

Burlington International Airport Airport Master Plan Update

Regional Advisory Committee Meeting # 4

February 12, 2020

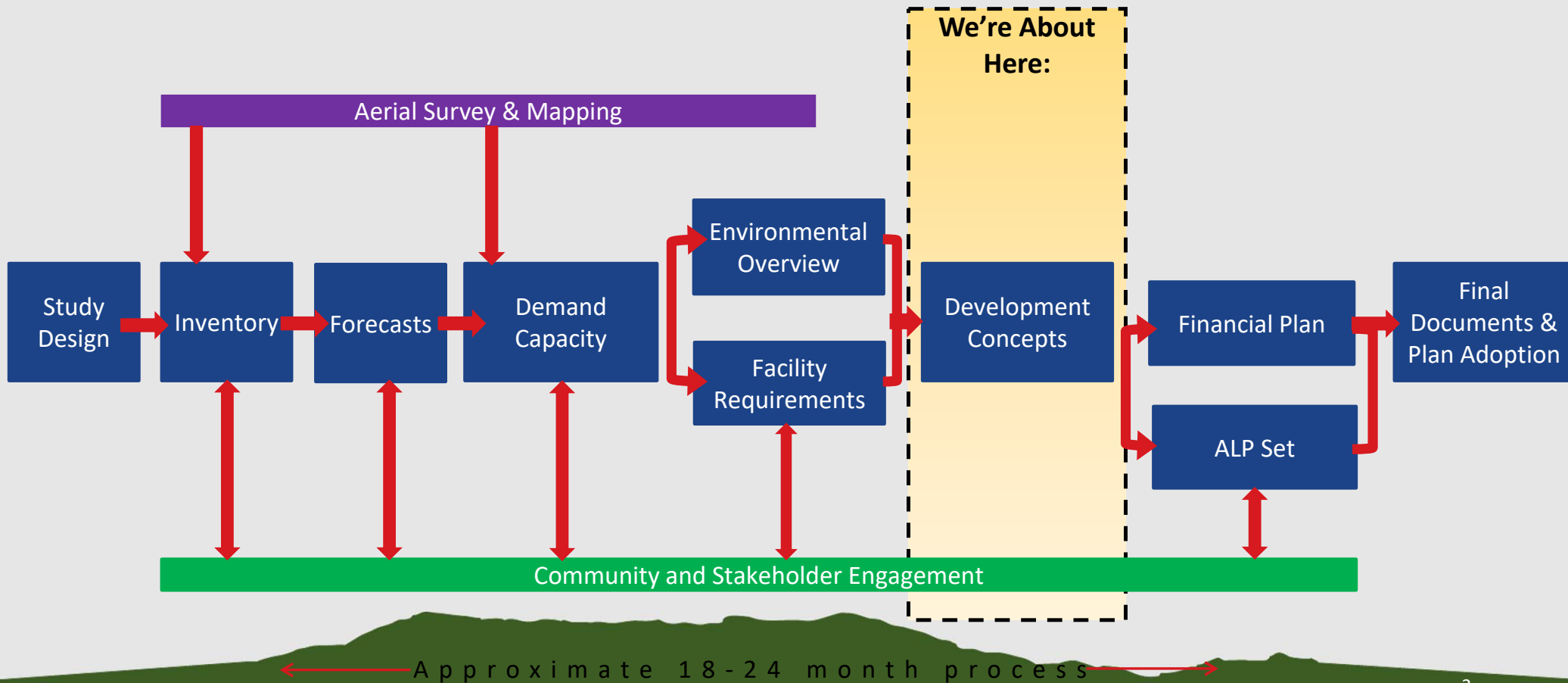


AGENDA

- Introductions
- Status of the Master Plan Update
- Passenger & Tenant Survey
- Forecast & Facility Requirement Summary
- Development Concepts
 - Access Roads
 - Passenger Terminal Building Concept
 - Airport Maintenance Building Relocation
 - GA and Air Cargo Improvements
 - Airfield Safety Improvements
- Next Steps



STATUS OF AIRPORT MASTER PLAN



Passenger/Tenant Experience

- TAC/RAC Input
- Passenger Experience
- Tenant Experience

 Burlington International Airport

Burlington International Airport

A SWOT analysis is a strategic planning tool that identifies an organization's *Strengths, Weaknesses, Opportunities and Threats*.

As a member of the Advisory Committee, you will help steer the Airport Master Plan for the Burlington International Airport for the next 10-20 years, by providing feedback on the strengths and weaknesses. Your information will be used to stimulate conversations and decisions by September 7.

1. Please list up to 3 Strengths

Strength 1

Strength 2

Strength 3

2. Please list up to 3 Weaknesses

Weakness 1

Weakness 2


Weakness 3

3. Please list up to 3 Opportunities

Opportunity 1

Opportunity 2

Opportunity 3


 Burlington International Airport

We need YOUR help! By answering the following questions, you will influence the future facility needs of the airport. Please let us know in this short survey (3 minutes or less), which is part of our Master Plan Study looking at the needs of the Burlington International Airport (BTV) over the next 10-20 years. Thank you for your help!

* 1. Are you departing on a flight out of Burlington today?

Yes

No

 Burlington International Airport

BTV Tenants Survey

We need YOUR help! By answering the following questions, you will influence the future facility needs of the airport. Please let us know in this short survey (3 minutes or less), which is part of our Master Plan Study looking at the needs of the Burlington International Airport (BTV) over the next 10-20 years. Thank you for your help!

* 1. About what percent of time do you use each runway? (enter a number, do not include "%," must add to 100)

Runway 1-19

Runway 15-33

2. What apron do you use?

Near Heritage/Pratt & Whitney

Near Vermont Flight Academy/Alert Hangars

Near Taxiway A/Runway 1

3. Are you planning on adding aircraft to your fleet?

Yes

No

Passenger & Tenant Survey Results

1,200 passengers responded to the survey. **Key findings:**

- Why did you choose BTV – “location”
- 97% passengers indicated that traffic was not an issue getting to the airport
- 40% passengers indicated TSA took longer than expected
- 55% indicated here is insufficient food vendors
- 52% indicated there were no delays exiting the airport



FORECAST SUMMARY



RECOMMENDED FORECAST

Year	Enplanements	Total Operations					Based Aircraft
		Air Carrier	GA	Cargo	Military	Total	
2017	591,558	21,467	37,332	1,396	8,567	68,762	92
2018	667,004	24,082	37,655	1,422	8,567	71,727	93
2023	695,171	24,480	39,449	1,563	5,954	71,446	97
2028	724,528	24,899	41,263	1,717	5,954	73,832	102
2033	755,124	25,340	43,101	1,886	5,954	76,281	106
2038	787,012	25,804	45,063	2,071	5,954	78,892	111
AAGR 2018- 2038	0.8%	0.3%	0.9%	1.9%	-1.8%	0.5%	0.9%
Growth 2018- 2038	18.0%	7.1%	19.7%	45.6%	-30.5%	10.0%	19.7%

AIRPORT FACILITY SUMMARY



Terminal – Ticketing & Baggage Screening

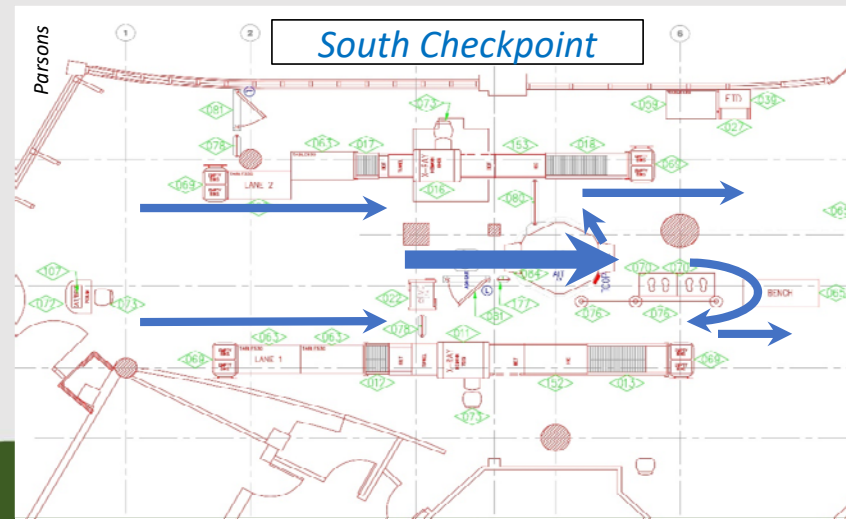
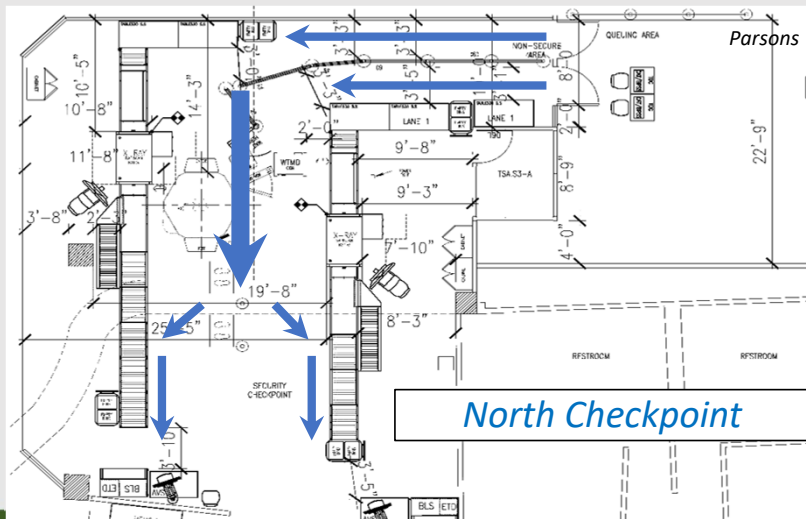


Terminal Summary – Baseline Requirements

Terminal Functional Area	Existing Terminal Area	Ultimate Requirement	Surplus (Deficit)	%
Passenger Boarding Gates	10	11	(1)	-11%
Check-In / Ticketing	7,460	9,544	(2,084)	-28%
Outbound Baggage Screening & Makeup	1,099	8,611	(7,512)	-684%
Passenger Screening Checkpoint	5,714	10,289	(4,575)	-56%
Passenger Lounges / Holdrooms				
Hold Rooms	10,298	10,999	(701)	-7%
Concessions	9,891	14,934	(5,043)	-51%
Core Terminal Areas Subtotal	47,118	64,743	(17,625)	-37%
Other Functions/Tenants	92,482	25,648	66,834	72%
Total Passenger Terminal Area	139,600	90,391	49,209	35.3%

Terminal - Security Checkpoint

Passenger Screening Area	Existing Terminal Area	Ultimate Requirement	Surplus (Deficit)	%
Existing Screening Lanes (both checkpoints)	4 Lanes	6 Lanes (with consolidation)	(2)	-50%
Checkpoint Area (SF) - Combined	5,714 SF	10,289 SF	(4,575) SF	-56%



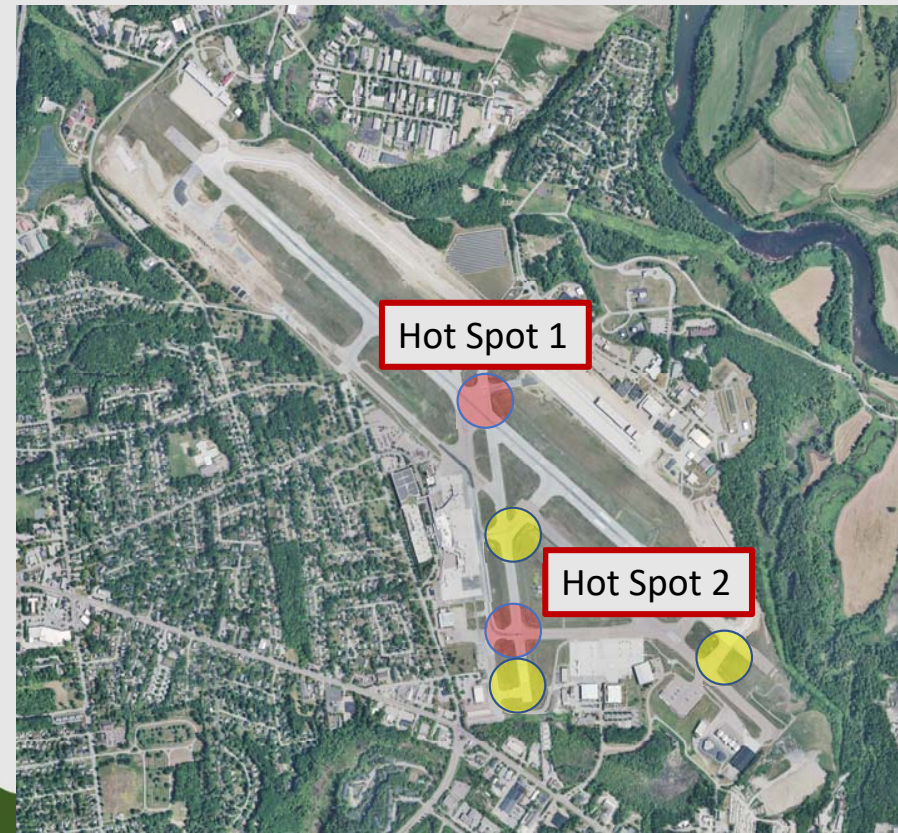
Airside Requirements - Runways

- Runway 15-33 – 8,319 x 150 (C/D IV) – Satisfies Requirements
 - Existing Length Scenario: FedEx Boeing 757 to Memphis
 - Future Length Scenario: Boeing 737/Airbus 320
- Runway 1-19 – 4,112 x 75 (B-I) – Satisfies Requirements
 - Existing and Future: Cessna 172



Taxiway Requirements / Geometry

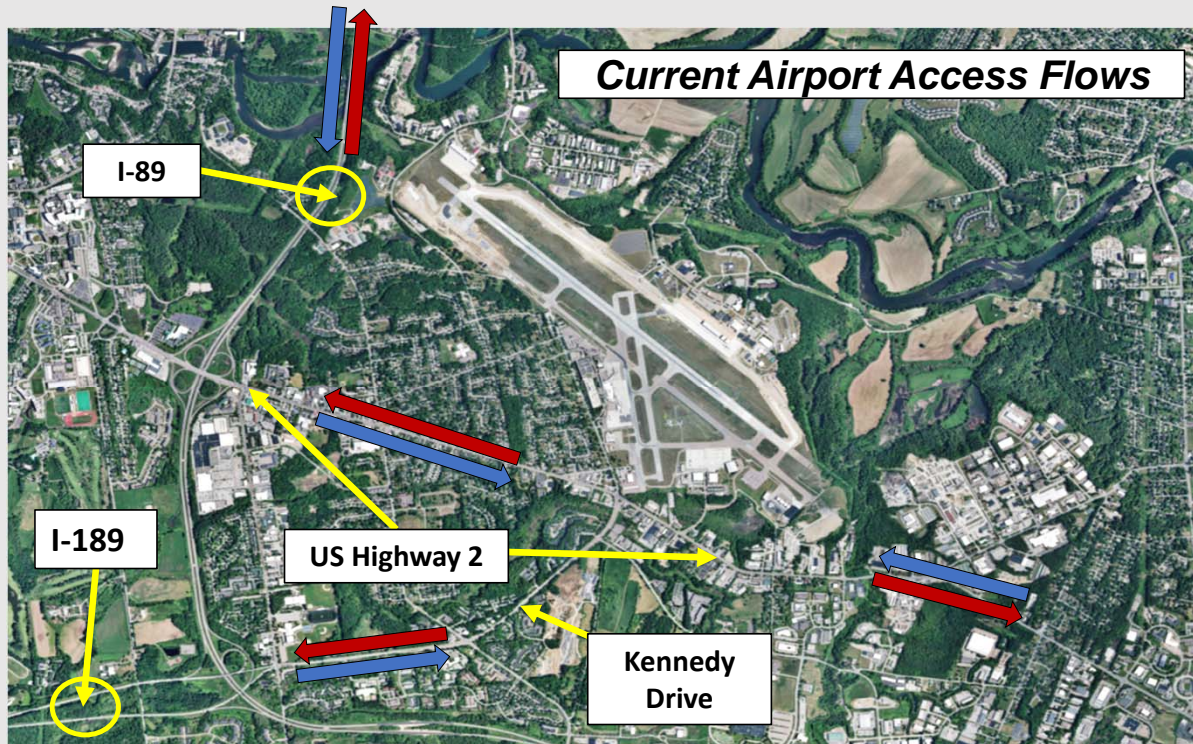
- Hot Spot 1: Wrong Runway Departure
 - Wide Expanse of Pavement
 - 3 Node Concept
- Hot Spot 2: Taxiway C Crossing Runway 1-19
- Direct Apron to Runway connections
 - Taxiway B, J, L



GROUND ACCESS IMPROVEMENTS CONCEPTS

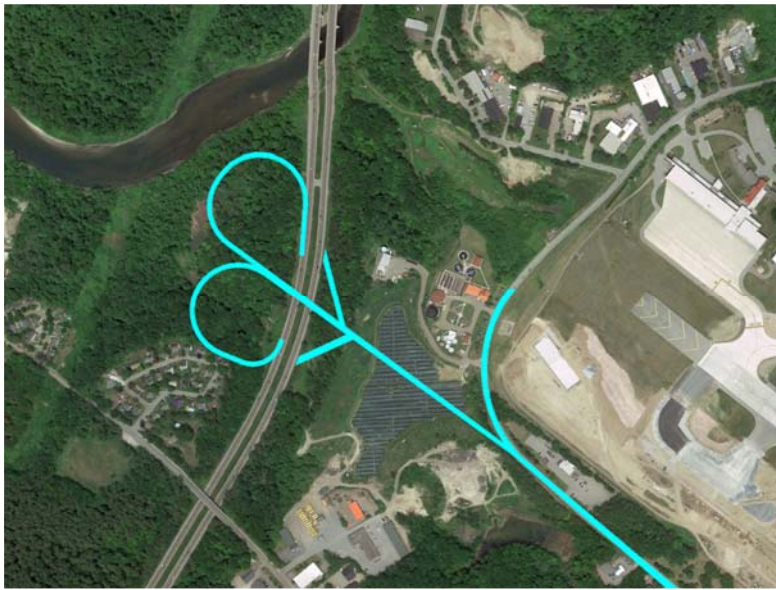


GROUND ACCESS IMPROVEMENT CONCEPTS



- Airport Share of Regional Traffic is low
- Traffic problems & solutions are regional
- FAA and Airport funding can not be used for Off Airport Projects

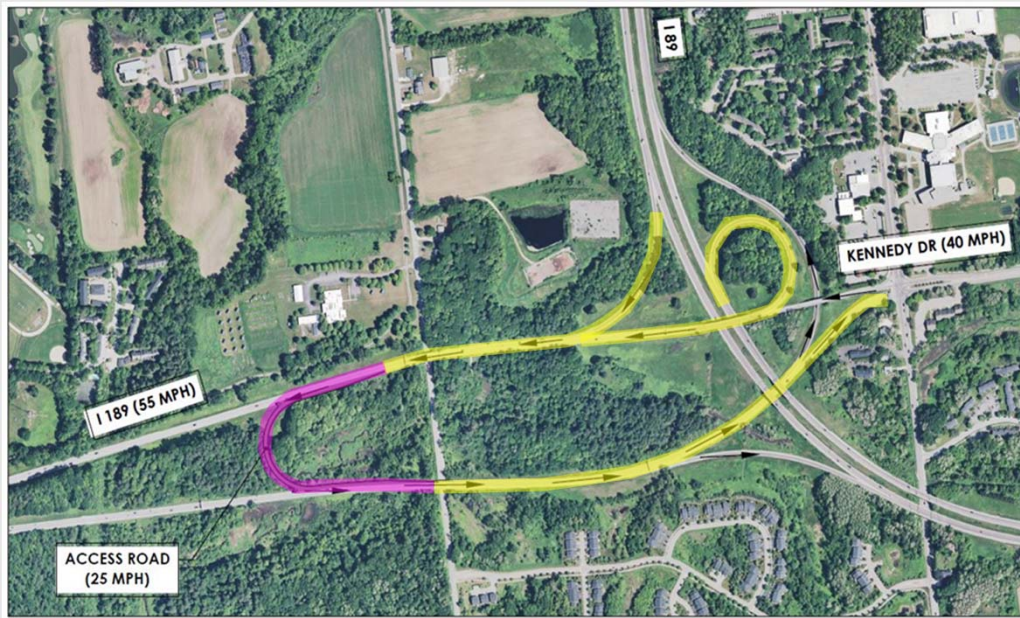
I-89 NEW INTERCHANGE 14B CONCEPT



- Construct new I-89 Interchange
- Provides new east/west access to airport
- Connects into Airport Parkway, to Terminal Building
- Avoids Route 2 and Kennedy Drive



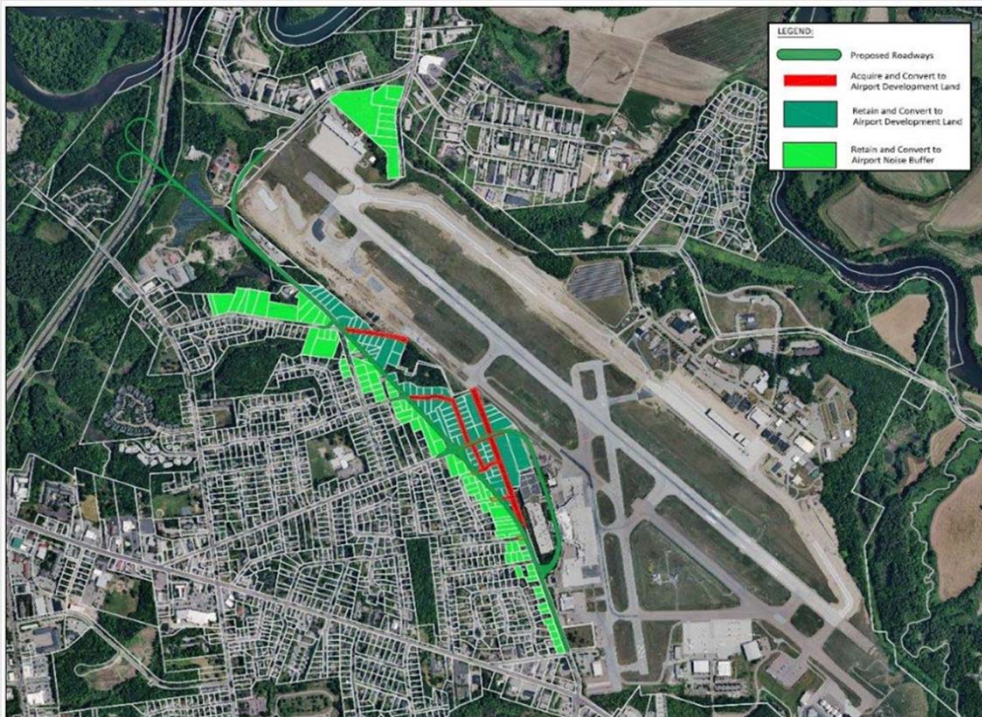
I-189 TURNAROUND CONCEPT



- Construct new I-189 U-turn ramp
- Provides east/west connection to I-89 N/S
- Tie into Kennedy Drive for direct access to Airport



AIRPORT DRIVE DEVELOPMENT CONCEPT



- Improve & Relocate Airport Drive
- Create a “Boulevard Type” Roadway with Landscaping
- Uses property acquired through airport noise program
- Retain a buffer area between Chamberlin Neighborhood

AIRPORT DRIVE DEVELOPMENT CONCEPT



PASSENGER TERMINAL BUILDING CONCEPT

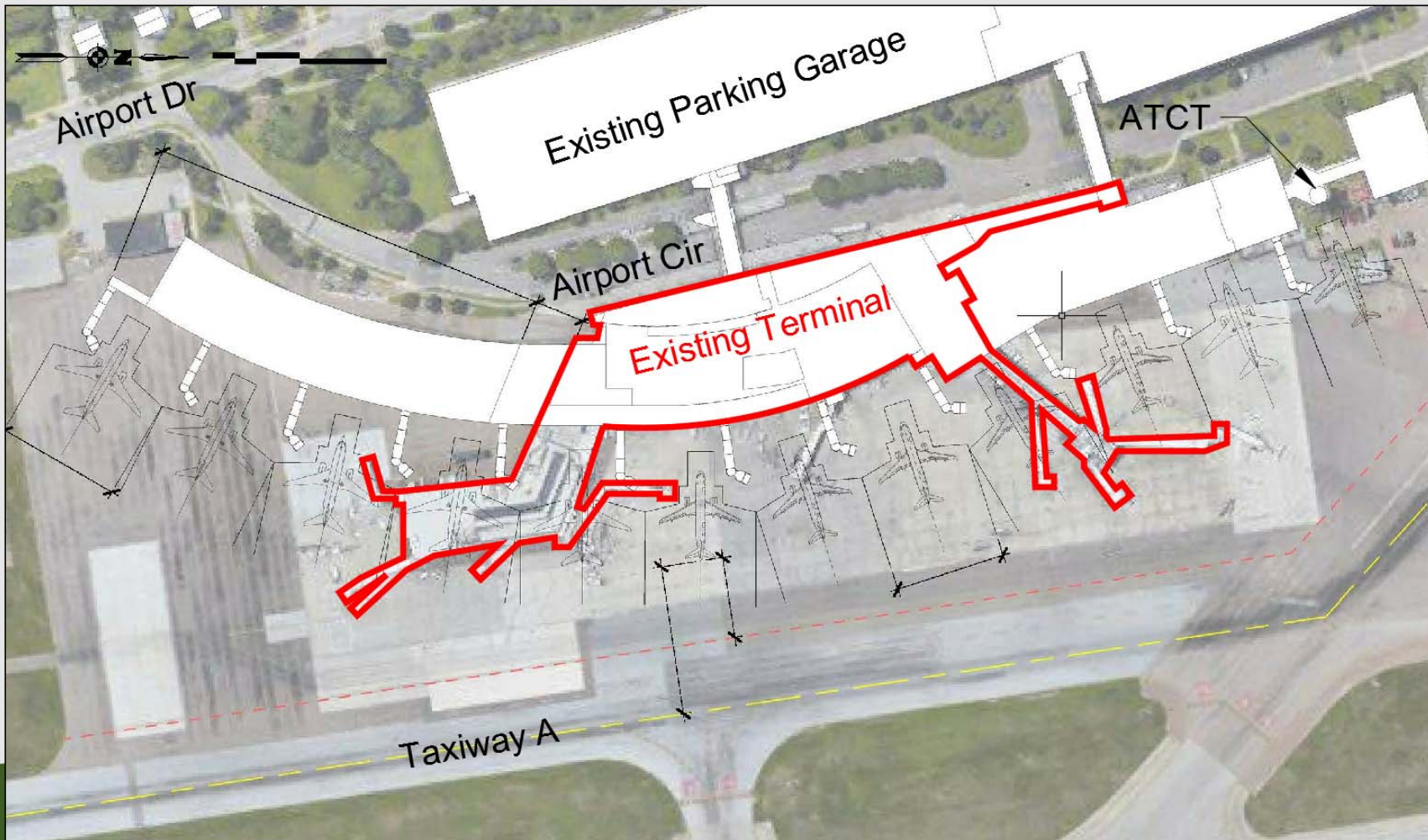


Existing Terminal Building

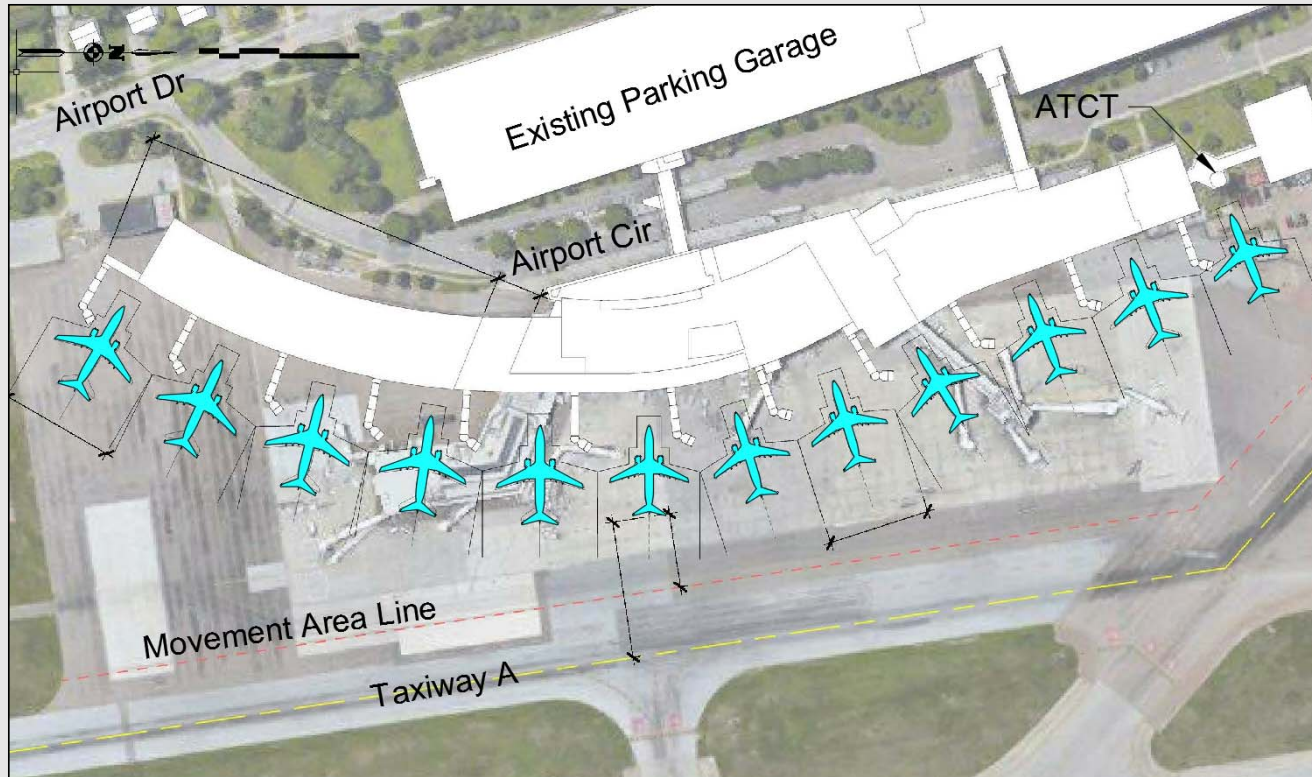


- Site restricted by
 - Taxiway A and Runway 1-19
 - Surrounding Roads
- Gate layout designed for Turboprops & Regional Jets
- Aircraft pushback enters Movement Area
- Internal Building Constraints
 - Split Passenger Screening Areas
 - Congestion in Holdrooms
 - Limited Concessions
- Inadequate holdroom size

PROPOSED TERMINAL BUILDING CONCEPT

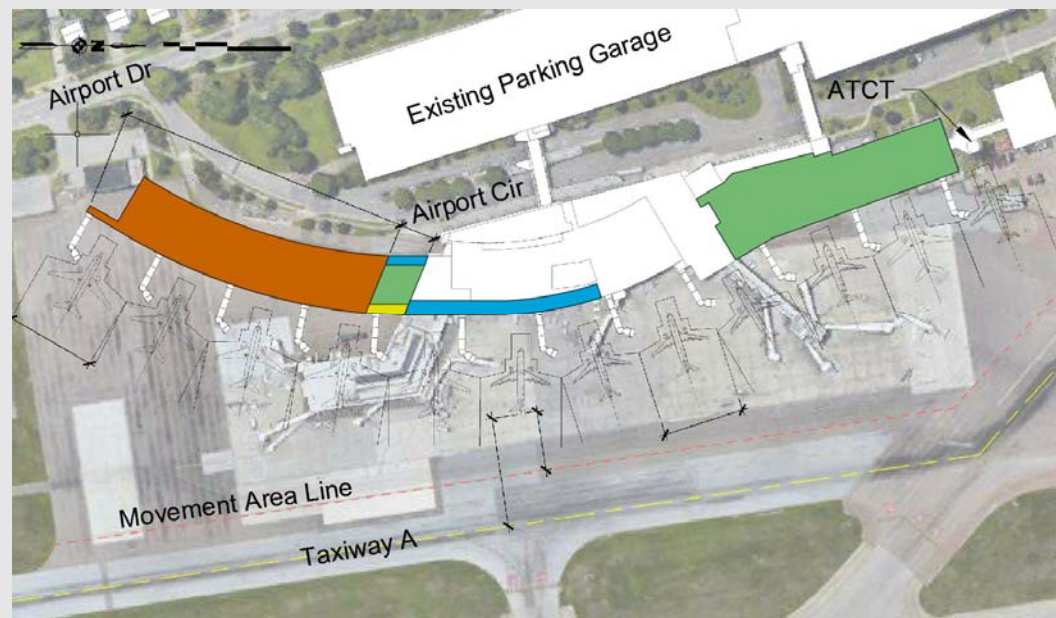


PROPOSED AIRCRAFT PARKING LAYOUT



- Efficient Use of Apron Space with 12 Contact Gate Positions
- Additional Area Between Gates and Taxiway A
- Pushbacks Can Avoid Entering Movement Area

PROPOSED TERMINAL DEVELOPMENT PHASING



Phase 1A

Phase 1B

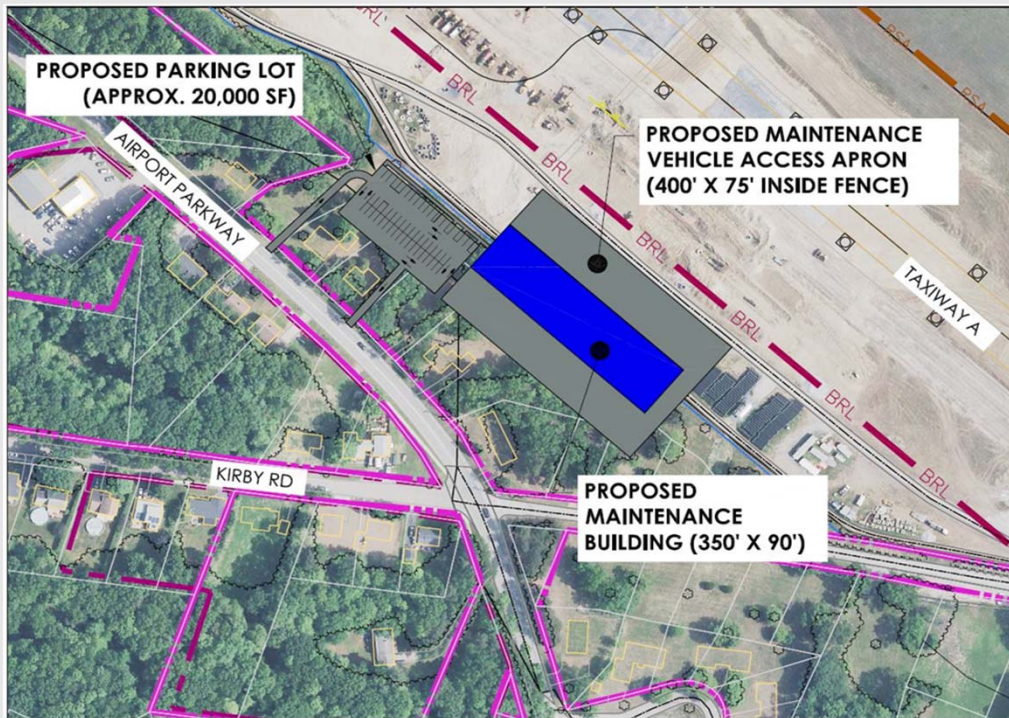
Phase 2

Phase 3

AIRPORT MAINTENANCE, GA, AND AIR CARGO CEONCEPTS



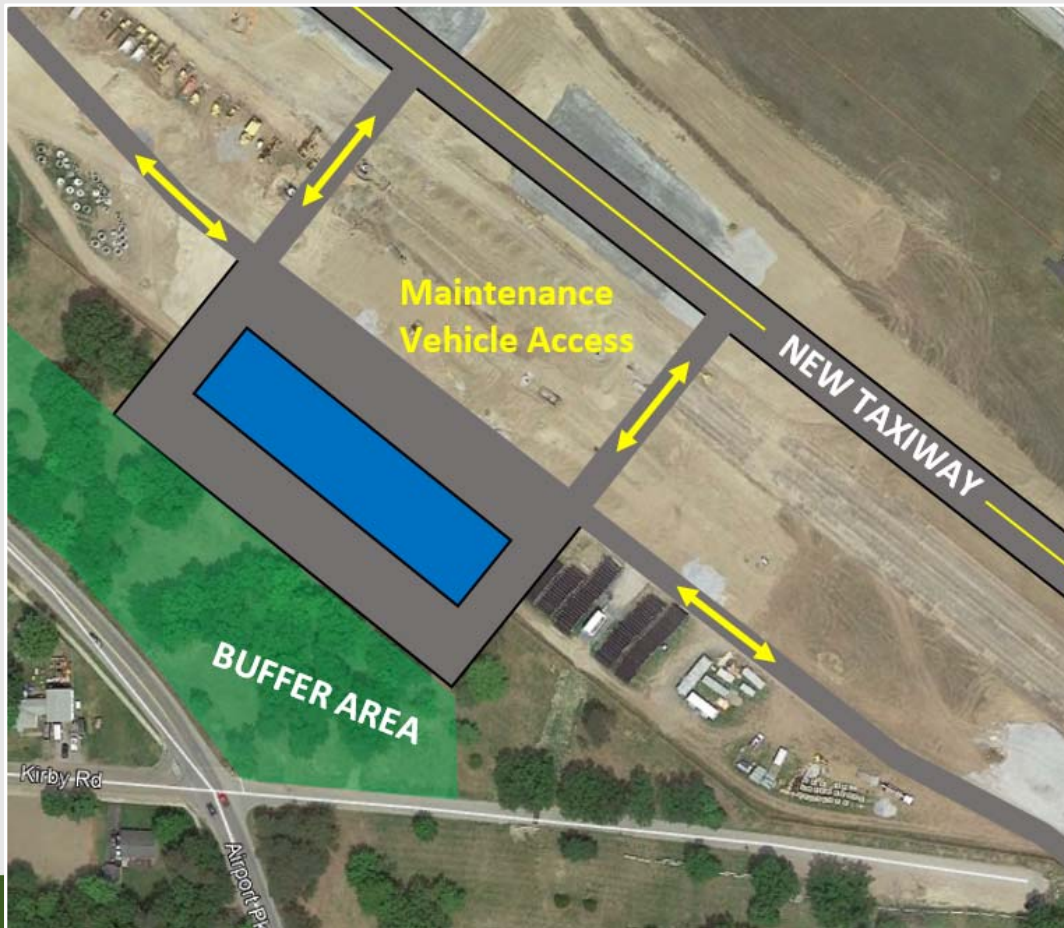
AIRPORT MAINTENANCE FACILITY RELOCATION



- Existing Facility is Undersized (some equipment stored outside)
- Existing location is constrained & distant from main runway

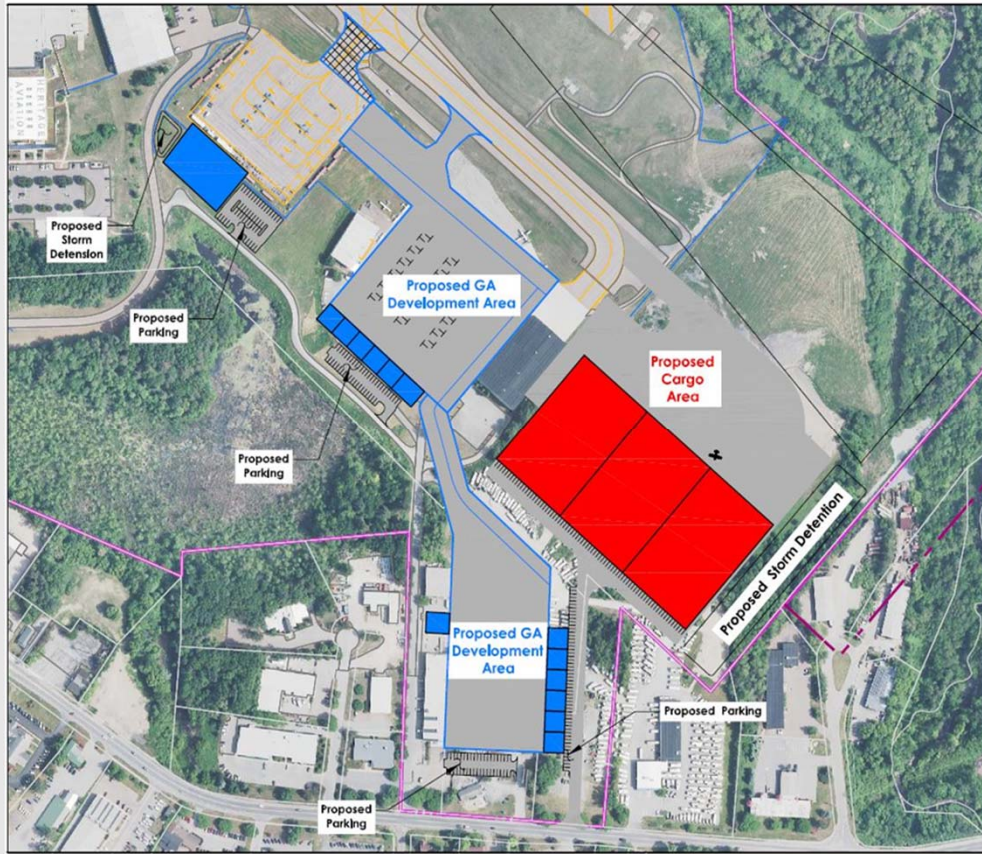


AIRPORT MAINTENANCE FACILITY RELOCATION



- Proposed Facility with direct access to new Taxiway G
- Unconstrained Site for All Maintenance Equipment
- **Buffer Area** Retained between Airport Parkway & Chamberlin Neighborhood
- Note: Airport vehicles Do **Not** Use public roads

GA AND AIR CARGO IMPROVEMENTS



- General Aviation Hangar Development
- General Aviation Apron Expansion
- Air Cargo Expansion
- Provide Buffer Along Airport Dr



AIRFIELD DEVELOPMENT CONCEPTS

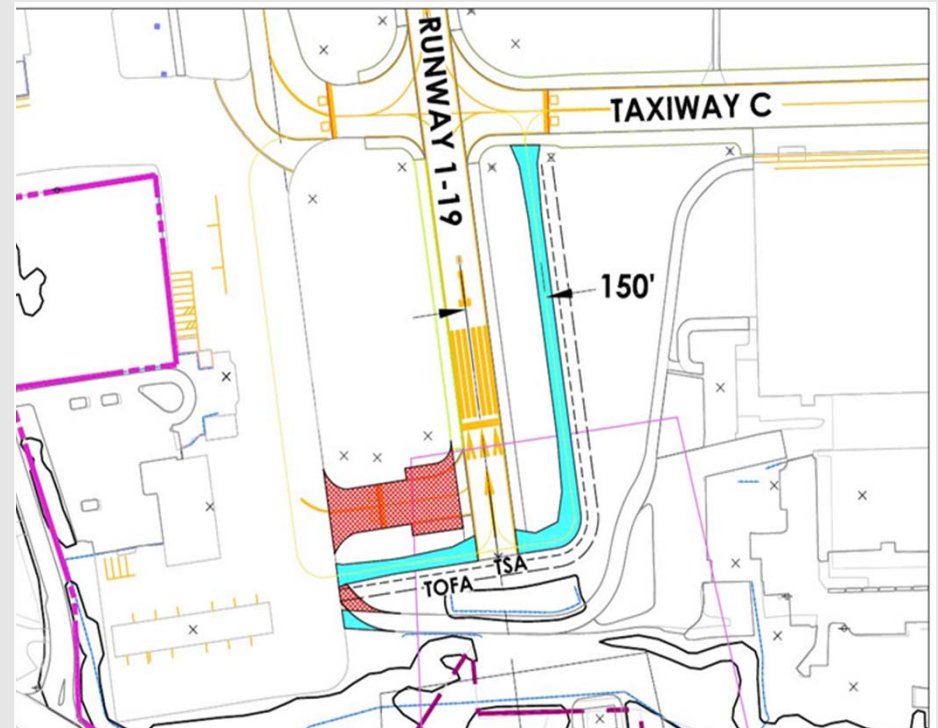
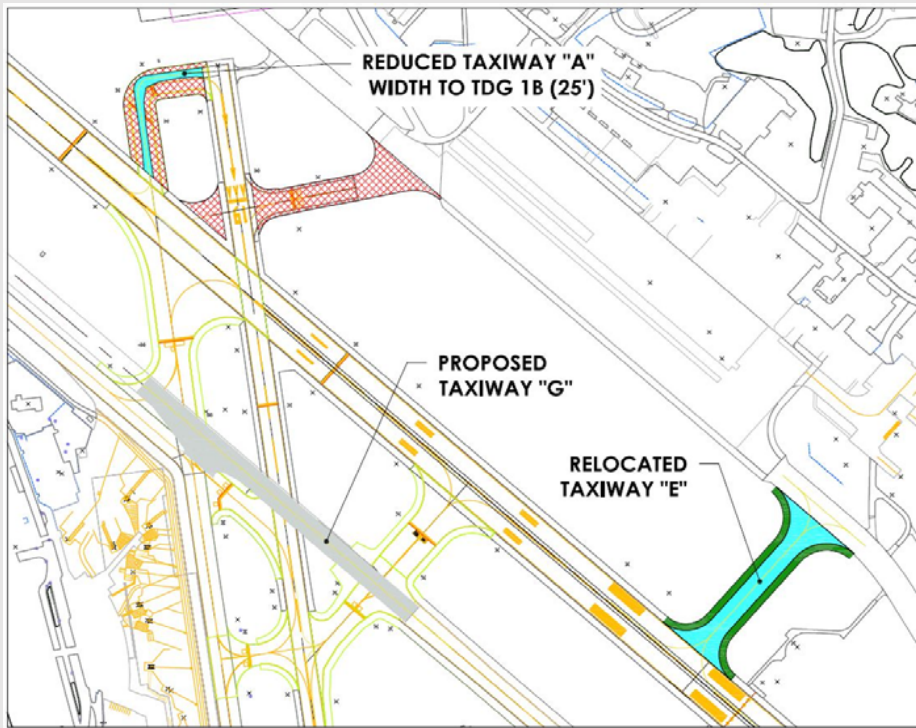


HOTSPOT MITIGATION



- Relocation of Taxiway E
- New GA Parallel Taxiway (West of Runway 1-19)
- Relocate Taxiway B
- New Parallel Taxiway (East of Runway 1-19)
- Shorten Runway 1-19
- Add Guard Lights on Taxiway C
- Add GA Taxiway to Runway 1
- Relocate Taxiway L
- Relocate Taxiway M

AIRFIELD SAFETY IMPROVEMENT CONCEPTS



NEXT STEPS

- Prepare Environmental Overview
- Prepare Development Concepts
- ALP Preparation



QUESTIONS/COMMENTS

Any questions or comments regarding the Airport Master Plan or any of the information discussed today?

Available for contact anytime:

[Lisa M. Cheung](#)

[Senior Airport Planner, Passero Associates](#)

lcheung@passero.com