



Project Advisory Committee Meeting #1

April 15, 2021



Agenda

- Overview of ALP Update Process
- Role of Project Advisory Committee
- Background & History
- Airport Inventory
- Forecasts Update
- Get Your Input & Ideas
- Next Steps



Scope of Work

- Update 2017 Airport Layout Plan (ALP)
- Update Aviation Forecasts
- Exhibit 'A' Property Map



Project Scope of Services and Fee Proposal

Exhibit 'A' Property Map & Airport Layout Plan Update
X66654.000

Burke Lakefront Airport (BKL)

JANUARY 6, 2021



What is an Airport Master Plan?

- Guides the Airport's development and operational sustainability
- Two parts
 - *Master Plan Report*
 - *Airport Layout Plan*
- Covers 5, 10, and 20-year planning horizons
- Normally updated every 10 years
- Follows FAA guidance & standards
- 18-24 Month Process



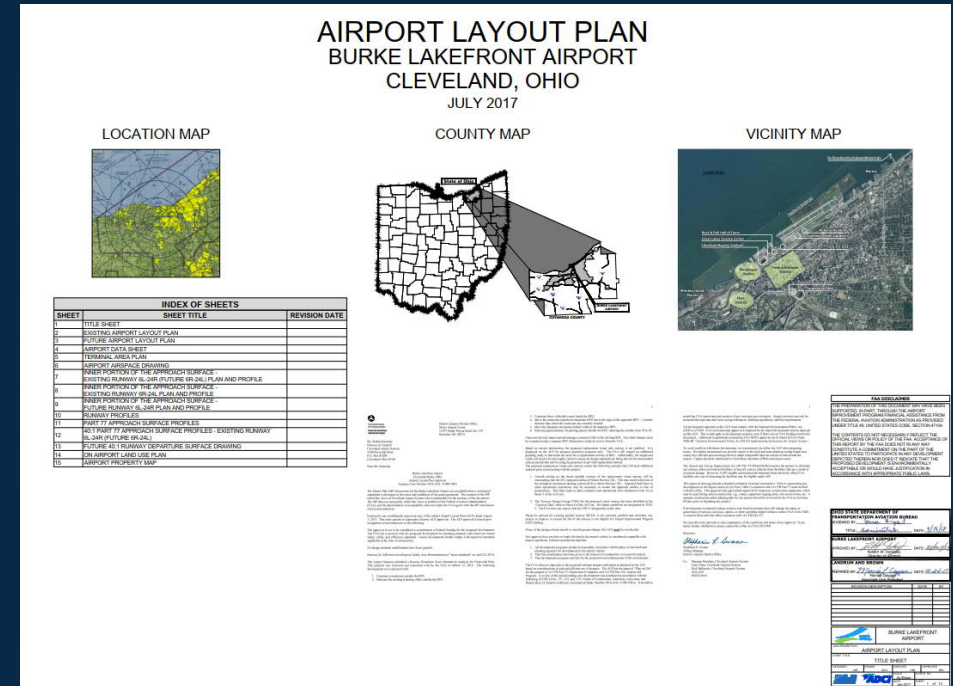
What is an Airport Layout Plan (ALP)?

- Critical planning tool
- Federal requirements
 - Existing airport facilities, structures, and buildings
 - Proposed projects on all areas owned by BKL for airport purposes
 - Existing & proposed non-aeronautical areas and improvements



Why is the ALP Updated?

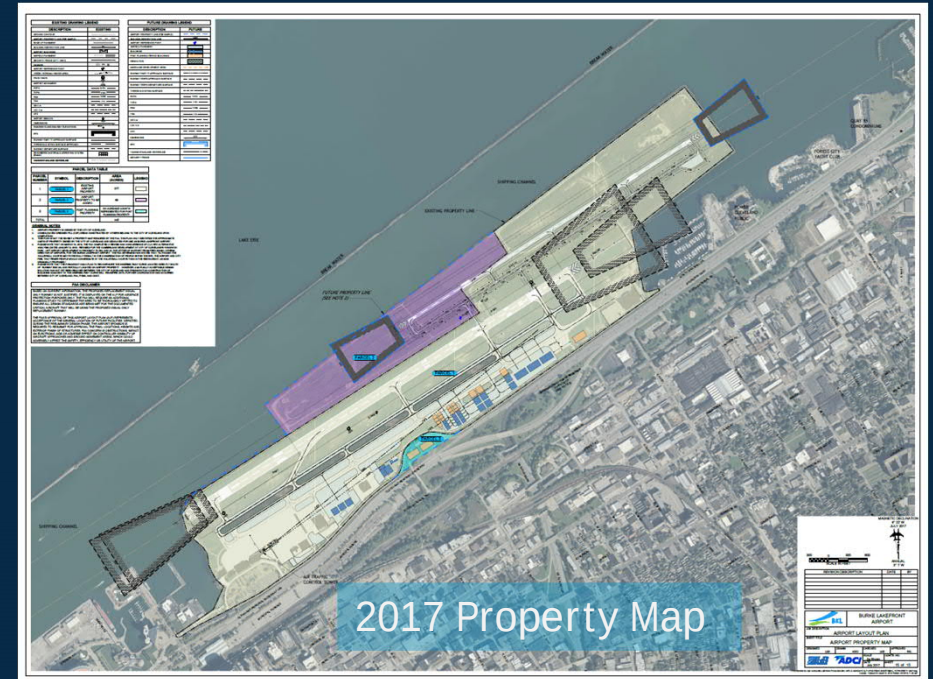
- Construction project(s)
 - Change in airfield geometry
 - New buildings
 - Acquisition or release of airport property
- Other
 - Future development shown on an approved ALP that is no longer needed to meet future demand or is impacted by other project(s)



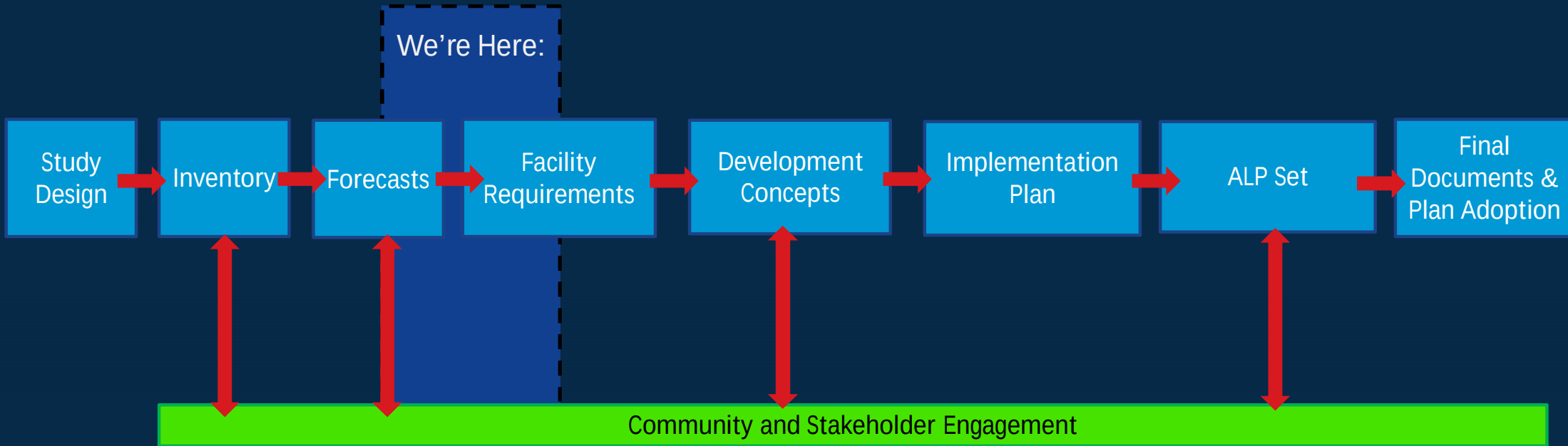
What is an Exhibit 'A'?

- An inventory of parcels that make up dedicated airport property
- Indicates how the land was acquired, the funding source for the land and if the land was conveyed as Federal surplus land or Government Property
- Must show all dedicated airport property regardless of the type of funds (AIP, state, local, etc.) used to acquire that property

-FAA ARP SOP 3.0

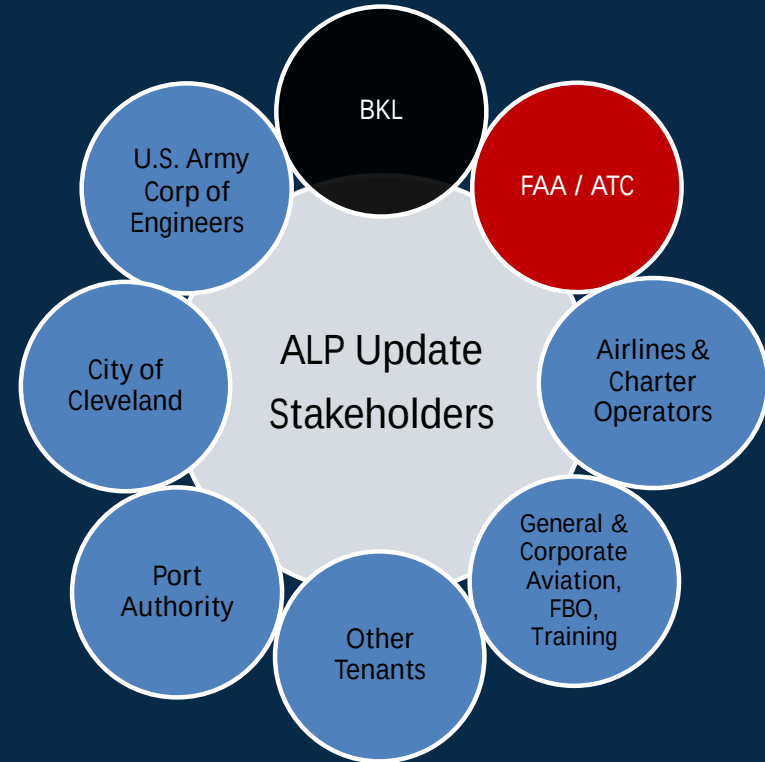


ALP Update Process



Role of the PAC?

- You are a valued stakeholder for the ALP Update that can provide
 - Insight on airport, community, and regional issues.
 - Technical input on operational and facility issues.
- You will have the opportunity to review and comment on the ALP Update as findings and recommendations are developed.



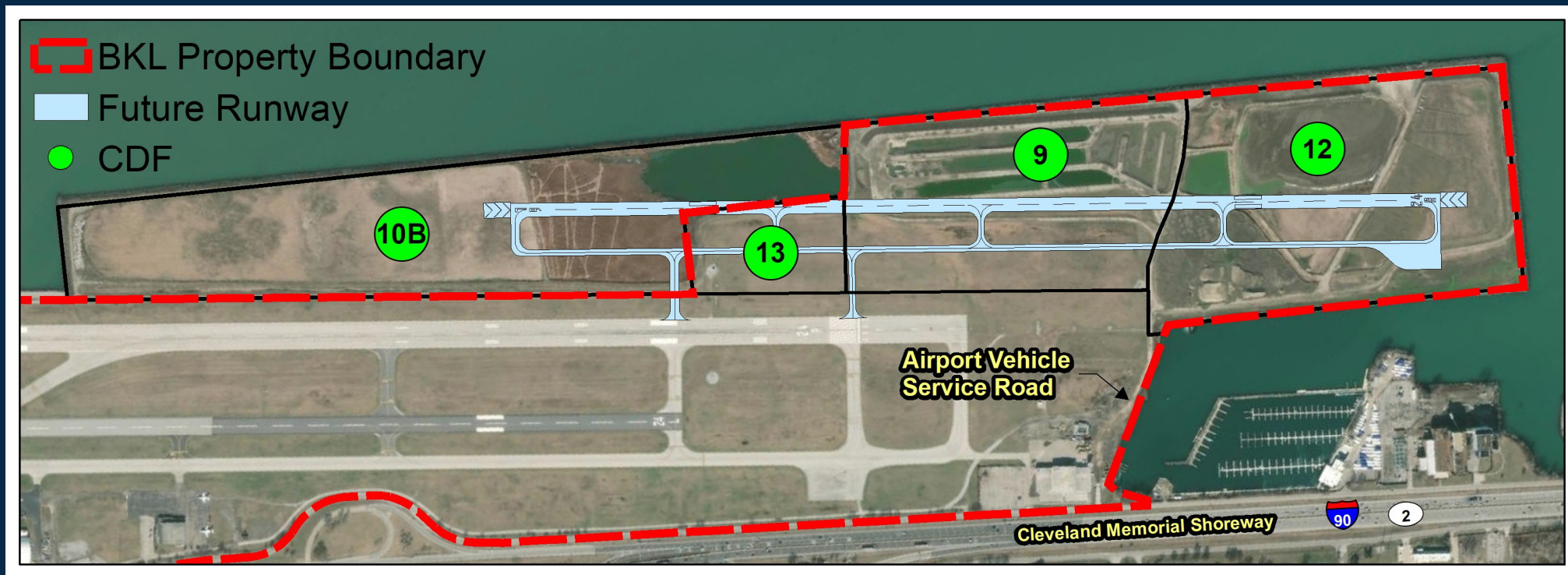
BKL – A National Asset

- Four categories of GA Airports
 - National – Provides communities with access to national and international markets
 - Regional – Connects communities to statewide and interstate markets
 - Local – Provides access primarily to intrastate and some interstate markets
 - Basic – supports activities such as emergency service, charter service, cargo operations, flight training, and personal flying

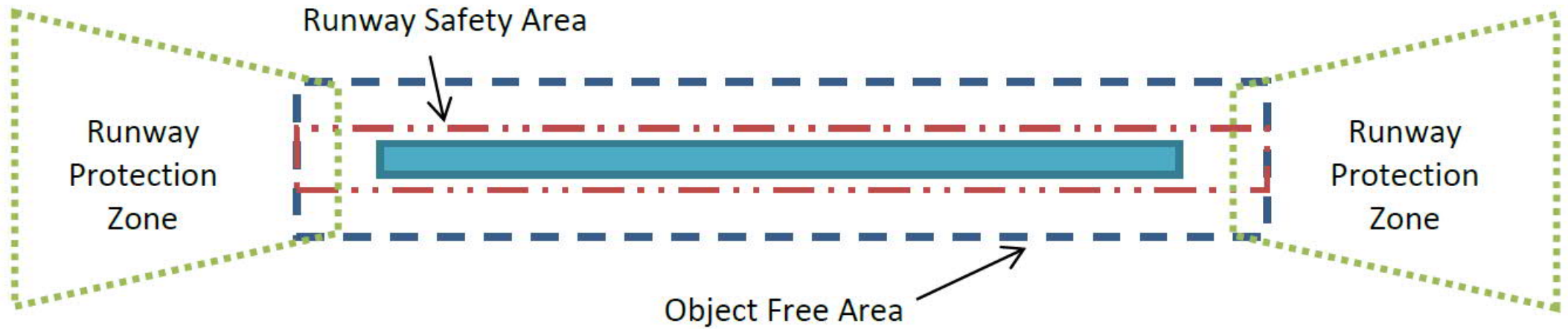
BKL is a National General Aviation Airport!



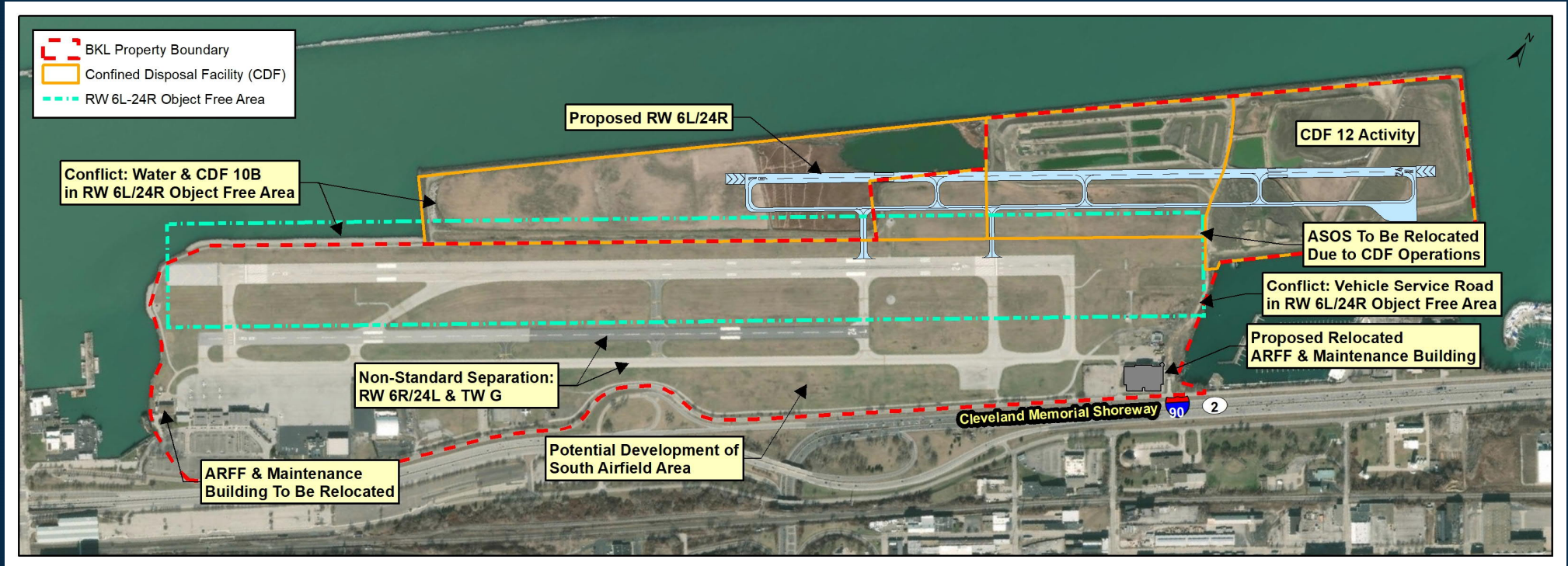
Project Background/History



Design Standards



Issues & Focus Areas



INVENTORY

Summary of Key Facilities



Summary of Key Facilities

Two runways:

- 6L-24R at 6,603 x 150' with instrument approach
- 6R-24L at 5,199' x 100'

Apron space:

- Approx. 50,000 SF of apron space surrounding terminal and FBO facility
- Approx. 13,000 SF of additional hangar apron space

Hangar storage:

- Three corporate hangars: approx. 54,000 SF of combined space

Item	Runway 6L	Runway 24R	Runway 6R	Runway 24L
Runway Length (feet)	6,603		5,199	
Displaced Threshold (feet)	178	600	275	-
Width (feet)	150		100	
Runway End Elevation (feet above MSL)	561.1	582.4	580.5	582.5
Pavement Type	Asphalt		Asphalt	
Pavement Load Bearing and Pavement Classification Number	Single wheel: 93.0 Double wheel: 113.0 Double tandem: 170.0 PCN: 84/F/C/X/T		Single wheel: 43.0 Double wheel: 50.0 Double tandem: 82.0 PCN: 63/F/C/X/T	
Declared Distances	LDA: 6,325' TODA: 6,503' TORA: 6,503' ASDA: 6,503'	LDA: 6,003' TODA: 6,603' TORA: 6,603' ASDA: 6,603'	LDA: 4,924' TODA: 5,199' TORA: 5,199' ASDA: 5,199'	LDA: 5,199' TODA: 5,199' TORA: 5,199' ASDA: 5,199'
Aircraft Approach Category	C-II		B-II	
Runway Markings	Precision		Basic	
Runway and Approach Lighting	HIRL, PAPI-4, REIL	-	-	HIRL, REIL
Navigational Aids	-	LOC/ILS, MALSF, GPS	-	-
Runway Design Code	C-II-VIS	C-II-4000	B-II-VIS	B-II-VIS

Tenant Interviews

- Airport tenants (flight schools, charter/air service operators, fixed base operator, etc.) interviewed at start of process
- Key takeaways:
 - Ultimate starting service again in April
 - 75% of their customers said they had no work travel restrictions
 - Aging hangar facilities
 - Increasing demand for additional hangar space
 - No issue with potential one runway airport



Based Aircraft

Helicopter	5
Jet	4
Single-Engine	9
18 Total	

McDonnell Douglas (2)



Bell 206B (2)



Bell 260 (1)



Cessna Citation (4)



Cessna 172 (7)



Cessna 152 (1)



Diamond DA-40 (1)



Top Operators in 2019/2020

Aircraft	Group	2019 Operations	2020 Operations
Cessna Citation V/Ultra/Encore	B-II	1,124	820
Fairchild Dornier 328 Jet	B-II	932	330
Cessna Citation Excel/XLS	B-II	526	254
Beech 200 Super King	B-II	480	264
Cessna Citation Sovereign	B-II	446	358
Dassault Falcon 2000	B-II	440	196
Embraer Phenom 300	B-II	378	310
Hawker 800	B-II	368	220
Cessna Citation Jet/CJ1	A-I	306	330
Cessna Citation II/Bravo	B-II	242	260
Bombardier Learjet 35/36	D-I	240	104
Gulfstream IV/G400	D-II	205	106
Gulfstream V/G500	D-III	140	74
Dassault Falcon F7X	B-III	67	33

AVIATION FORECASTS

Airport Reference Code (ARC)

- System used by the FAA to classify airports
- Based on size and approach speed of critical aircraft
- Critical Aircraft
 - Aircraft or grouping of aircraft that operate > 500 times/year
- Dictates dimensional requirements of the airfield
- 2017 ALP Airport Reference Code – C-II

Approach Category	
Airspeed (knots)	
A	< 91
B	91 ≤ 121
C	121 ≤ 141
D	141 ≤ 166
E	166+

Design Group	
Wingspan (feet)	
I	< 49
II	49 ≤ 79
III	79 ≤ 118
IV	118 ≤ 171
V	171 ≤ 214
VI	214 ≤ 262

Current Critical Aircraft



Cessna Citation XL (C-II)



Learjet 35/36 (D-I)

2021 ALP
Update

D-II ARC

Future Critical Aircraft

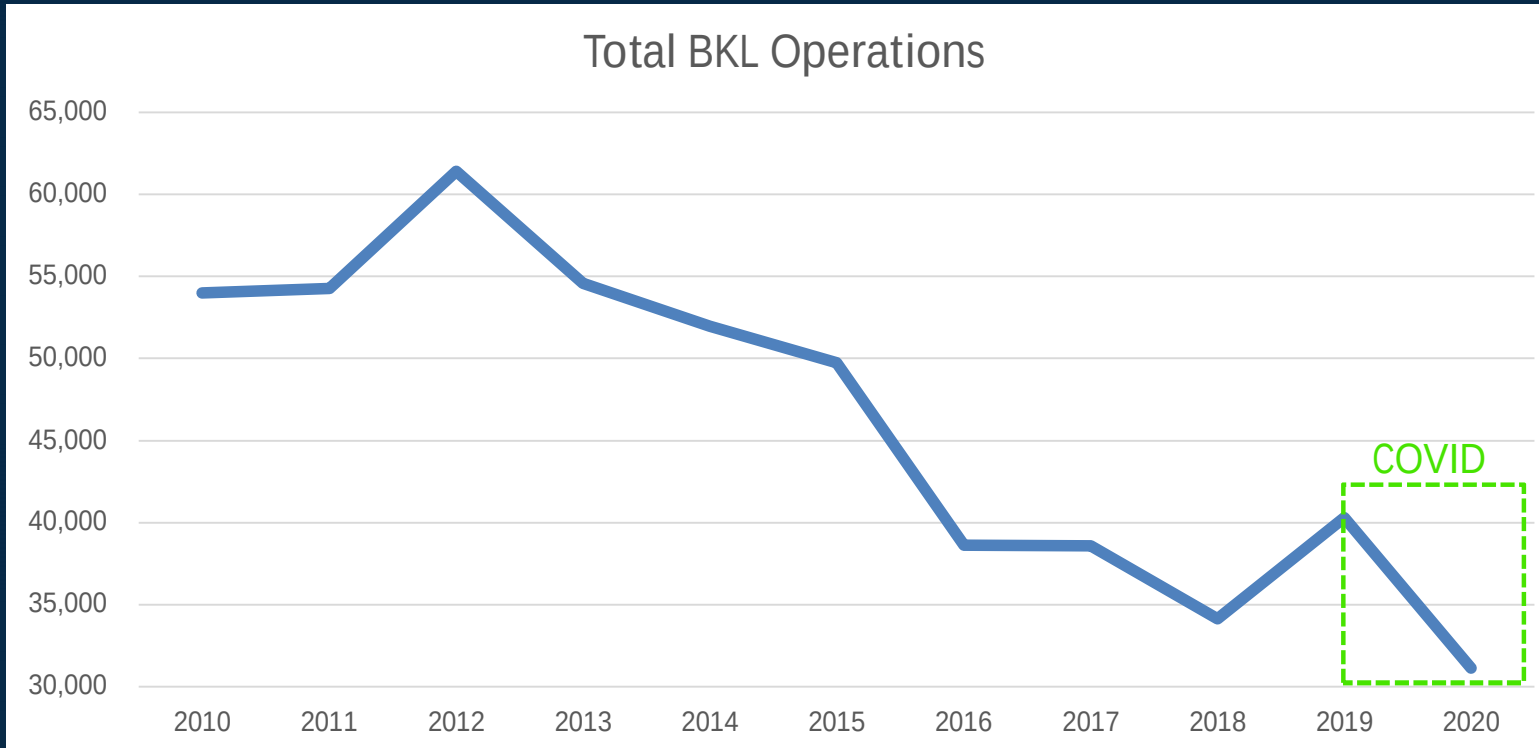
2019 Operations			
AAC		ADG	
A	2,086	I	4,282
B	7,376	II	7,480
C	2,032	III	438
D	772	IV	76
n/a	14	V	4
12,280			

2021 ALP
Update

D-III ARC

Based on forecast that ADG III operations will continue its upward trend and rise above 500 in the future.

Historical Operations



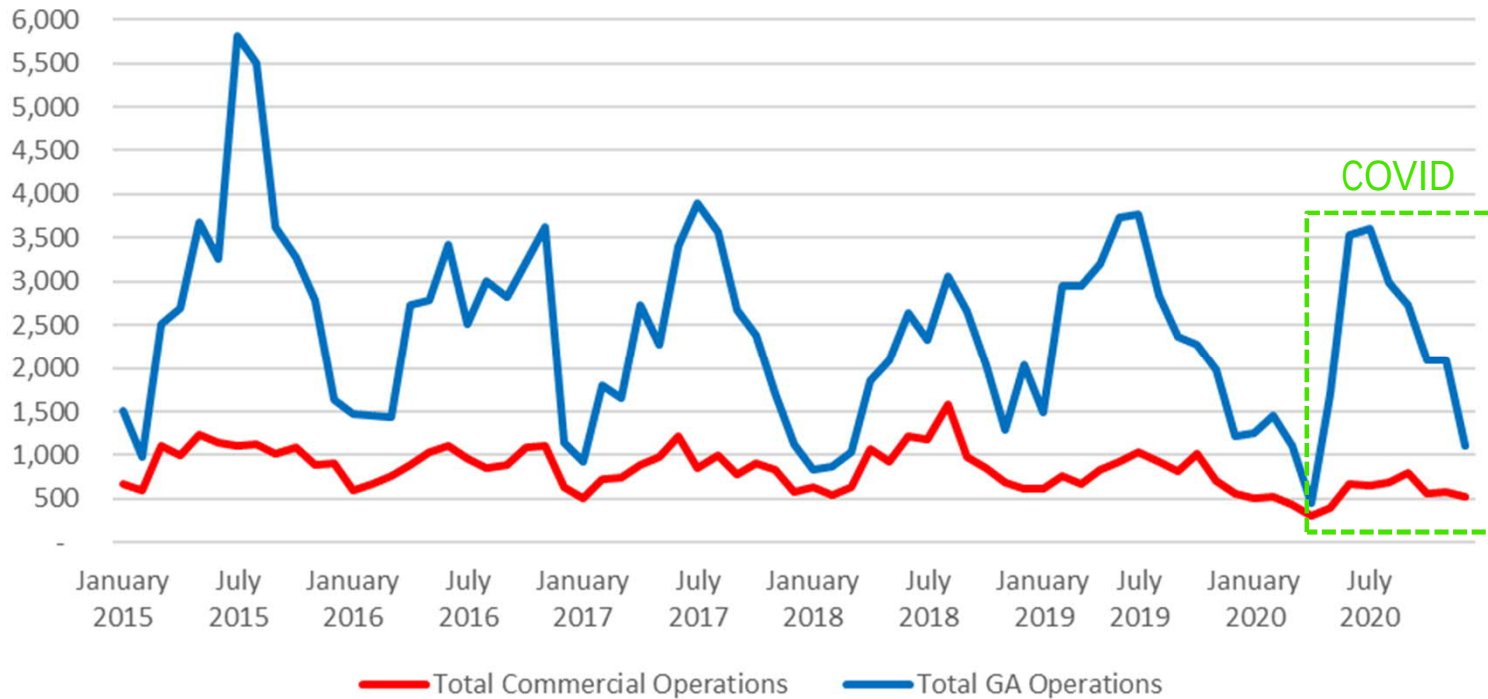
2010 – 2015
54,330 avg. operations

2016 – 2019
37,925 avg. operations

2020 COVID-19
31,107 operations

Historical Operations

2016 – 2019



General Aviation

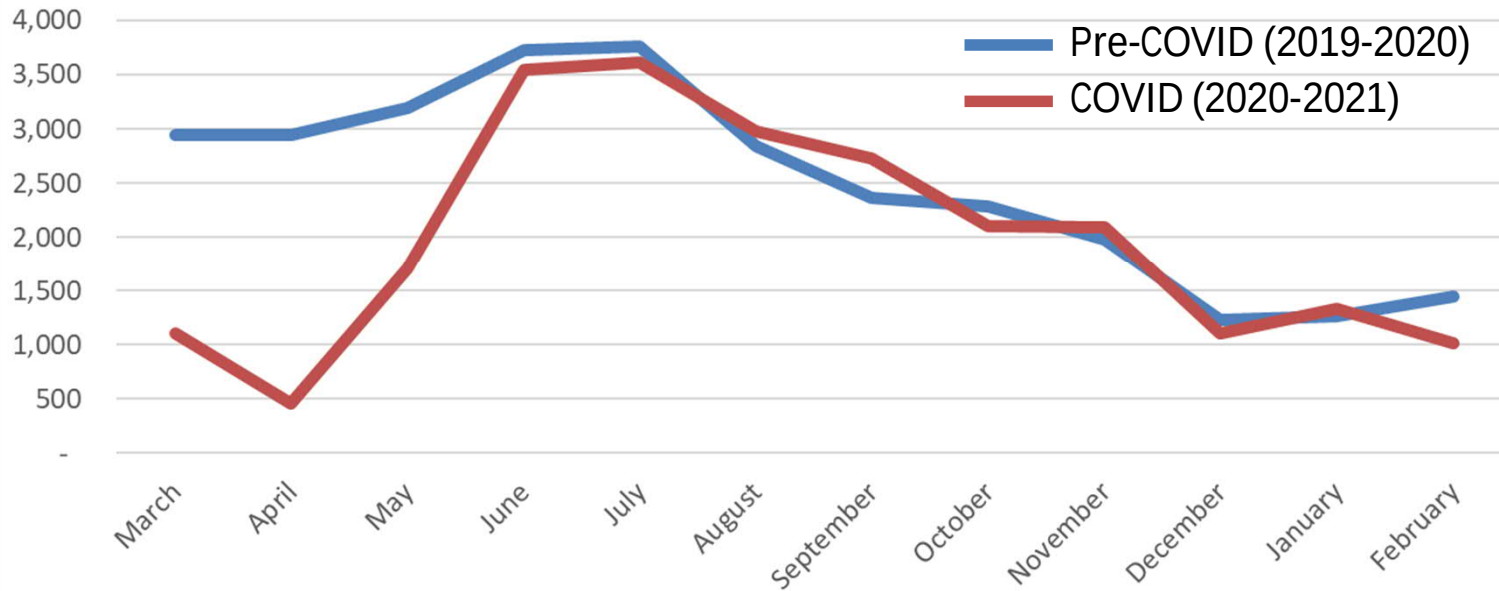
- 2,282 avg. per month
- Peak: 3,298 in June
- Low: 1,077 in February

Commercial

- 841 avg. per month
- Peak: 1,117 in June
- Low: 462 in February

COVID-19 Impacts on GA Operations

General Aviation



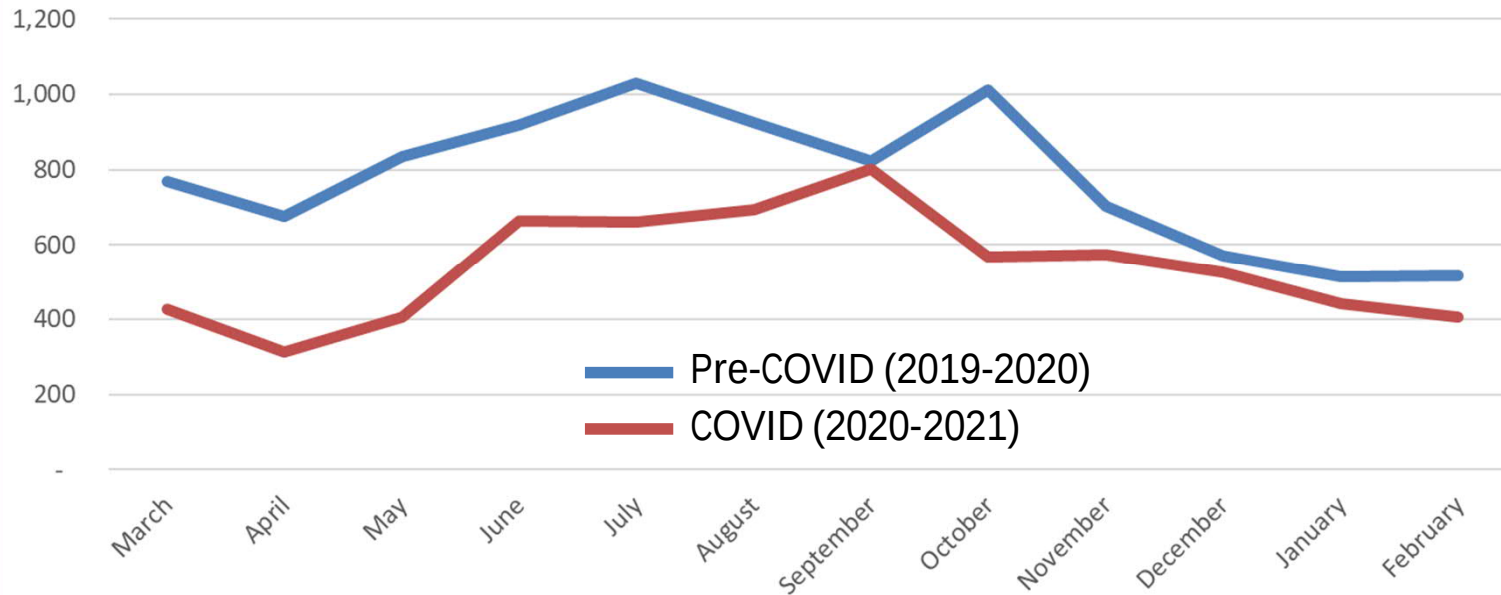
12-Month Comparison

- Down 21% overall
- Down 18% avg/month
- March 2020 – down 63%
- April 2020 – down 85%
- May 2020 – down 47%

Mostly recovered by June with some months above previous year.

COVID-19 Impacts on Commercial Operations

Commercial Operations



12-Month Comparison

Down 30% overall

Down 29% avg/ month

Down every month
ranging from 54% (April) to
3% (September)

*Exacerbated by Ultimate
Air ceasing operations.*

Activity Demand Forecasts

- Traditionally includes 5, 10, 20-year estimates of aviation activity compared against the FAA Terminal Area Forecast (TAF) – *to be published April 2021*
- Due to COVID-19, FAA is requiring a recovery and a post-recovery forecast
 - Post-recovery to be compared against the FAA TAF
- Forecast is one of two deliverables approved by the FAA



Activity Demand Forecasts

- Provide an initial timetable for facility improvements
- Basis for the development of alternatives to meet the projected demand
- Basis for environmental analyses and economic and financial plans
- Used as support for airport funding



What is the Forecast Process?



FAA Terminal Area Forecasts

- The FAA TAF is the baseline metric that all aviation forecasts are compared with
- TAF considers socioeconomic and demographic factors, general industry trends, and regional commercial service growth

	--ENPLANEMENTS--			--AIRPORT OPERATIONS--									
				Itinerant Operations						Local Operations			
Fiscal Year	Air Carrier	Commuter	Total	Air Carrier	AT & Commuter	GA	Military	Total	Civil	Military	Total	Total OPS	
2013	1,069	26	1,095	99	14,616	18,638	334	33,687	21,788	126	21,914	55,601	
2014	828	165	993	56	12,814	17,136	453	30,459	22,330	66	22,396	52,855	
2015	1,108	159	1,267	77	12,125	16,410	394	29,006	20,278	48	20,326	49,332	
2016	1,353	7,218	8,571	88	10,598	15,490	423	26,599	14,143	117	14,260	40,859	
2017	1,376	9,860	11,236	49	10,514	17,638	397	28,598	13,308	56	13,364	41,962	
2018	854	10,571	11,425	36	11,246	14,189	391	25,862	8,588	38	8,626	34,488	
2019	1,387	11,237	12,624	77	9,190	15,797	362	25,428	14,402	64	14,466	39,892	
2020	*	534	6,712	32	5,920	12,790	323	19,065	12,450	122	12,572	31,637	
2021	*	705	7,895	41	6,574	15,118	323	22,056	12,488	122	12,610	34,666	
2022	*	875	9,077	50	7,228	18,327	323	25,928	12,526	122	12,648	38,576	
2023	*	1,046	9,213	59	7,882	18,327	323	26,591	12,564	122	12,686	39,277	
2024	*	1,216	10,225	68	8,536	18,327	323	27,254	12,602	122	12,724	39,978	
2025	*	1,387	11,237	77	9,190	18,327	323	27,917	12,640	122	12,762	40,679	

*Draft 2020 TAF – December 2020

ALP forecast vs. FAA TAF?

- The TAF is the official FAA forecast of aviation activity that uses a standardized methodology for all U.S. airports.
- ALP Update forecast is:
 - Based on the latest available data (ATCT data)
 - Supported by information obtained in the planning process (interviews)
 - Determined by a methodology appropriate for BKL
 - COVID considerations

Forecast Must Be Within:

10% of 5-Year TAF

15% of 10-Year TAF

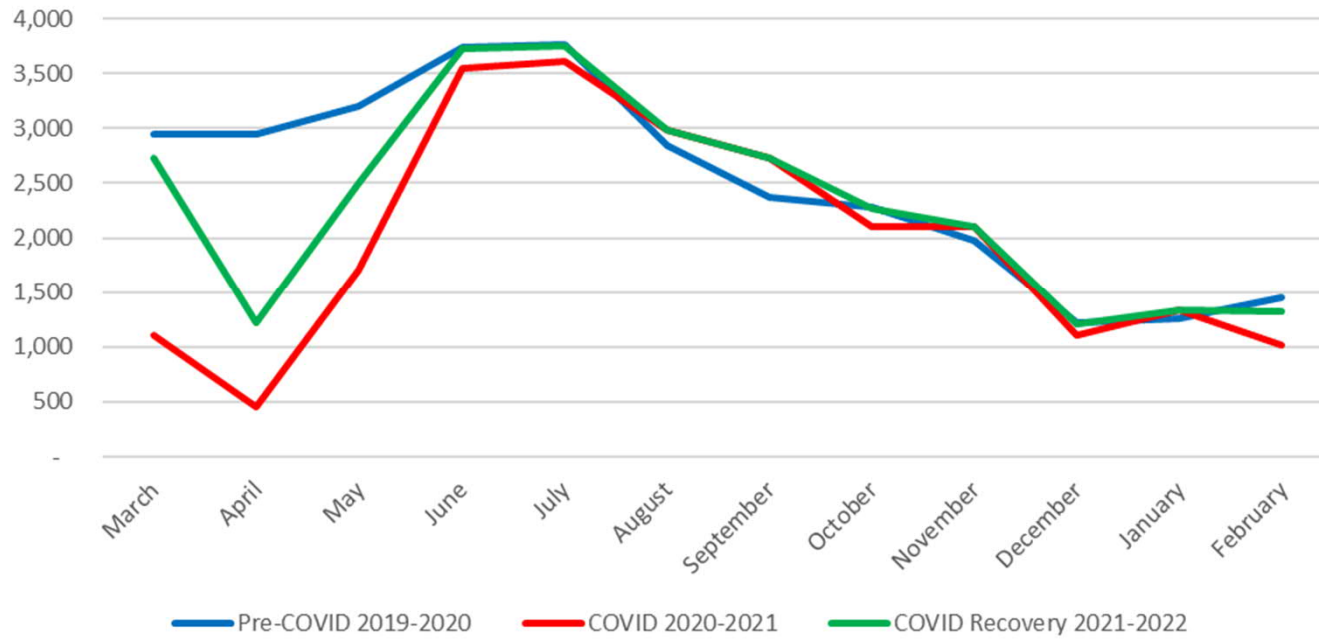
BKL Preliminary Forecasts

- “Optimistic” and “Pessimistic” COVID-19 Recovery Forecasts
- Post-Recovery Forecasts
 - ✓ General Aviation
 - ✓ Commercial
 - ✓ Enplanements
 - ✓ Based Aircraft



GA COVID-19 Recovery

Optimistic GA Operations Recovery Forecast



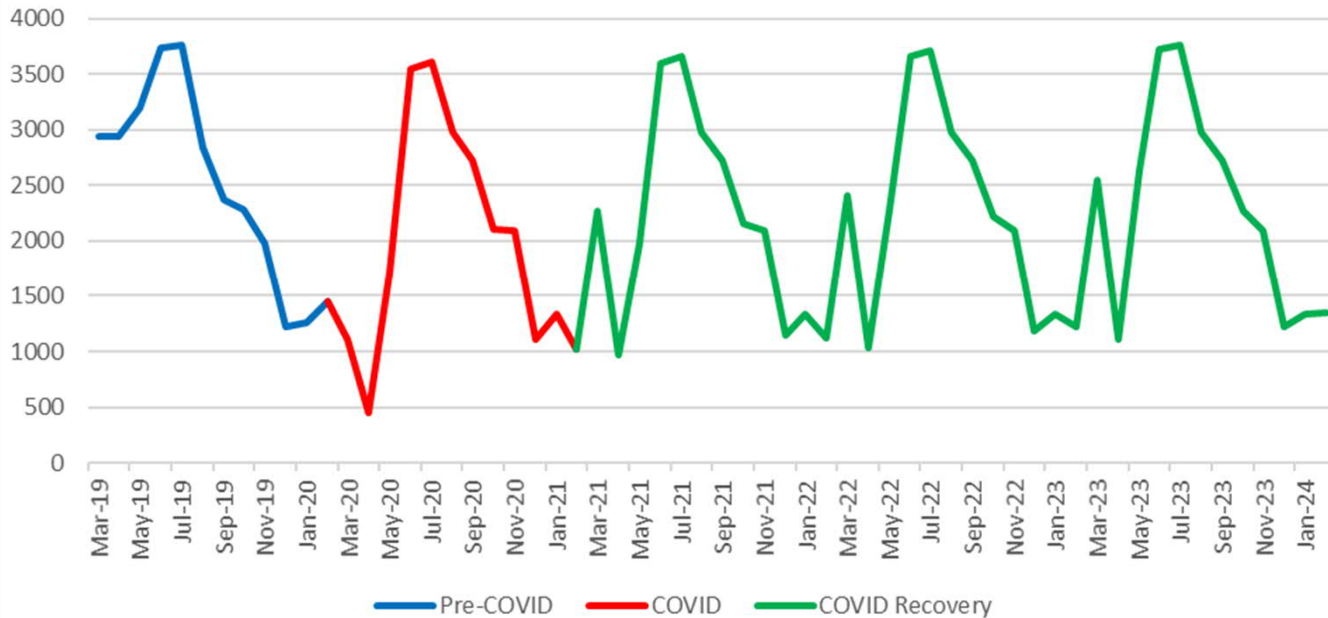
“Optimistic” Forecast

Recover 93% of operations within 1 year

- July 2020 was down 4%, therefore July 2021 will have 104% of operations from July 2020
Note: March and April treated special
- If operations during COVID were above previous year, this is retained

GA COVID-19 Recovery

Pessimistic GA Operations Recovery Forecast



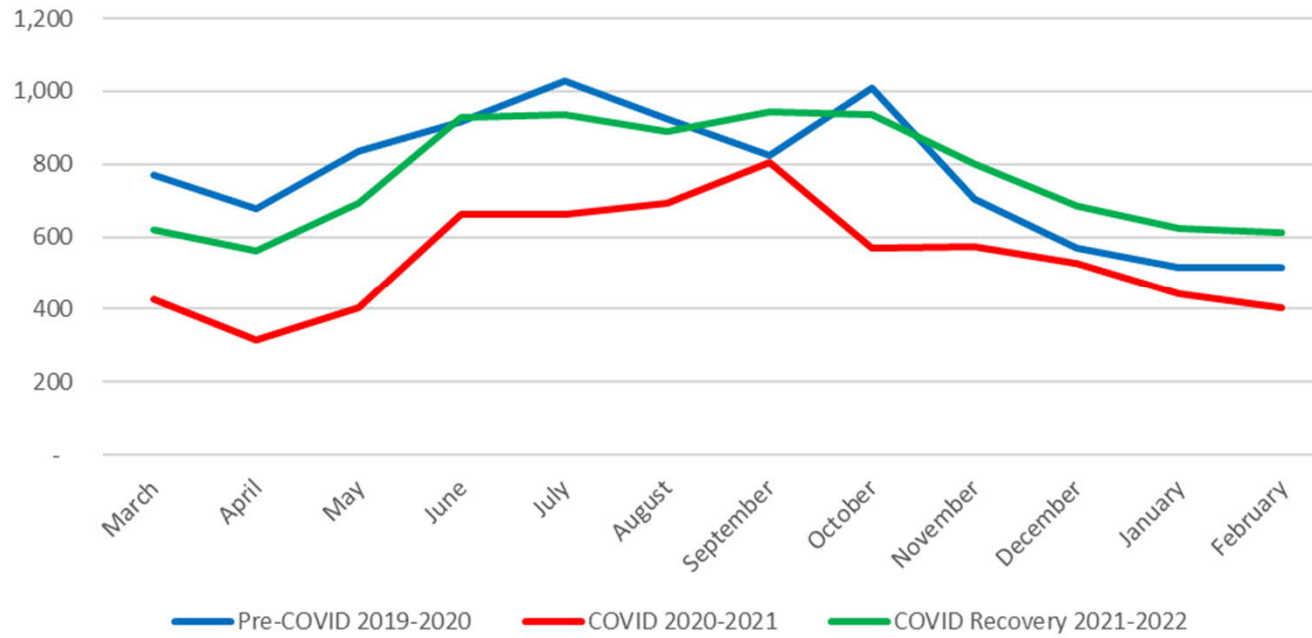
“Pessimistic” Forecast

Recover 93% of operations within 3 years

- Same as “optimistic” except the recovery rate is divided by 3
Note: March and April 2021 treated special, then follows normal math
- If operations during COVID were above previous year, this is retained constant every year

Commercial COVID-19 Recovery

Optimistic Commercial Operations Recovery Forecast



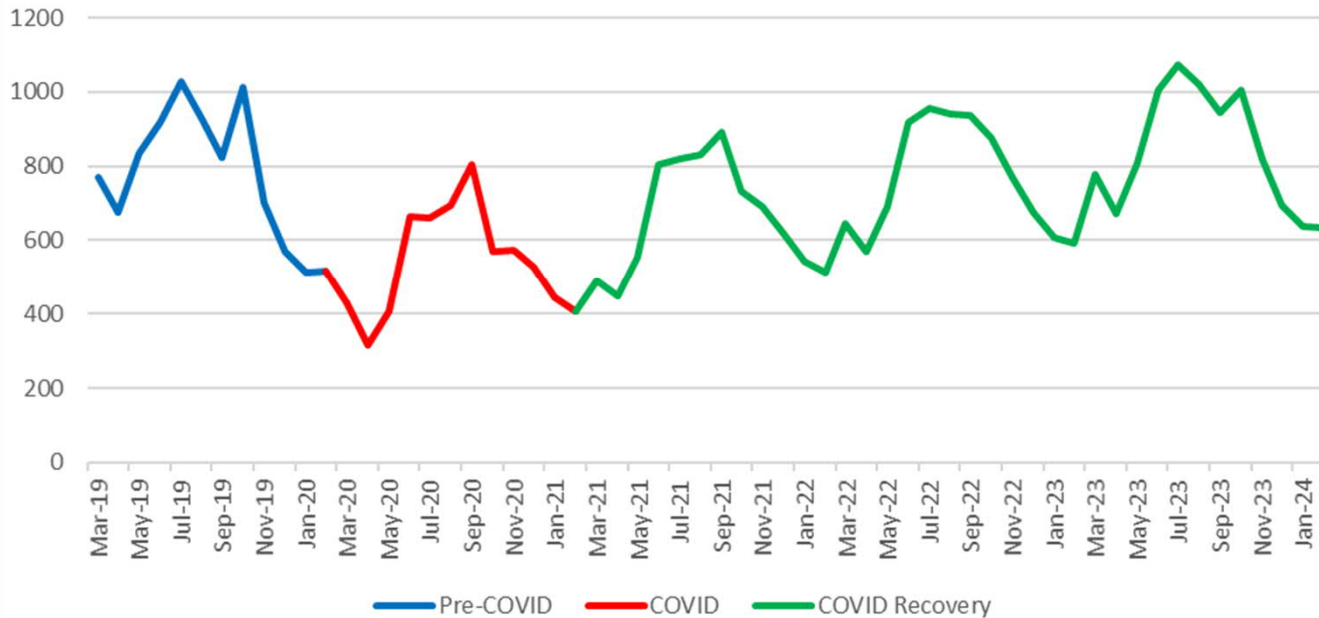
“Optimistic” Forecast

Recover 99% of operations within 1 year

- Same as GA “optimistic” recovery
- Restores Ultimate Air service in April 2021 and adds mid-day turn in September 2021

Commercial COVID-19 Recovery

Pessimistic Commercial Operations Recovery Forecast



“Pessimistic” Forecast

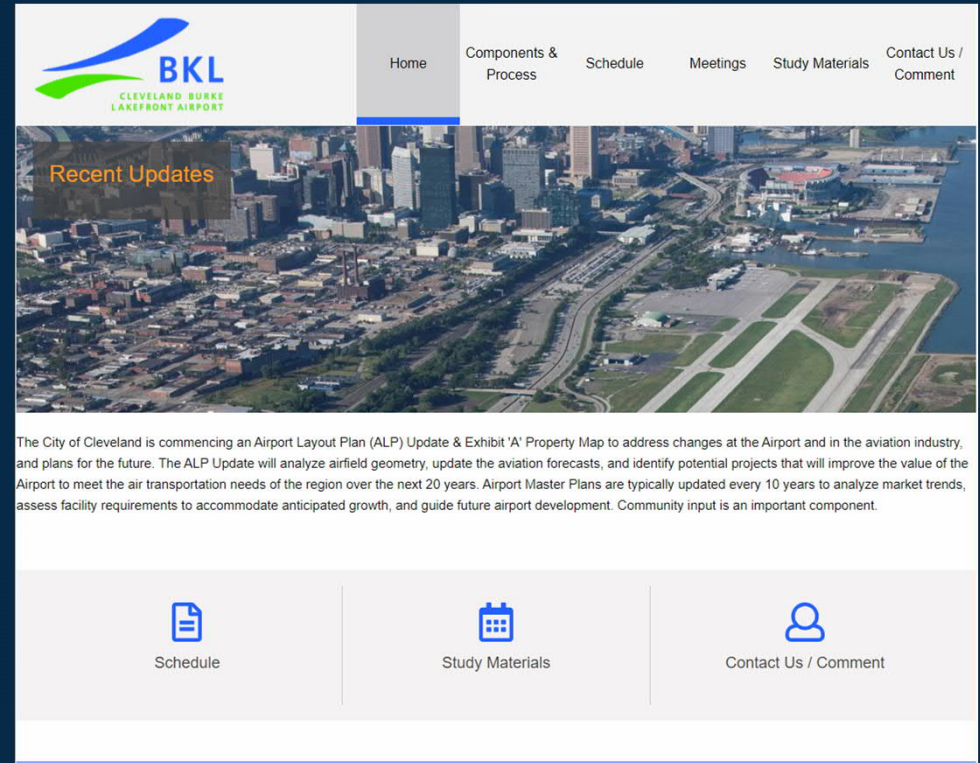
Recover 109% of operations within 3 years

- Same as GA “pessimistic” recovery
- Restores Ultimate Air service in April 2021 and adds mid-day turn in April 2022

Study Website

Serves as a central hub and repository to provide information about BKL and the project, including public meetings and reports.

www.bkl-alpupdate.com



Next Steps

- Complete forecasting effort
 - FAA TAF Released
 - Complete Forecasts
 - Submit Working Paper #1 to PAC & FAA: Inventory & Forecasts
- Begin analysis of facility requirements
- Next PAC meeting – mid June 2021



Questions or Comments?

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



COMMENT FORMS ONLINE!

www.bkl-alpupdate.com

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Responsibly Improving the World We Live In