

Master Common Use Gate Space Plan & Terminal Capacity Parameters : **Winter 2023/2024**

April 14, 2023

FINAL

TSUPS SUBMISSION REQUIREMENTS

- The City is bound by the Terminal Space Use Protocols (TSUPS) to submit a Master Common Use Gate Space Plan and Terminal Capacity Parameters to the Scheduling Manager on March 30th, 2023, 6 weeks prior to the IATA initial submission deadline.
- The gate space plan should include all the relevant information needed for the Scheduling Manager to process assignments to Common Use Gate Space and Hardstand Space.
- The terminal capacity parameters submission should include all the useful information to process assignments of the following:
 - Check-in and bag drop positions, including self-service kiosks.
 - Security screening checkpoints.
 - Baggage handling and makeup.
 - Federal inspection station and baggage claim.
- The submission should include terminal capacity parameters related to these processes, at a level of detail reasonably deemed appropriate by the city.

NOTES: TSUPS – Terminal Space Use Protocols (effective April 15, 2019)
IATA – International Air Transport Association

Scheduling Capacity Summary



METHODOLOGY AND ASSUMPTIONS

- The Winter 2023/2024 terminal capacity parameters are based upon a methodology consistent with prior capacity declarations (including the Winter 2022/2023 capacity declaration). These parameters are based upon the following:
 - An analytical assessment of the processes using previously sampled data and industry metrics.
 - Periodic on-site observations to understand the following:
 - Operational specificities
 - Gather stakeholder input
 - Changes in airport operations
- The capacities resulting from this analysis are expressed for the entire Winter 2023/2024. These include variations in capacity due to construction activities, as well as infrastructure and operational improvements.
- The analysis considers the impact of domestic airline changes (Delta Air Lines move to Terminal 5, Frontier Airlines route restructuring, and Southwest Airlines growth) at Terminal 5.
- Enhanced safety and security measures (such as social distancing or health screening) are not assumed to affect Winter 2023/2024 capacity.

COMMON USE PROCESSING CAPACITY MAIN TERMINALS

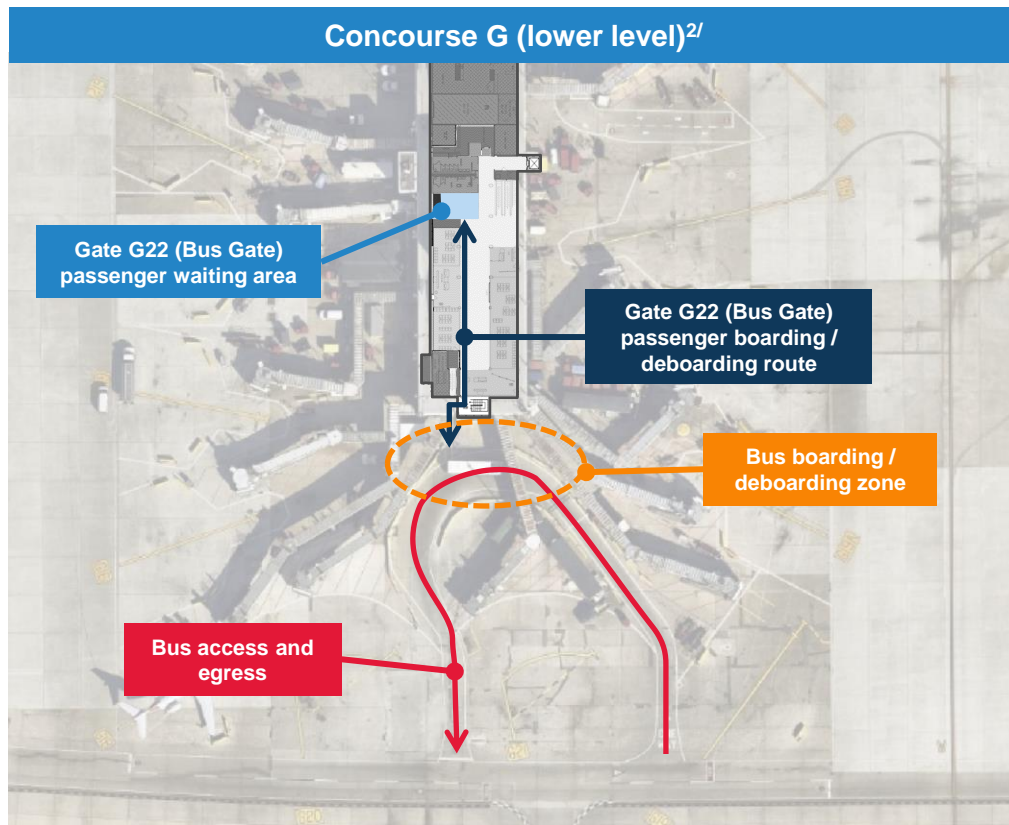
Process	Unit	Common Use units used as a basis for capacity declaration
		Winter 2023/2024
Terminal 1		
No Common Use Facilities	-	-
Terminal 2		
No Common Use Facilities	-	-
Terminal 3		
Check-in	Positions	8 ^{1/}
Baggage Makeup	Devices	1 (joint use)
Non-FIS Baggage Reclaim ^{2/}	Devices	1
Bus Gates	Gates	1 (G22)

NOTES: 1/ Common Use check-in allocation subject to use of Terminal 3 Joint Use baggage makeup. The Terminal 3 Joint Use baggage makeup carousel provides 14 makeup positions currently used by Spirit Airlines and Essential Air Services (Cape Air, Key Lime Air/Denver Air Connection, and Southern Airways Express).

2/ Vacant in Summer 2021. Spirit Airlines and Essential Air Services use a separate, Joint Use, baggage reclaim device.

SOURCE: Ricondo & Associates, Inc., March 2023.

MAIN TERMINALS – G22 BUS GATE / TERMINAL TRANSFER BUS STOP



- A single door is provided for Gate G22 and Terminal Transfer Bus^{1/} operations.
- The Gate G22 waiting area is sized to primarily handle aircraft with 50 seats or less.

Image not to scale : North 

NOTE: 1/ Terminal Transfer Bus provided for passengers connecting between Main Terminals and Terminal 5.

2/ Ramp and interior layout are indicative and subject to change.

SOURCES: Nearmap, September 28, 2022 ; Ricondo & Associates, Inc., April 2023.

COMMON USE PROCESSING UNITS TERMINAL 5

Process	Unit	Common Use units as a basis for capacity declaration		
		Winter 2022/2023 Declared (prior equivalent season)	Winter 2023/2024	Terminal 5 Extension Complete
International Arrivals				
Federal Inspection Station	Primary positions	35	10/29 – 11/30: 50 12/1 – 3/30: 56	56
FIS Baggage Reclaim	Devices	9 ^{1/}	9 ^{1/}	9 ^{1/}
Transfers Recheck	Common-use positions	16	16	16
Domestic and Precleared Arrivals				
Non-FIS Baggage Reclaim	Devices	2 ^{2/}	2 ^{2/}	2 ^{2/}
Departures				
Check-in	Positions	115-123	132 ^{3/}	136 ^{3/}
Security Screening ^{4/}	Lanes	13	13	13
Baggage Departure Processing	Originating in-line EDS machines	3 ^{5/}	5 ^{5/}	5 ^{5/}
Baggage Makeup	Makeup positions	120-138	10/29 – 12/14: 144 12/15 – 2/29: 168 3/1 – 3/30: 180	180
Bus Gates	Gates	Not declared	1 (M13)	1 (M13)

NOTES: 1/ Includes 6 devices with 215 linear foot presentation length and 3 devices with 195 linear foot presentation length.

2/ Based upon 1 device with 175 linear foot presentation length and 1 device with 150 linear foot presentation length (excludes 1 Preferential Use Delta Air Lines device).

3/ Common-use desks only. Does not include Delta Air Lines Preferential Use space.

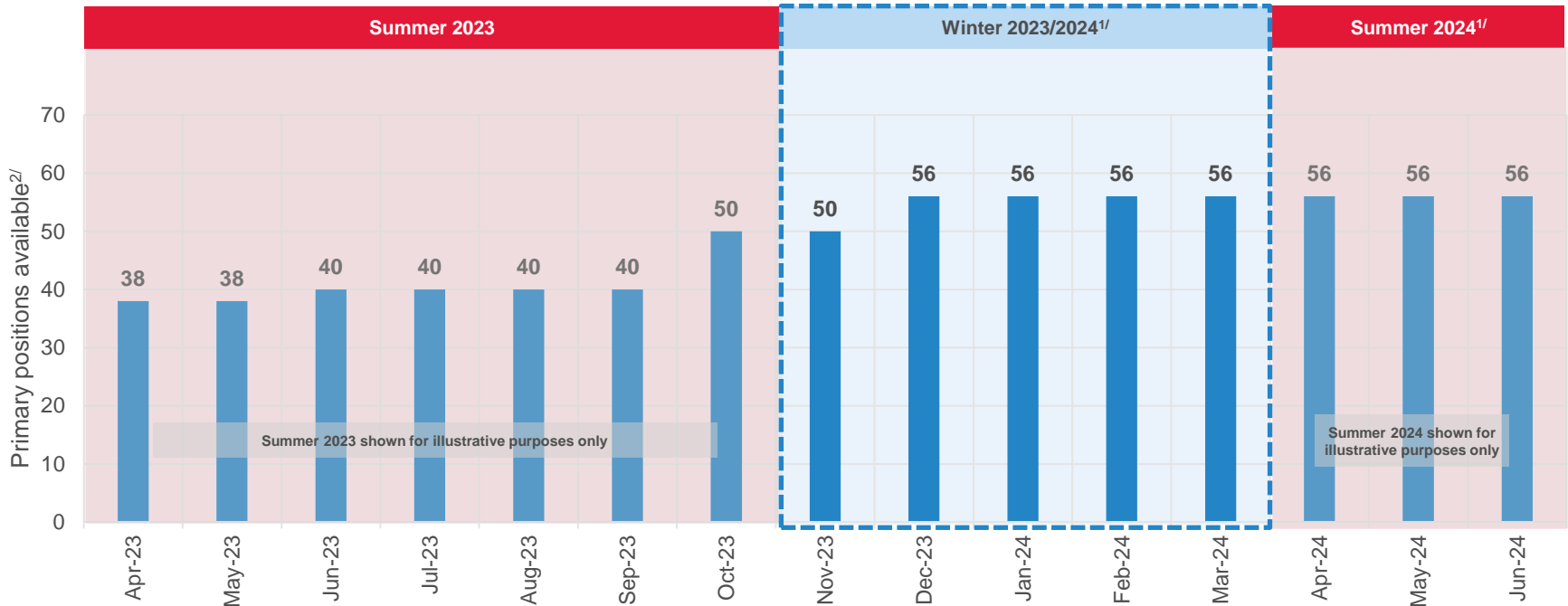
4/ Security screening provided for TSA Precheck as well as standard processes.

5/ Baggage departures processing assumed to be limited by CBIS capacity. Includes EDS machines provided in-line for the departures process (excludes any machines provided for transfers recheck). 1 EDS machine used as redundancy.

SOURCES: Chicago Department of Aviation, *Executive Working Group – Terminal 5 Subcommittee*, February 8, 2023; Vanderlande, *Acceleration Plan for West Phase*, March 2023; Ricondo & Associates, Inc., March 2023.

Processing unit variation between
Winter 2022/2023 and Winter 2023/2024

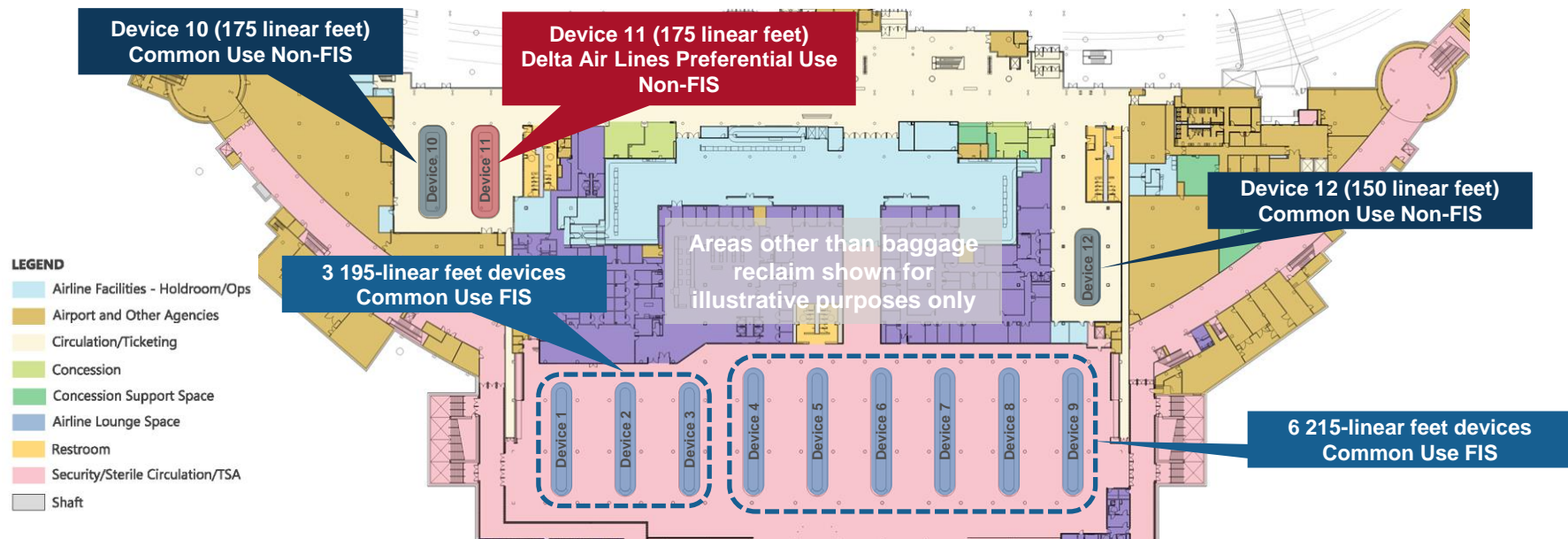
TERMINAL 5 – KNOWN WINTER 2023/2024 CONSTRUCTION ACTIVITIES FEDERAL INSPECTION STATION PRIMARY INSPECTION CAPACITY



NOTES: 1/ Capacity anticipated to be available prior to and after Winter 2023/2024 is shown for illustrative purposes only and should not be considered to be part of this capacity declaration.
2/ Exhibit only shows installed positions useable for regular processing of passengers. Actual processing capacity is subject to U.S. Customs and Border Protection staffing. Phasing for capacity declaration purposes only.
SOURCES: Austin Power Partners, *Revised Phasing Dates*, January 12, 2023; Ricondo & Associates, February 2023.

TERMINAL 5 – KNOWN WINTER 2023/2024 CONSTRUCTION ACTIVITIES

BAGGAGE RECLAIM

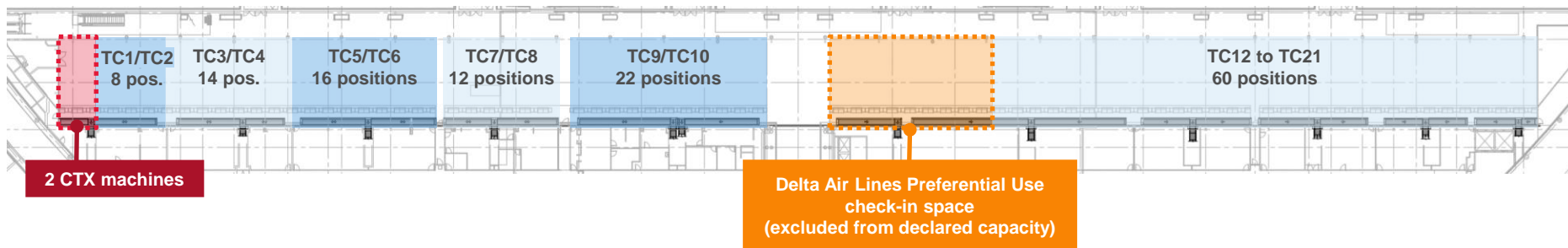


- The declared capacity assumes two non-FIS baggage reclaim devices (one 150 linear foot device and one 175 linear foot device)
- All FIS baggage reclaim projects are anticipated to be complete, with 9 common use devices available

SOURCES: Chicago Department of Aviation, Executive Working Group – Terminal 5 Subcommittee, February 8, 2023; Ricondo & Associates, Inc., March 2023.

TERMINAL 5 – KNOWN WINTER 2023/2024 CONSTRUCTION ACTIVITIES

COMMON USE CHECK-IN COUNTERS



Winter 2023/2024
Declared capacity



132
Common use
check-in positions

- All check-in baggage handling system improvements are anticipated to be completed by Winter 2023/2024
- No portering is anticipated to be required during the Winter 2023/2024 season

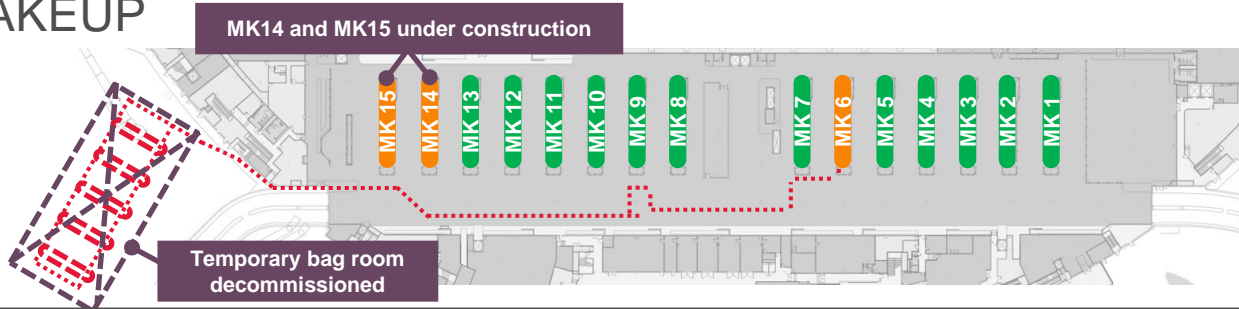
SOURCES: Chicago Department of Aviation, *Executive Working Group – Terminal 5 Subcommittee*, February 8, 2023; Vanderlande, *Acceleration Plan for West Phase*, March 2023; Ricondo & Associates, Inc., March 2023.

TERMINAL 5 – KNOWN WINTER 2023/2024 CONSTRUCTION ACTIVITIES

BAGGAGE MAKEUP

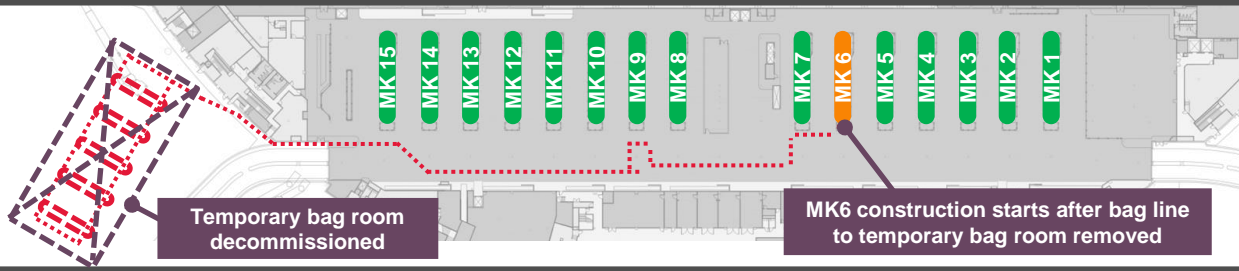
October 29, 2023 –
December 14, 2023

144 positions
available
(12 carousels)



December 15, 2023 –
February 29, 2024

168 positions
available
(14 carousels)



March 1, 2024 –
March 30, 2024

180 positions
available
(15 carousels)

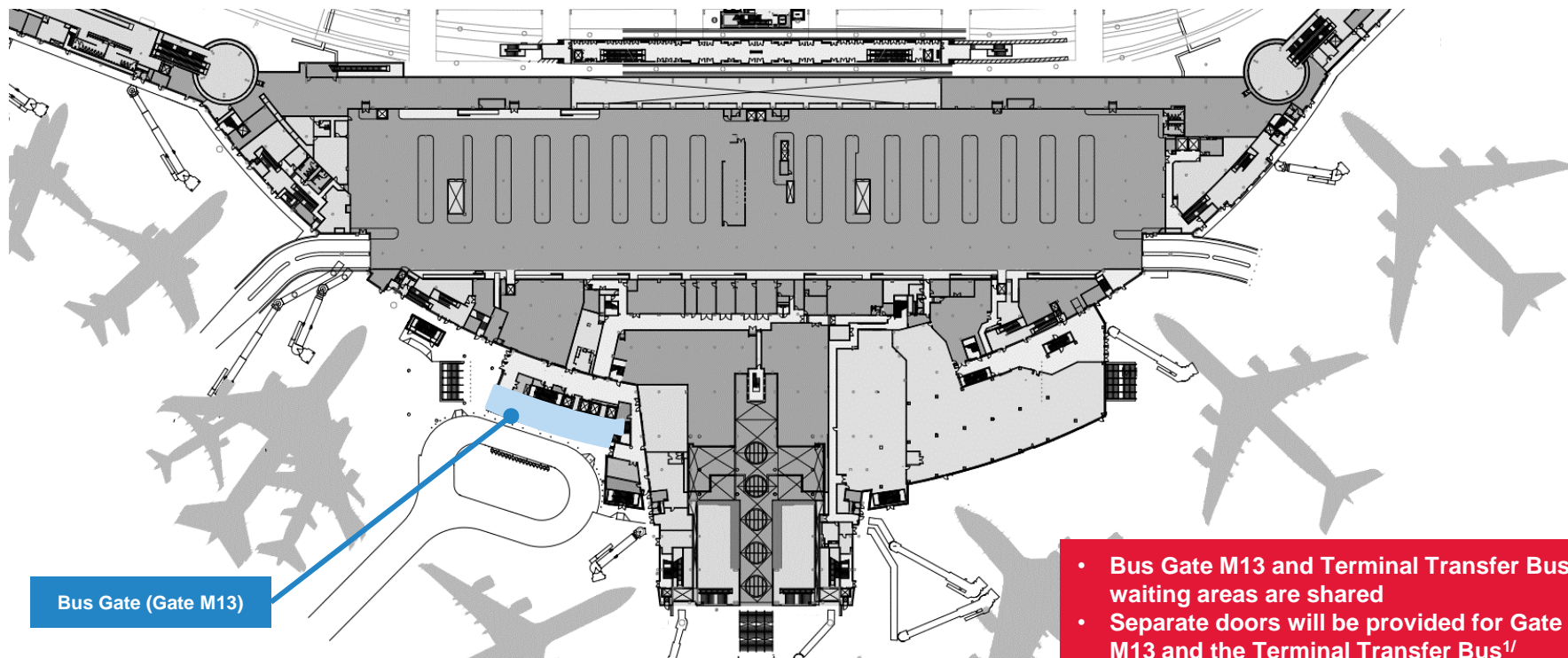


LEGEND – MAKEUP DEVICES

- █ Operational
- █ Remaining to be built
- █ Decommissioned / being demolished

NOTE: Phasing for capacity declaration purposes only.
SOURCES: Chicago Department of Aviation, Executive Working Group – Terminal 5 Subcommittee, February 8, 2023; Vanderlande, Acceleration Plan for West Phase, March 2023; Ricondo & Associates, Inc., March 2023.

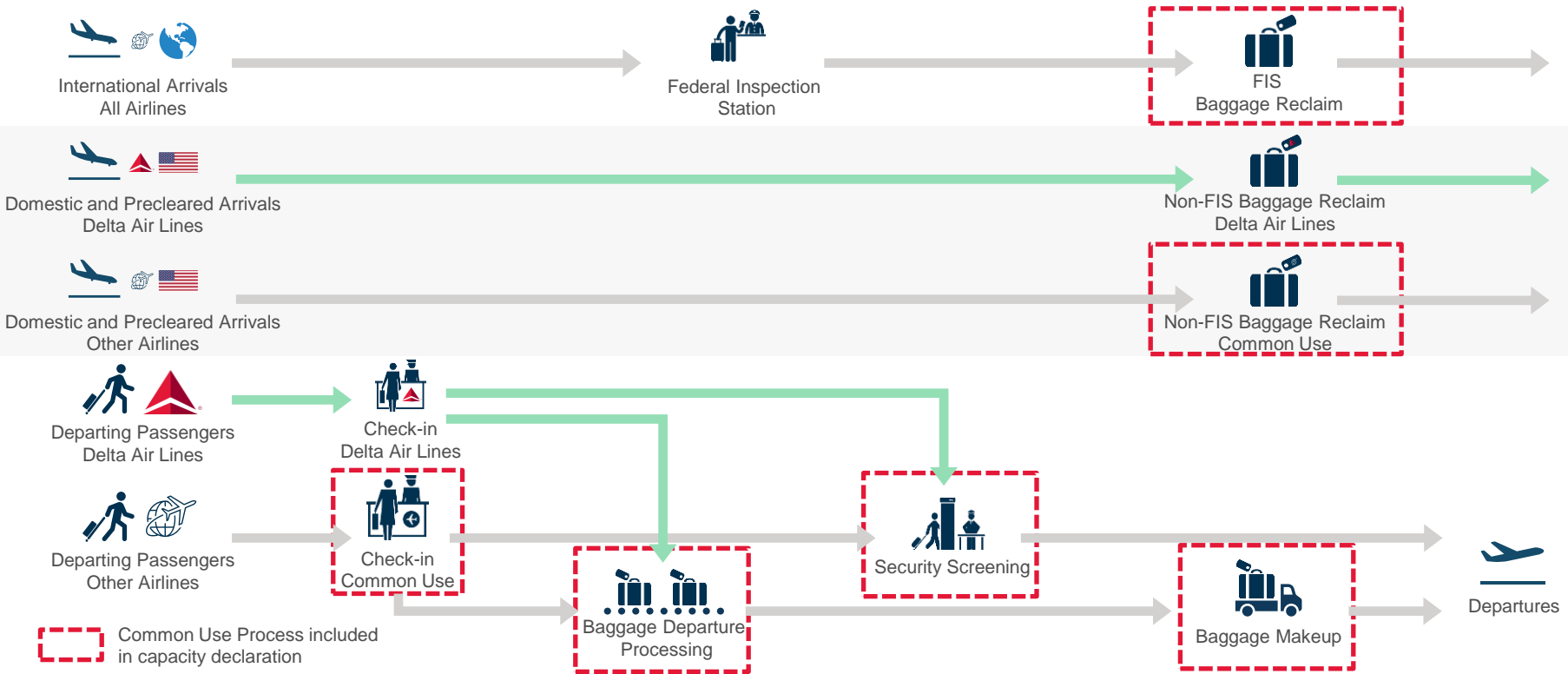
TERMINAL 5 – M13 BUS GATE / TERMINAL TRANSFER BUS STOP



NOTE: 1/ Terminal Transfer Bus provided for passengers connecting between Main Terminals and Terminal 5.

SOURCES: Chicago Department of Aviation, *Executive Working Group – Terminal 5 Subcommittee*, February 8, 2023; Ricondo & Associates, Inc., March 2023.

COMMON USE DECLARED CAPACITIES – TERMINAL 5






Declared capacities based upon total demand at Common Use processes (including Delta Air Lines and other airlines)

SOURCE: Ricondo & Associates, Inc., March 2023.

MAIN TERMINALS – WINTER 2023/2024 CAPACITY PARAMETERS

OCTOBER 29, 2023 - MARCH 30, 2024

Passenger Flow	Process	Time of Day	Available Common Use Units		Declared Common Use Capacity	
			Unit	Capacity	Unit	Capacity
Terminal 1						
No Common Use Facilities	-	-	-	-	-	-
Terminal 2						
No Common Use Facilities	-	-	-	-	-	-
Terminal 3						
  Domestic and Precleared Arrivals	Non-FIS Baggage Reclaim	All day	Devices	1 ^{2/}	Domestic seats per hour ^{3/}	600
	Check-in ^{4/}	All day	Positions	8	Seats per four hours	1,100
	Security Screening	All day	Lanes	20 ^{5/}	Seats per four hours	18,400
	Baggage Makeup	All day	Devices	1 (joint use) ^{6/}	Seats per four hours	1,900 (joint use) ^{6/}

NOTES: 1/ All Terminal 3 carriers are anticipated to use security screening capacity outlined in the table. American Airlines and Spirit Airlines are anticipated to operate Preferential Use or Joint Use check-in and non-FIS baggage reclaim and do not use Common Use check-in or non-FIS baggage reclaim capacity.

2/ Device 1 (140 linear feet of presentation length – vacant in Winter 2022/2023) is declared as common use. Spirit Airlines and Essential Air Services use a separate, Joint Use, baggage reclaim device.

3/ Non-FIS baggage reclaim capacity is equivalent to 200 precleared international seats per hour. Each precleared international seat is equivalent to 2.6 domestic seats due to higher average number of passengers with baggage and longer time at reclaim.

4/ Common Use check-in allocation subject to use of Terminal 3 Joint Use baggage makeup.




5/ Includes 4 Automated Screening Lanes (ASL) and 16 traditional lanes.

6/ Joint Use baggage makeup currently used by Spirit Airlines and Essential Air Services (as of August 2022: Cape Air and Key Lime Air).

SOURCE: Ricondo & Associates, Inc., March 2023.

TERMINAL 5 – WINTER 2023/2024 CAPACITY PARAMETERS

OCTOBER 29, 2023 - MARCH 30, 2024

Passenger Flow	Process	Time of Day	Available Common Use Units		Declared Common Use Capacity ^{1/}	
			Unit	Capacity	Unit	Capacity
 International Arrivals	Federal Inspection Station ^{2/}	All day	Primary positions	10/29 – 11/30: 50 12/1 – 3/30: 56	Seats per hour	10/29 – 11/30: 3,800 12/1 – 3/30: 4,200
	FIS Baggage Reclaim	All day			Devices	9 ^{3/}
 Domestic and Precleared Arrivals	Non-FIS Baggage Reclaim	All day	Devices	2 ^{4/}	Domestic seats per hour ^{4/}	1,500
 Departures	Check-in	All day	Positions	132	Seats per 4-hours	6,600
	Security Screening	Peak (12:30-20:30)	Lanes	13	Seats per 4-hours	8,400
		Off-peak (20:30-12:30)	Lanes	11	Seats per 4-hours	7,100
	Baggage Departures Processing	All day	In-line EDS machines	5 ^{5/}	Seats per 4-hours	10,300
Baggage Makeup	All day	Makeup positions	10/29 – 12/14: 144 12/15 – 2/29: 168 3/1 – 3/30: 180	Seats per 4-hours	10/29 – 12/14: 6,700 12/15 – 2/29: 7,900 3/1 – 3/30: 8,400	

NOTES: 1/ All Terminal 5 carriers are anticipated to use Federal Inspection Station, security screening, non-FIS and FIS baggage reclaim, baggage departures processing and baggage makeup capacity outlined in the table. Delta Air Lines is anticipated to operate Preferential Use check-in and does not use Common Use check-in capacity.

2/ Capacity is subject to U.S. Customs and Border Protection staffing.

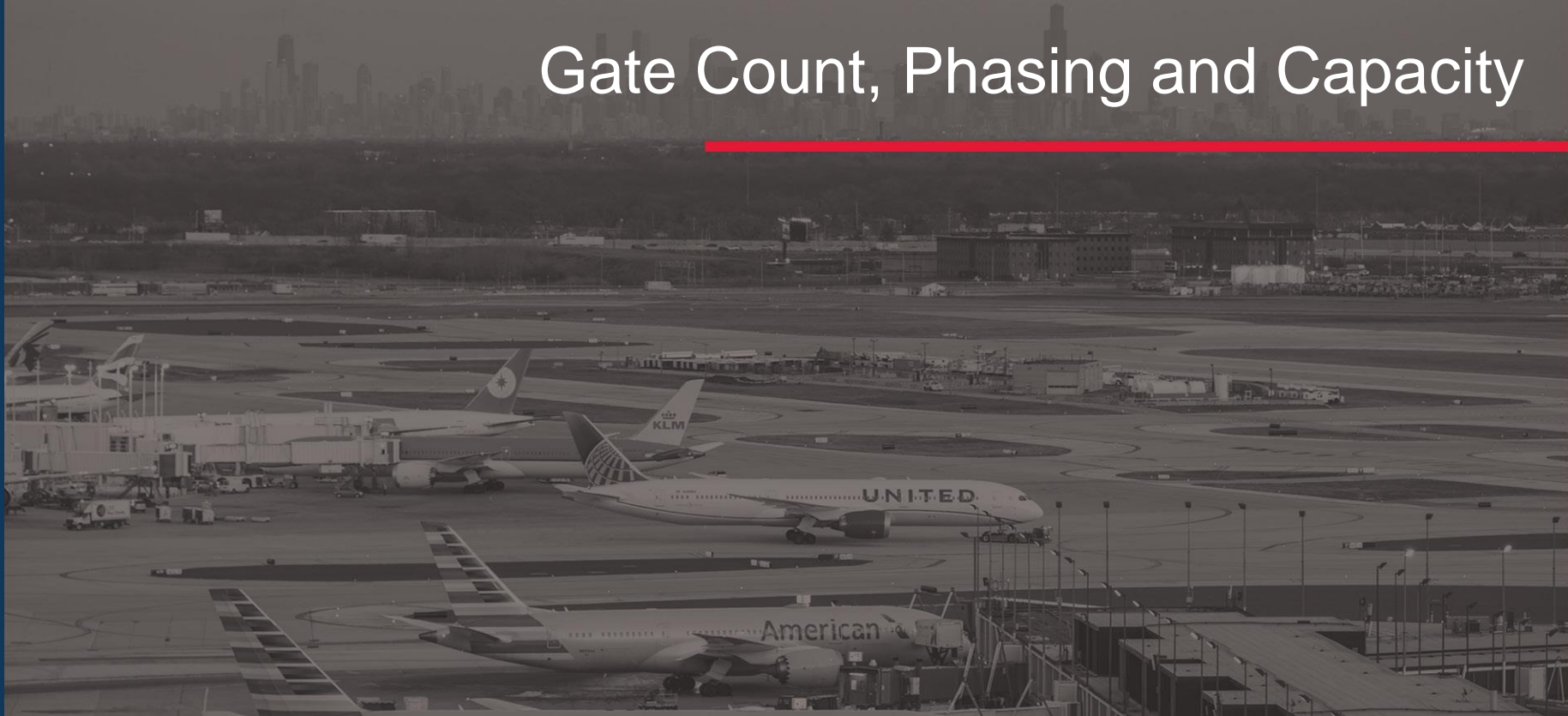
3/ FIS baggage reclaim includes 6 devices with 215 linear foot presentation length and 3 devices with 195 linear foot presentation length.

4/ Non-FIS baggage reclaim capacity is equivalent to 600 precleared international seats per hour. Each precleared international seat is equivalent to 2.6 domestic seats due to higher average number of passengers with baggage and longer time at reclaim. Capacity based upon 1 device with 175 linear foot presentation length and 1 device with 150 linear foot presentation length.

5/ Baggage departures processing assumed to be limited by CBIS capacity. Includes EDS machines provided in-line for the departures process (excludes any machines provided for transfers recheck). 1 EDS machine used as redundancy.

SOURCE: Ricondo & Associates, Inc., March 2023.

Gate Count, Phasing and Capacity



WINTER 2023-24 – O'HARE COMMON USE STANDS



Image not to scale : North

Source: Nearmap Aerial (July 20, 2020)

O'HARE TERMINAL 5 – WINTER 2023-24 AIRCRAFT PARKING LAYOUT

Gates M1A & M1B : Dual dependent Saab-340s (1st in 1st out)

Gates M2-M11 : Preferential Use by Delta Air Lines

Gate M14 : Closed to accommodate construction activities

Gate M13 : lower-level dedicated bus gate for remote aircraft

Gates M14-M40 : Dedicated for Common Use

- 18 International arrival wide-body Gates
9 of these are MARS capable for 14 narrow-bodies
- 4 wide-body Hardstand parking positions
1 of these is MARS capable for 2 narrow-bodies
- A380 parking capability at Gates M17A & M29W



Image not to scale : North

Source: Chicago Department of Aviation – Future Airport Layout Plan for O'Hare International Airport (December 5, 2022); TY Lin Design Plans & Bulletin #031; Ricondo (April 10, 2023)

CHICAGO O'HARE INTERNATIONAL AIRPORT CONCOURSE L STINGER Winter 2023-24 Aircraft Layout

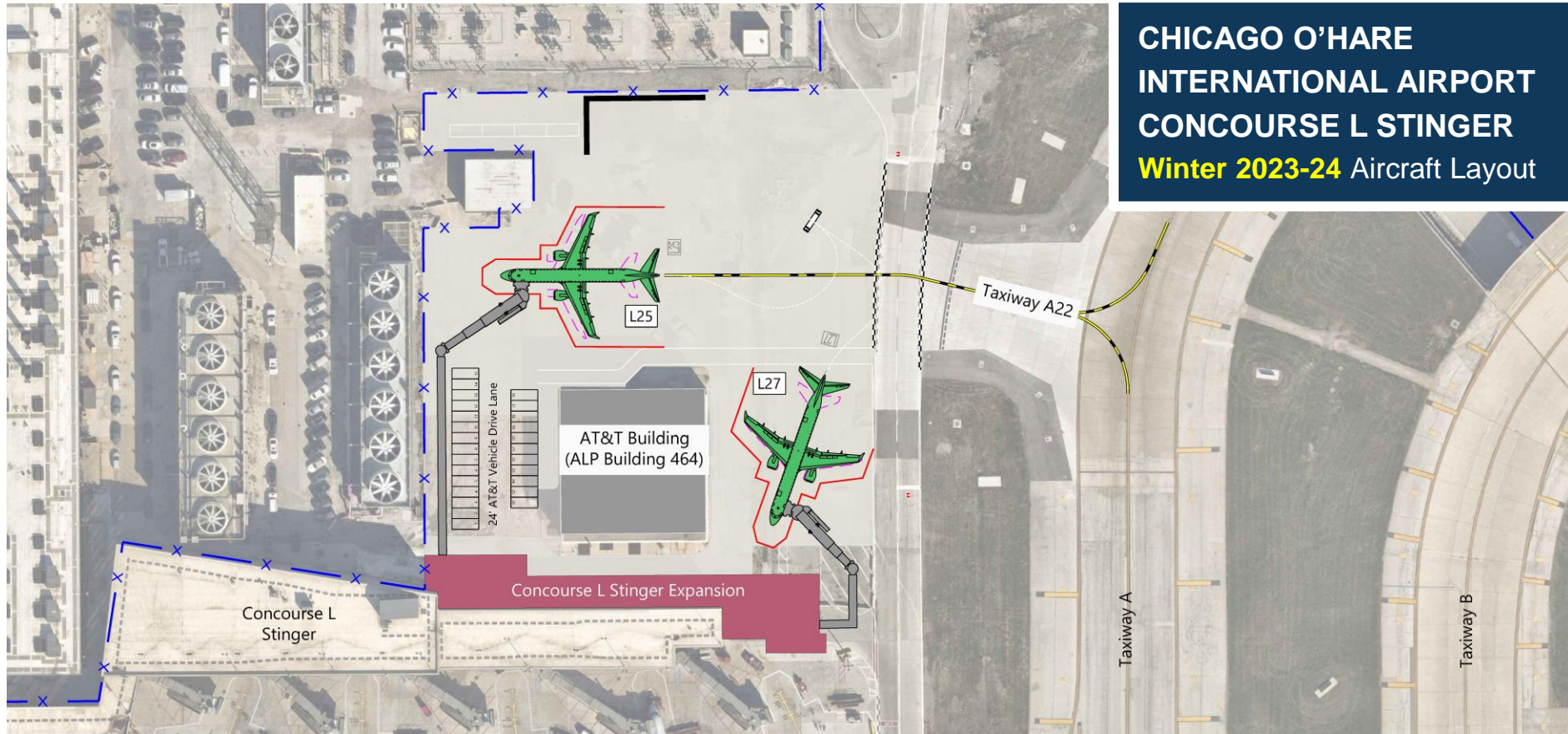
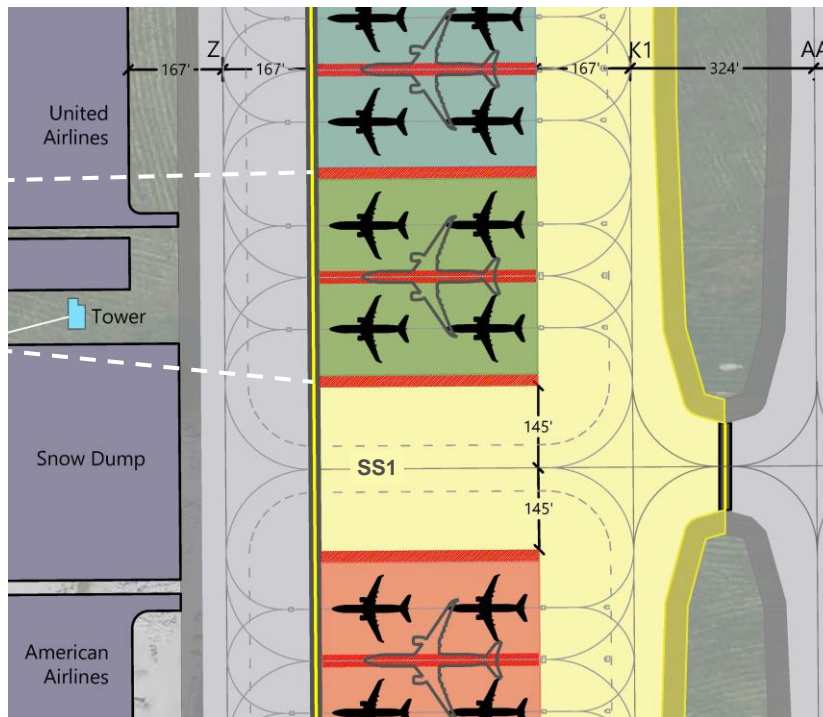


Image not to scale : North

Source: Chicago Department of Aviation; TY Lin Design Plans & Bulletin #031; Ricondo (March 23, 2023)

O'HARE CENTRAL DE-ICING PAD – HARDSTAND PARKING

Used primarily for Common Use Deicing from October 1 – May 15



GREEN AREA

4 narrow-body
(first in, first out)
or
1 wide-body

Field access via:
Twy U from North
Twy K from South

Ramp Tower Control
by United & American

Source: Chicago Department of Aviation, O'Hare International Airport - Draft Airport Layout Plan (March 2020)
Nearmap Aerial (July 20, 2020)

Source: Nearmap Aerial (September 28, 2022)

Image not to scale : North



CHICAGO DEPARTMENT OF AVIATION

JAMIE L. RHEE, COMMISSIONER



flychicago.com