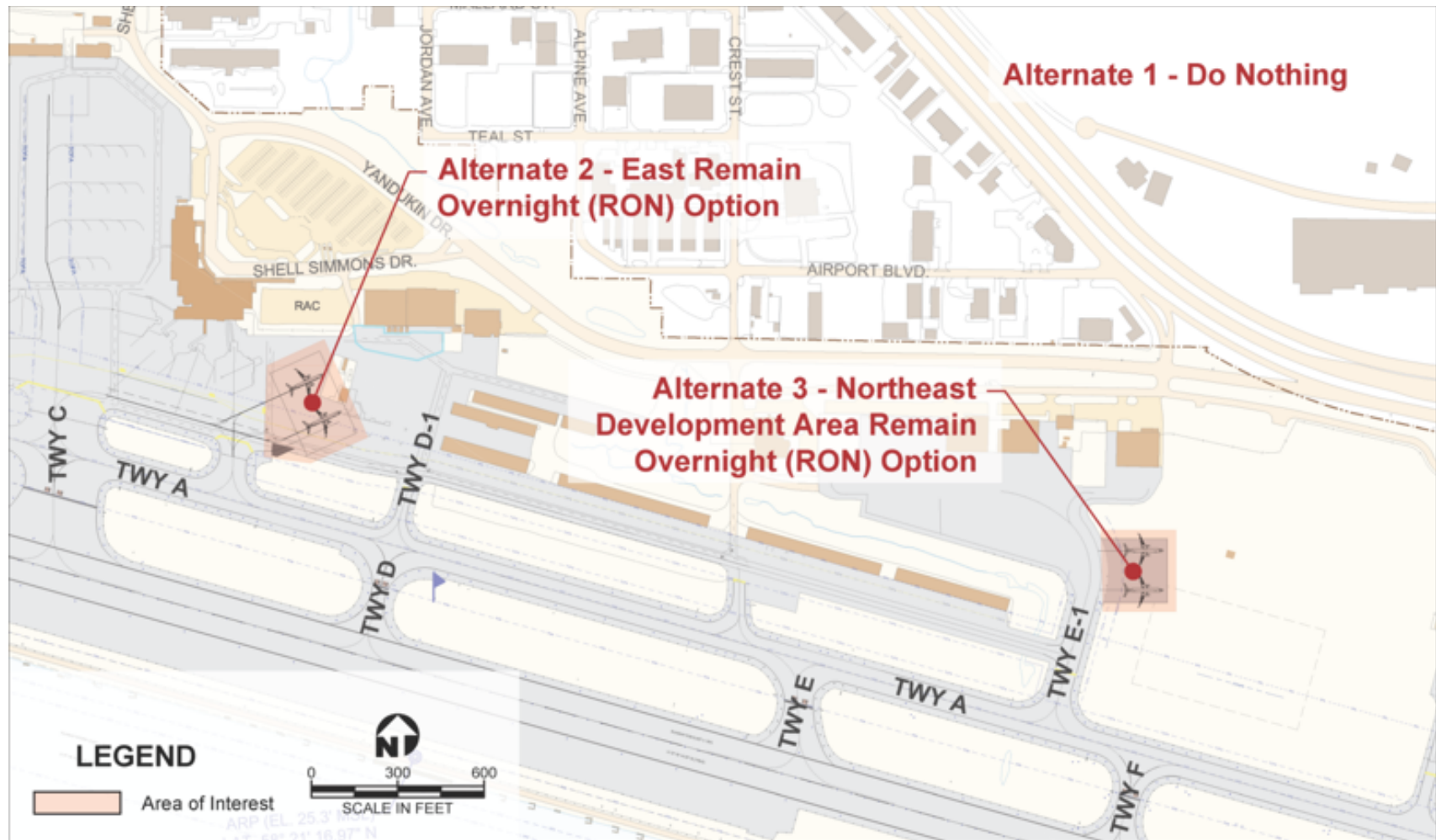
Alternative 4 – Mark as Dual Taxiway

# Taxiway C



Alternative 5 – Close Taxiway

# Remain Over Night Parking (RON) Positions



# RON Recommendation

	Alternative 1 Do Nothing	Alternative 2 Eastern Positions	Alternative 3 RON in NE Development Area
Accommodate Demand	No	Yes but relocates other uses.	Yes
Terminal Adjacency	N/A	250 ft.	4600 ft.
FAR Part 77	Compliant	Compliant	Compliant
Ground Service	Yes	Yes	Yes
Cost	\$0	\$4,630,360	\$4,120,000
Sustainability	None	None	None

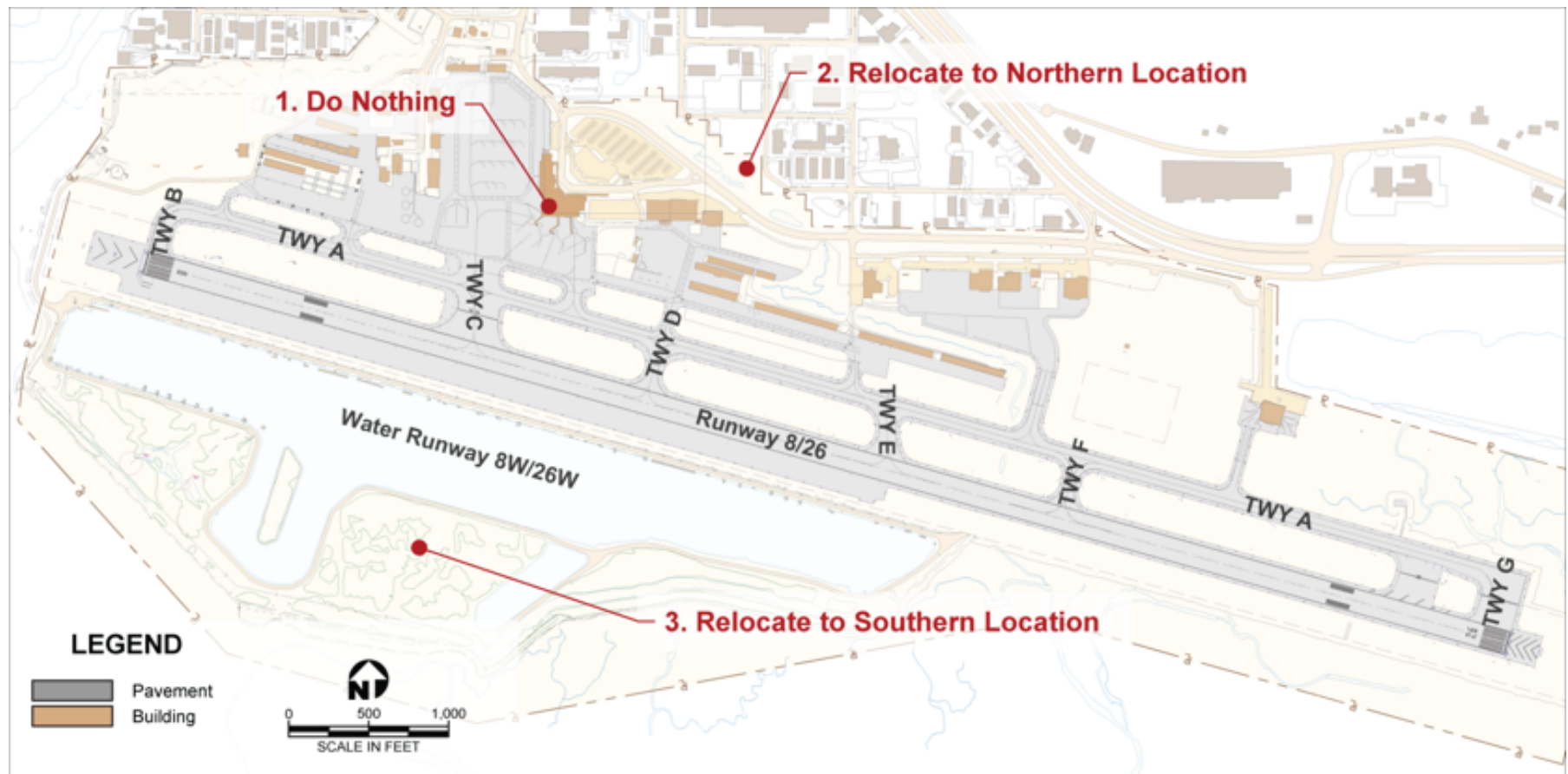
**Note:** The cost associated with Alternative 2 includes relocation of current buildings and helicopter landing area.

## Recommendation

- Provide the RON positions east of the terminal.
- Requires relocation of helicopter operations.



# ATCT Locations





# ATCT Recommendation

	Alternative 1 Do Nothing	Alternative 2 Northern Relocation	Alternative 3 Southern Relocation
Line of Sight	Yes	Yes	Yes
Aircraft Recognition	Good	Good	Good
Airspace	Yes	Yes	Yes
Utilities	Yes	Yes	No
Access	Yes	Yes	No
Cost	\$0	\$5,834,500	\$8,134,500
Environmental Factors	None	Yes	Numerous
Impacts on Sustainability	None	None	None

## Recommendation

- Work with FAA to relocate the ATCT.
- Preserve the airport land on the opposite side of Yandukin Road for this purpose.



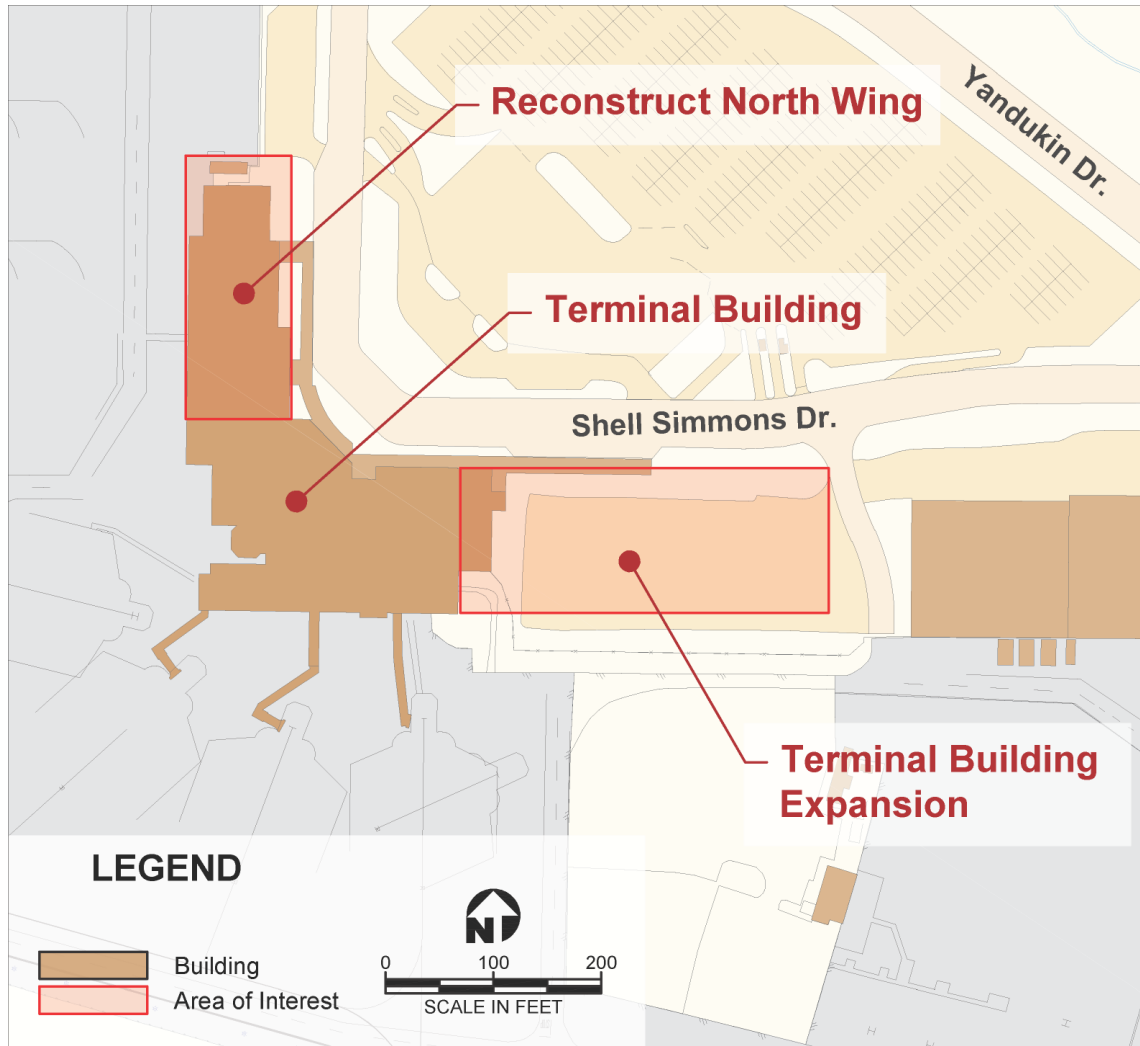
# Air Cargo Positions



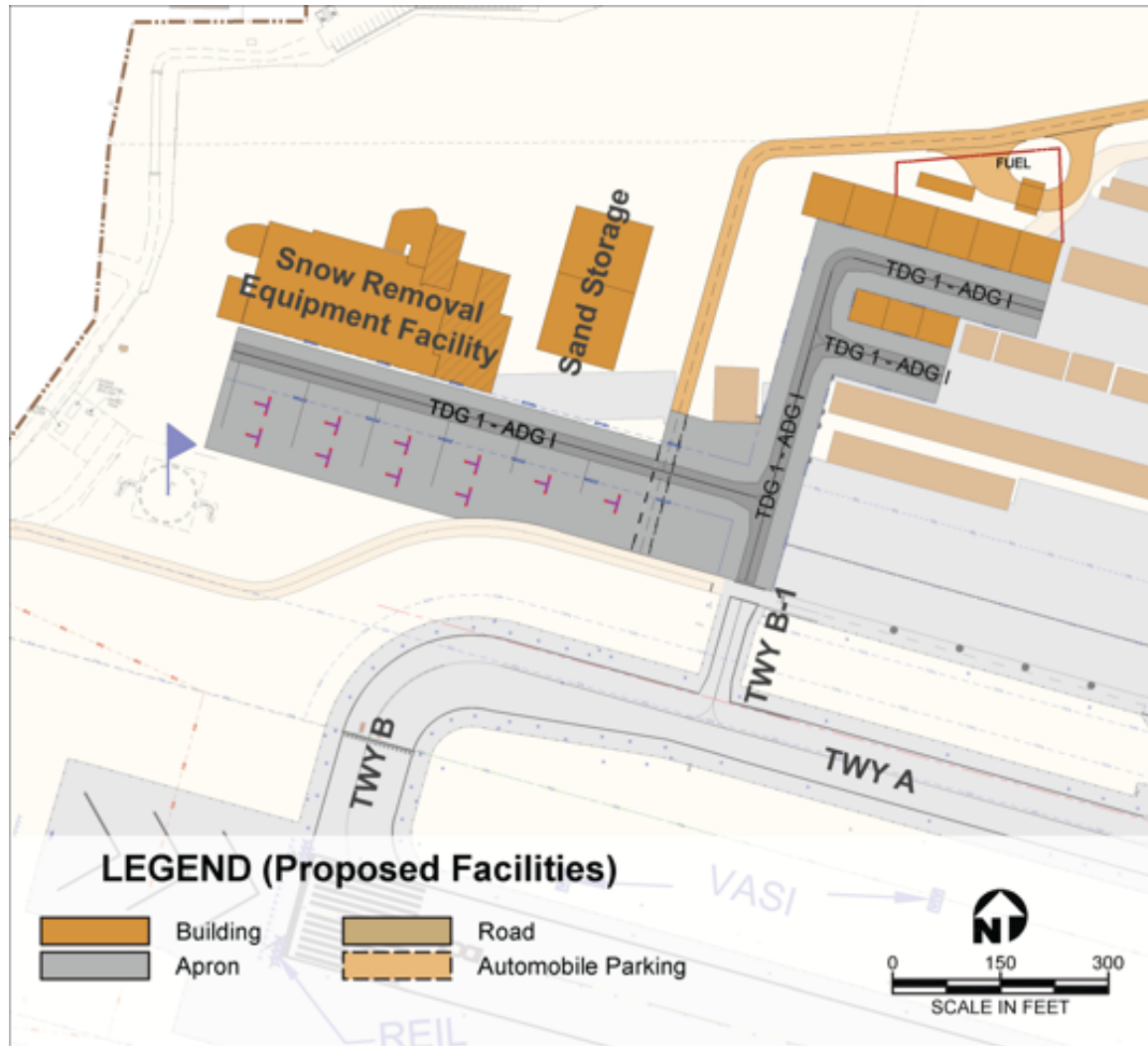
# Relocated Helicopter Operations Area



# Recommended Terminal Expansion

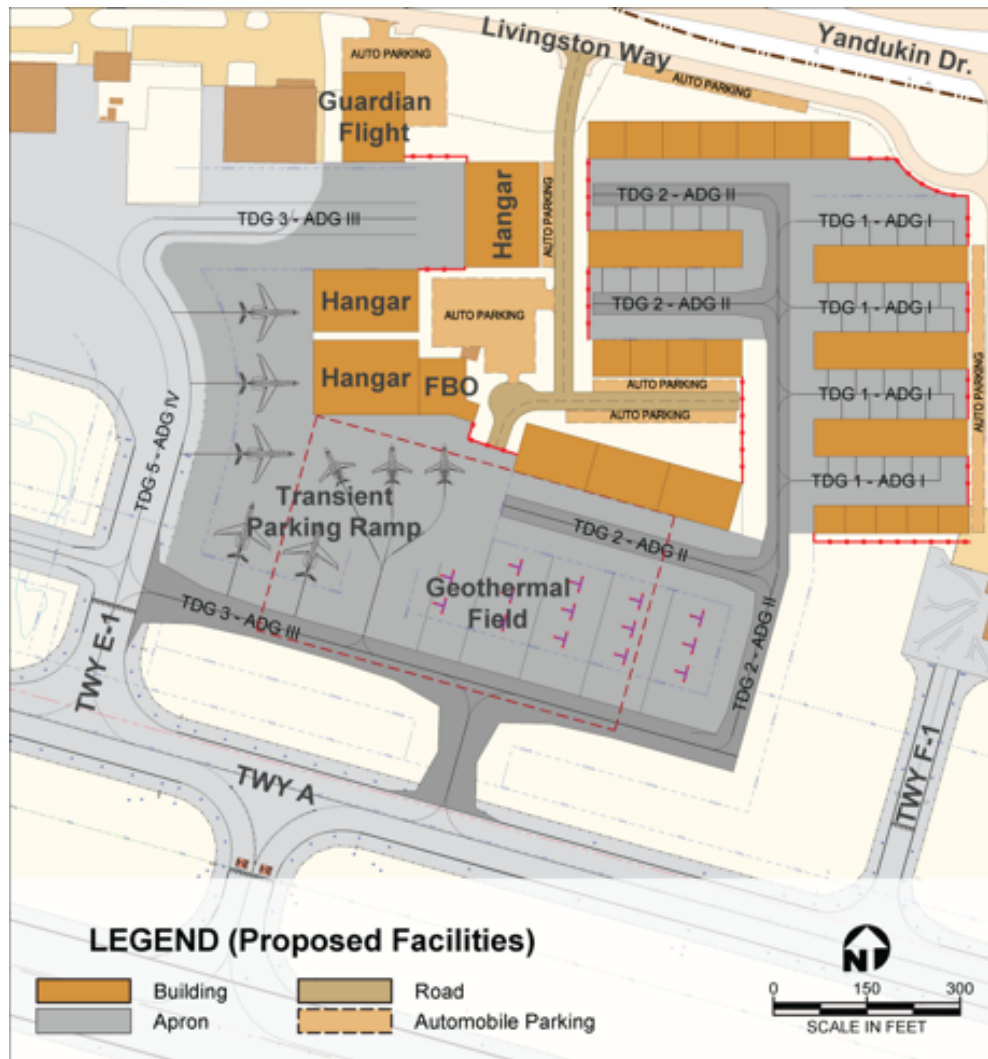


# General Aviation Development – West Area

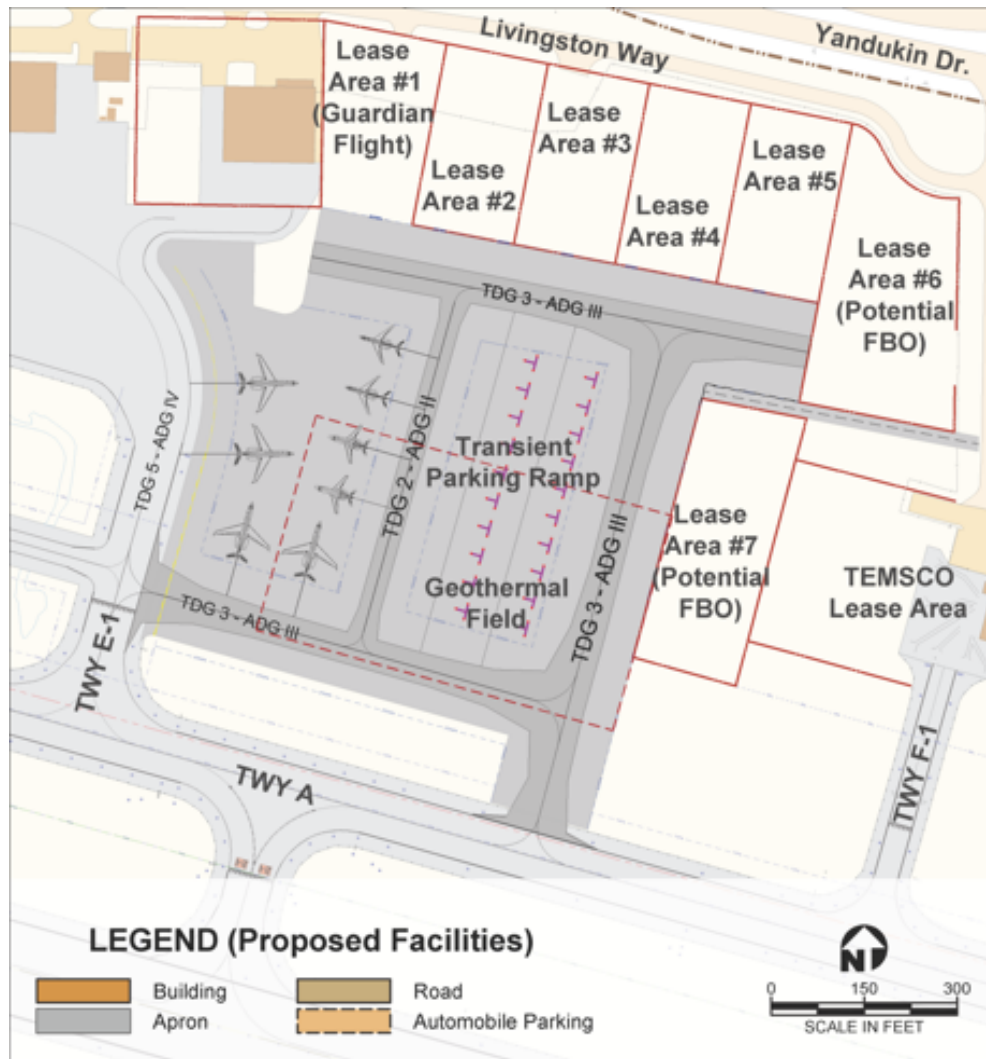




# General Aviation Development – East Area Option 1



# General Aviation Development – East Area Option 2



# Next Steps

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- Finalize the Airport Layout Plan
- Develop Implementation Plan
- Financial Feasibility Analysis





# Questions/Discussion