



# Master Common Use Gate Space Plan & Terminal Capacity Parameters : **Summer 2023**

September 6, 2022

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 by 6 weeks prior to the IATA initial submission deadline (due by August 25<sup>th</sup>, 2022)
- 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

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# METHODOLOGY AND ASSUMPTIONS

- The Summer 2023 terminal capacity parameters are based upon a methodology consistent with prior capacity declarations (including the Summer 2022 capacity declaration). These parameters are based upon the following:
  - An analytical assessment of the processes using previously sampled data and industry metrics.
  - On-site observations during Summer 2019 (pre-COVID-19) to understand operational specificities and gather stakeholder input.
  - Further on-site observations during Summer 2022 to reflect operational changes that have taken place since Summer 2019.
- The capacities resulting from this analysis are expressed for the entire Summer 2023 season. 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.
- Any international airline post-COVID-19 traffic recovery in Summer 2023 is assumed to follow trends established in the Summer 2022.
- Enhanced safety and security measures (such as social distancing or health screening) are not assumed to affect Summer 2023 capacity.

# COMMON USE PROCESSING CAPACITY CORE TERMINALS

Process	Unit	Common Use units used as a basis for capacity declaration
		Summer 2023
<b>Terminal 1</b>		
No Common Use Facilities	-	-
<b>Terminal 2</b>		
No Common Use Facilities	-	-
<b>Terminal 3</b>		
Check-in	Positions	8 <sup>1/</sup>
Baggage Makeup	Devices	1 (joint use)
Domestic Baggage Reclaim <sup>2/</sup>	Devices	1

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 and Key Lime Air/Denver Air Connection).

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

SOURCE: Ricondo & Associates, Inc., August 2022.

# COMMON USE PROCESSING CAPACITY TERMINAL 5

Processing unit variation between  
Summer 2022 and Summer 2023

Process	Unit	Common Use units used as a basis for capacity declaration		
		Summer 2019 (pre-COVID-19)	Summer 2022 Declared (prior equivalent season)	Summer 2023
<b>International Arrivals</b>				
Federal Inspection Station	Primary positions	72	35	March 26 – August 31: 46 September 1 – October 28: 42
International Baggage Reclaim	Devices	9	9	8 <sup>1/</sup>
Transfers Recheck	Common-use positions	24	16	16
<b>Domestic and Precleared Arrivals</b>				
Domestic Baggage Reclaim	Devices	1	2 <sup>2/</sup>	2 <sup>2/</sup>
<b>Departures</b>				
Check-in	Positions	143	115-123	128 <sup>3/</sup>
Security Screening <sup>4/</sup>	Lanes	9	13	13
Baggage Departure Processing	In-line EDS machines	Unchanged from prior seasons		5 <sup>5/</sup> (capacity limited by CBIS)
Baggage Makeup	Makeup positions	174	120-138	March 26 – August 31: 150 September 1 – October 28: 180
Passenger Assistance Desks	Positions	Not declared (none)	Not declared (1 provided)	1
Bus Gates	Gates	Not declared	Not declared	1 (M13)

NOTES: 1/ Includes 5 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.

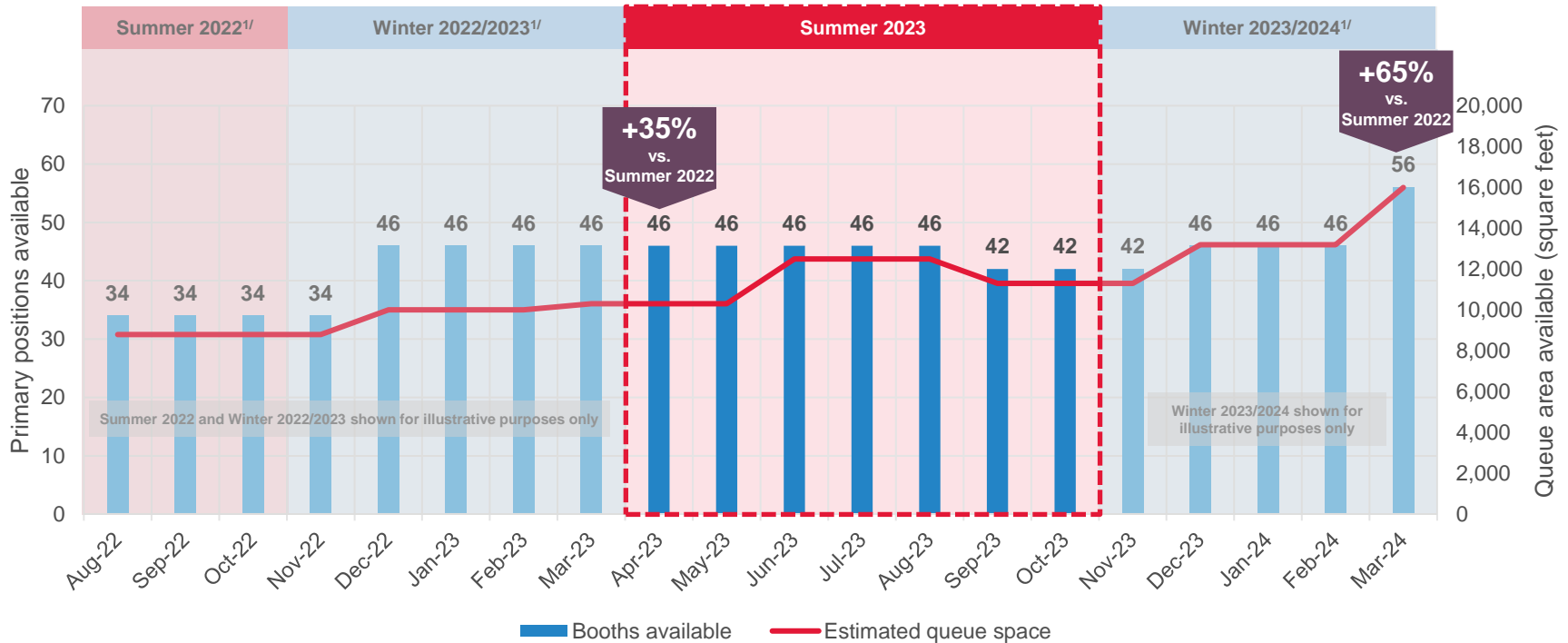
3/ Does not include Delta Air Lines Preferential Use space.

4/ Security screening provided for TSA Precheck as well as standard process in Summer 2022 and Summer 2023. Summer 2019 only had standard process.

5/ Includes EDS machines provided in-line for the departures process (excludes any machines provided for transfers recheck). 1 EDS machine used as redundancy.

SOURCE: Vanderlande, *Technical Committee Meeting*, June 7, 2022; Vanderlande, *Capacity Installation Planning*, August 16, 2022; Austin Power Partners, *Revised FIS commissioning dates*, August 15, 2022; Ricondo & Associates, Inc., August 2022.

# TERMINAL 5 – KNOWN SUMMER 2023 CONSTRUCTION ACTIVITIES FEDERAL INSPECTION STATION PRIMARY INSPECTION CAPACITY

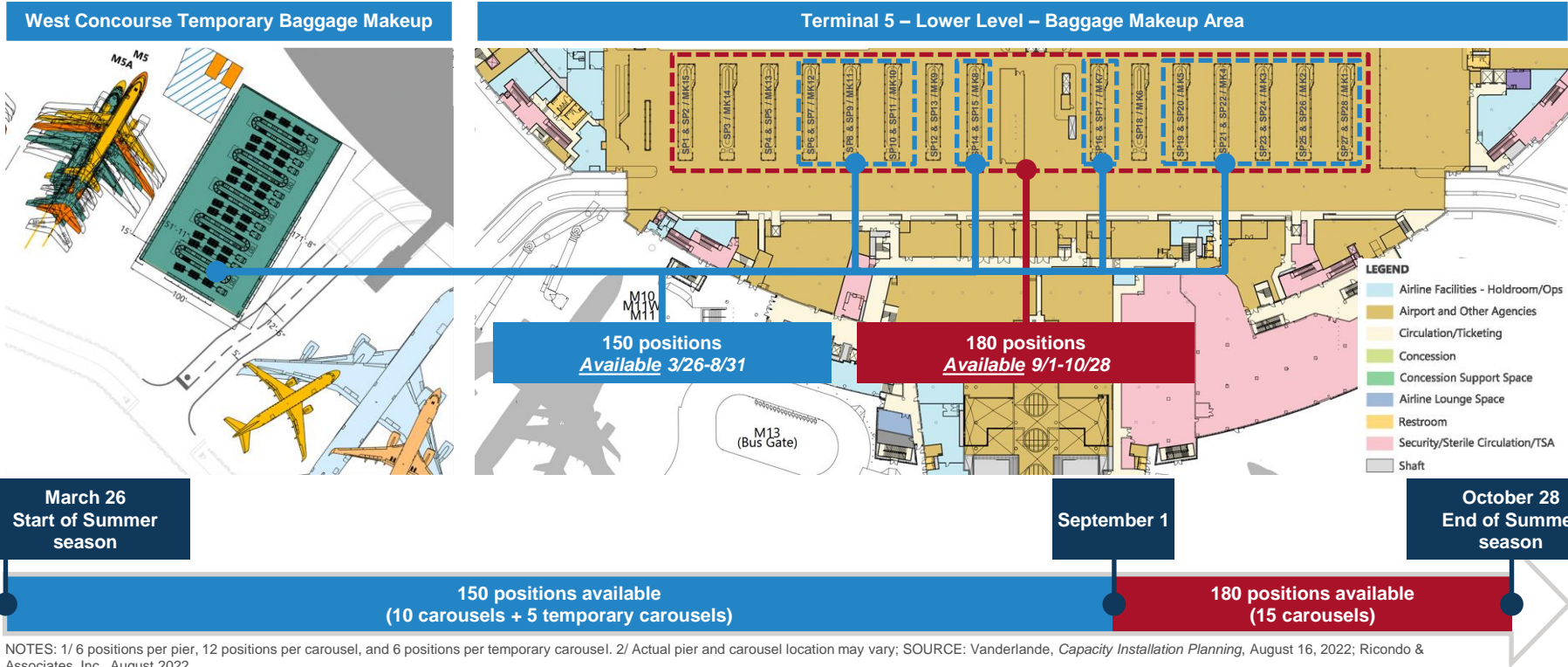


NOTES: 1/ Capacity anticipated to be available prior to and after Summer 2023 is shown for illustrative purposes only and should not be considered to be part of the Summer 2023 capacity declaration.

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.

SOURCES: Austin Power Partners, Revised Phasing Dates, August 15, 2022; Ricondo & Associates, August 2022.

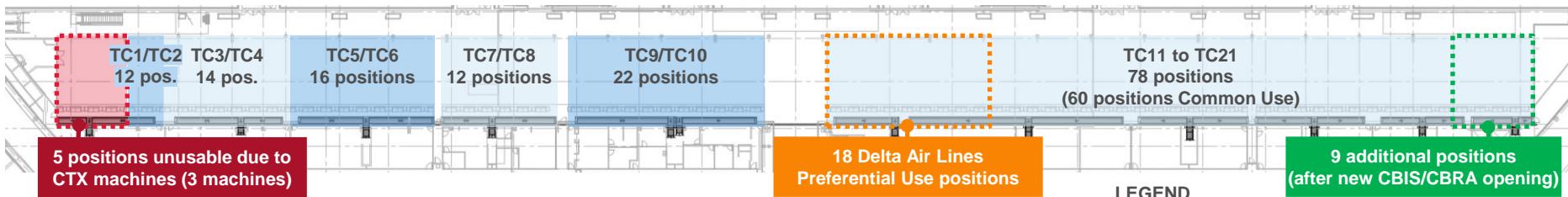
# TERMINAL 5 – KNOWN SUMMER 2023 CONSTRUCTION ACTIVITIES BAGGAGE MAKEUP





# TERMINAL 5 – TICKET COUNTER PHASING SCHEDULE (VANDERLANDE)

Ticket Counter (TC) Belt	Side	Positions Served	Nr. of Positions	March 26-31, 2023	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	Oct. 1-28, 2023
TC1/TC2	West	5A-6B	4								
TC3/TC4	West	7A-13B	14								
TC5/TC6	West	14A-21B	16								
TC7/TC8	West	22A-27B	12								
TC9/TC10	West	29A-39B	22								
TC11 to TC21	East	40A-79A	78 (60 CU)								
<b>A: Total positions connected to belt<sup>1/</sup></b>	-	-	<b>146</b>	<b>110</b>	<b>146</b>	<b>130</b>	<b>146</b>	<b>146</b>	<b>146</b>	<b>146</b>	<b>146</b>
B: Positions using neighboring belts	-	-	0	36	0	16	0	0	0	0	0
<b>C=A+B: Total usable positions</b>	-	-	<b>146</b>	<b>146</b>	<b>146</b>	<b>146</b>	<b>146</b>	<b>146</b>	<b>146</b>	<b>146</b>	<b>146</b>
D: Delta Preferential Use positions	-	-	18	18	18	18	18	18	18	18	18
<b>E=C-D: Total Common Use positions</b>	-	-	<b>128</b>	<b>128</b>	<b>128</b>	<b>128</b>	<b>128</b>	<b>128</b>	<b>128</b>	<b>128</b>	<b>128</b>



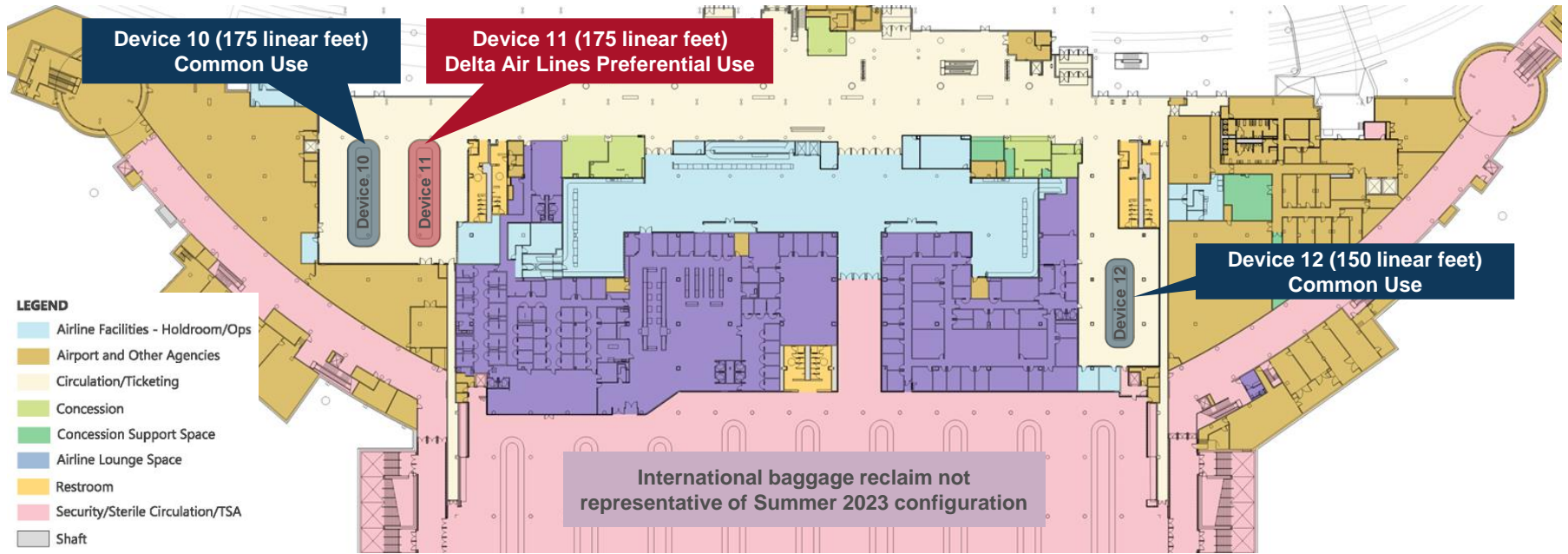
- Any remaining in-lobby CT80 machines are not assumed to impact ticket counters during Summer 2023
- Baggage checked in at positions served by an unavailable TC belt will be carried to positions with available TC belts. Any portering that may be required will be provided as needed based on flight operations.

### LEGEND

- Existing TC belts
- TC Belt Unavailable
- New TC belts

NOTE: 1/ Assumes lowest position count for each month. The number of positions available may be higher at certain times.  
 SOURCES: Vanderlande, June 7, 2022; Ricondo & Associates, Inc., August 2022.

# TERMINAL 5 – KNOWN SUMMER 2023 CONSTRUCTION ACTIVITIES DOMESTIC BAGGAGE RECLAIM

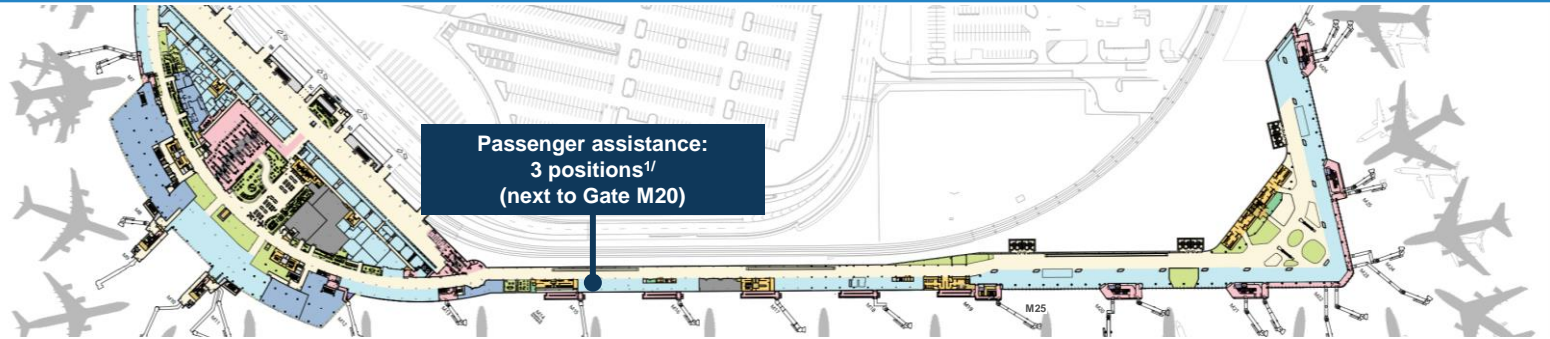


**The declared capacity assumes two domestic baggage reclaim devices (one 150 linear foot device and one 175 linear foot device). Device 10 may be used as an overflow device by Delta Air Lines**

SOURCES: Chicago Department of Aviation, O'Hare International Airport -Terminal Area Assignment, February 2015.; APP, August 2022.; Ricondo & Associates, Inc., August 2022 (analysis).

# TERMINAL 5 – BUS GATES AND PASSENGER ASSISTANCE DESKS

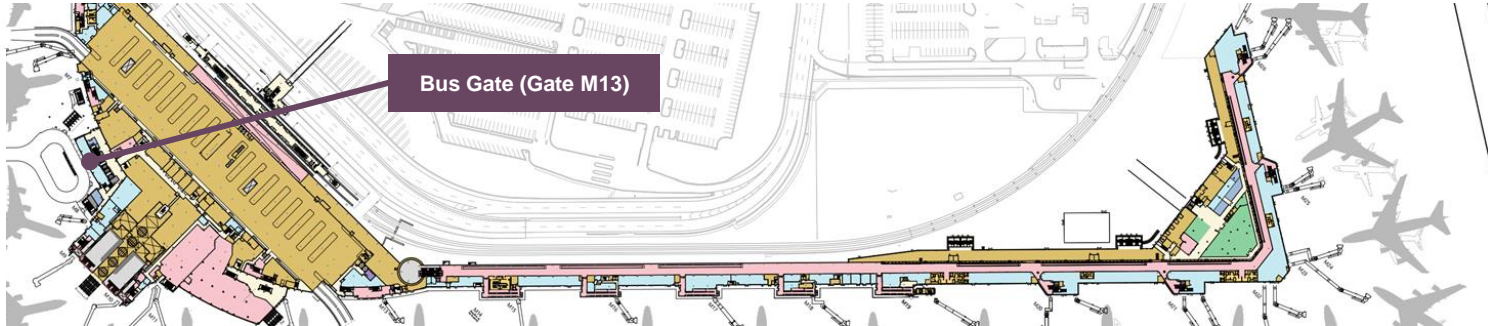
Terminal 5 – Upper Level



Terminal 5 – Apron Level

LEGEND

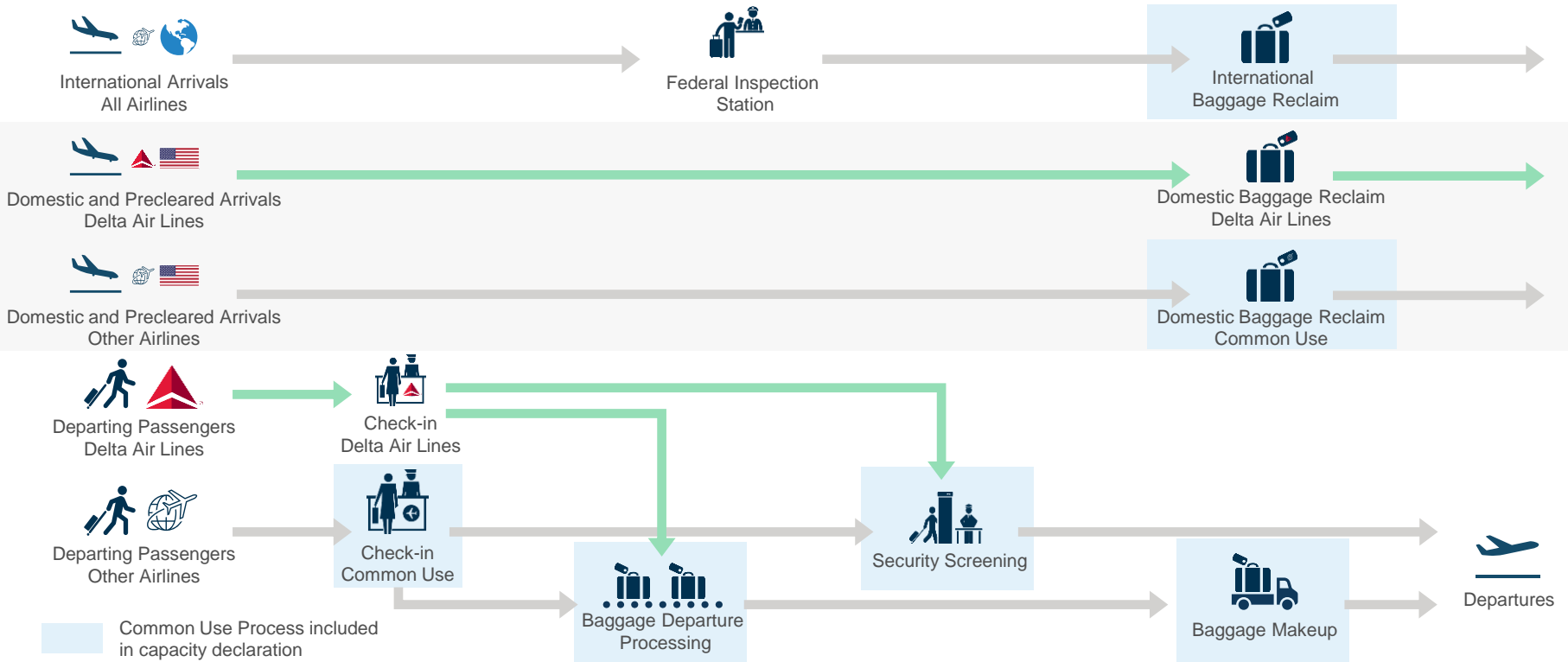
- Airline Facilities - Holdroom/Ops
- Airport and Other Agencies
- Circulation
- Concession
- Concession Support Space
- Lounge Space
- Restroom
- Security/Sterile Circulation/TSA
- Shaft
- To be Programmed



NOTE: 1/ Subject to Gate M20 utilization.

SOURCES: Chicago Department of Aviation, O'Hare International Airport -Terminal Area Assignment, February 2015.; APP, February 2021.; Ricondo & Associates, Inc., August 2022 (analysis).

# 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., August 2022.

# CORE TERMINALS – SUMMER 2023 CAPACITY PARAMETERS

## MARCH 26, 2023 – OCTOBER 28, 2023

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

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 domestic baggage reclaim and do not use Common Use check-in or domestic baggage reclaim capacity.

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

3/ Domestic 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., August 2022.

# TERMINAL 5 – SUMMER 2023 CAPACITY PARAMETERS

## MARCH 26, 2023 – OCTOBER 28, 2023

Passenger Flow	Process	Time of Day	Available Common Use Units		Declared Common Use Capacity <sup>1/</sup>	
			Unit	Capacity	Unit	Capacity
 International Arrivals	Federal Inspection Station <sup>2/</sup>	All day	Primary positions	3/26 – 8/31: 46 9/1 – 10/28: 42	Seats per hour	3/26 – 8/31: 3,500 9/1 – 10/28: 3,300
	International Baggage Reclaim	All day			Devices	8 <sup>3/</sup>
 Domestic and Precleared Arrivals	Domestic Baggage Reclaim	All day	Devices	2 <sup>4/</sup>	Domestic seats per hour <sup>4/</sup>	1,500
 Departures	Check-in	All day	Positions	128	Seats per 4-hours	6,400
	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 <sup>5/</sup>	Seats per 4-hours	10,300
Baggage Makeup	All day	Makeup positions	3/26 – 8/31: 150 9/1 – 10/28: 180	Seats per 4-hours	3/26 – 8/31: 7,000 9/1 – 10/28: 8,400	

NOTES: 1/ All Terminal 5 carriers are anticipated to use Federal Inspection Station, security screening, domestic and international 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/ International baggage reclaim includes 5 devices with 215 linear foot presentation length and 3 devices with 195 linear foot presentation length.

4/ Domestic 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/ 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., August 2022.

# Gate Count, Phasing and Capacity

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# COMMON USE GATES AND HARDSTANDS AT O'HARE

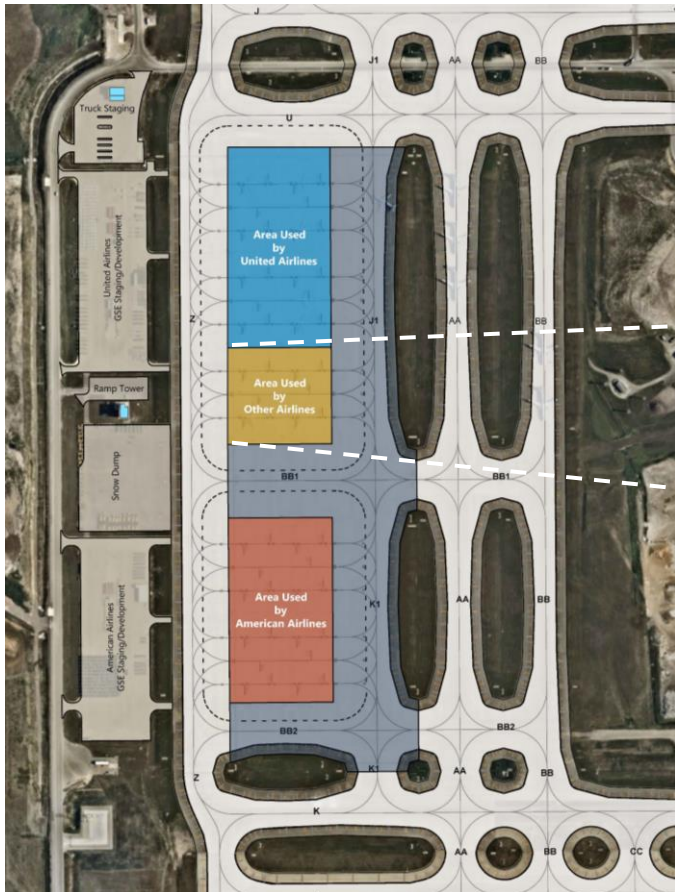
- There are **3 Common Use locations**:
  - **Terminal 5**
    - 19 Common Use wide-body gates (or 11 wide-body and 13 narrow-body Common Use gates) with access to Federal Inspection Services (FIS)
    - 4 wide-body hardstands (or 3 wide-body and 2 narrow-body hardstands)
    - 2 dependent small aircraft gates (M1A and M1B)
  - **Central Deicing Pad** – 4 narrow-body positions (or 1 wide-body position) that can be used as hardstands outside of the deicing season
- Construction of an eastern **Terminal 5 Extension** started in Spring 2019. By the start of Summer 2023 all ramp work will be complete with only minor interior building work remaining.
- In addition to the extension project, the **passenger boarding bridges** at Terminal 5 are in the process of being **replaced** one-by-one – this will continue in conjunction with extension work until late-2022.
- Contained within this presentation are the details of gate and hardstand availability for Terminal 5 throughout Summer 2023



# O'HARE CORE AREA

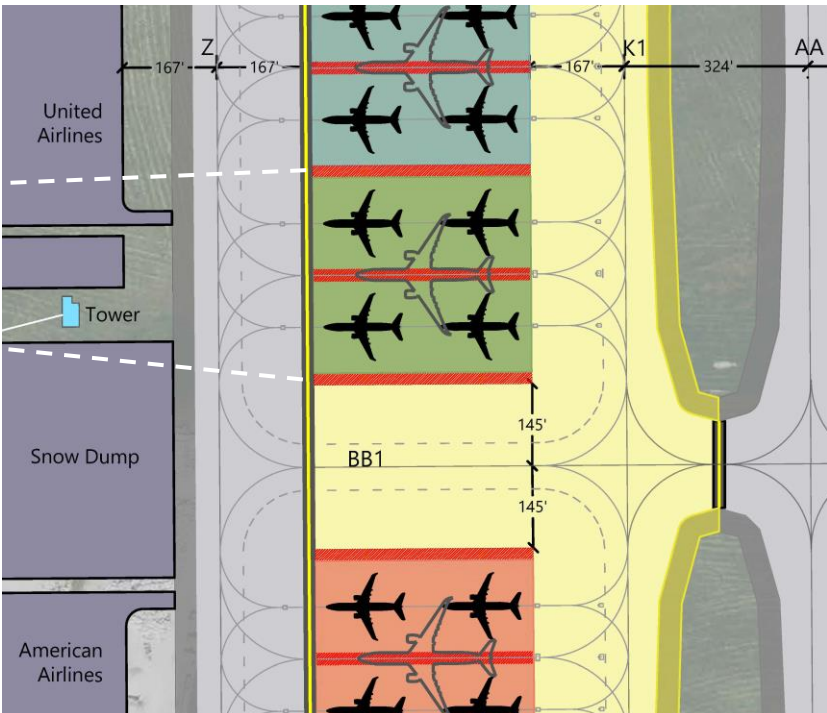


Source: Nasa map Aerial (July 25, 2021)



# CENTRAL DEICING 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 K from South  
 Twy U from North

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)

# CHICAGO O'HARE INTERNATIONAL AIRPORT – TERMINAL 5

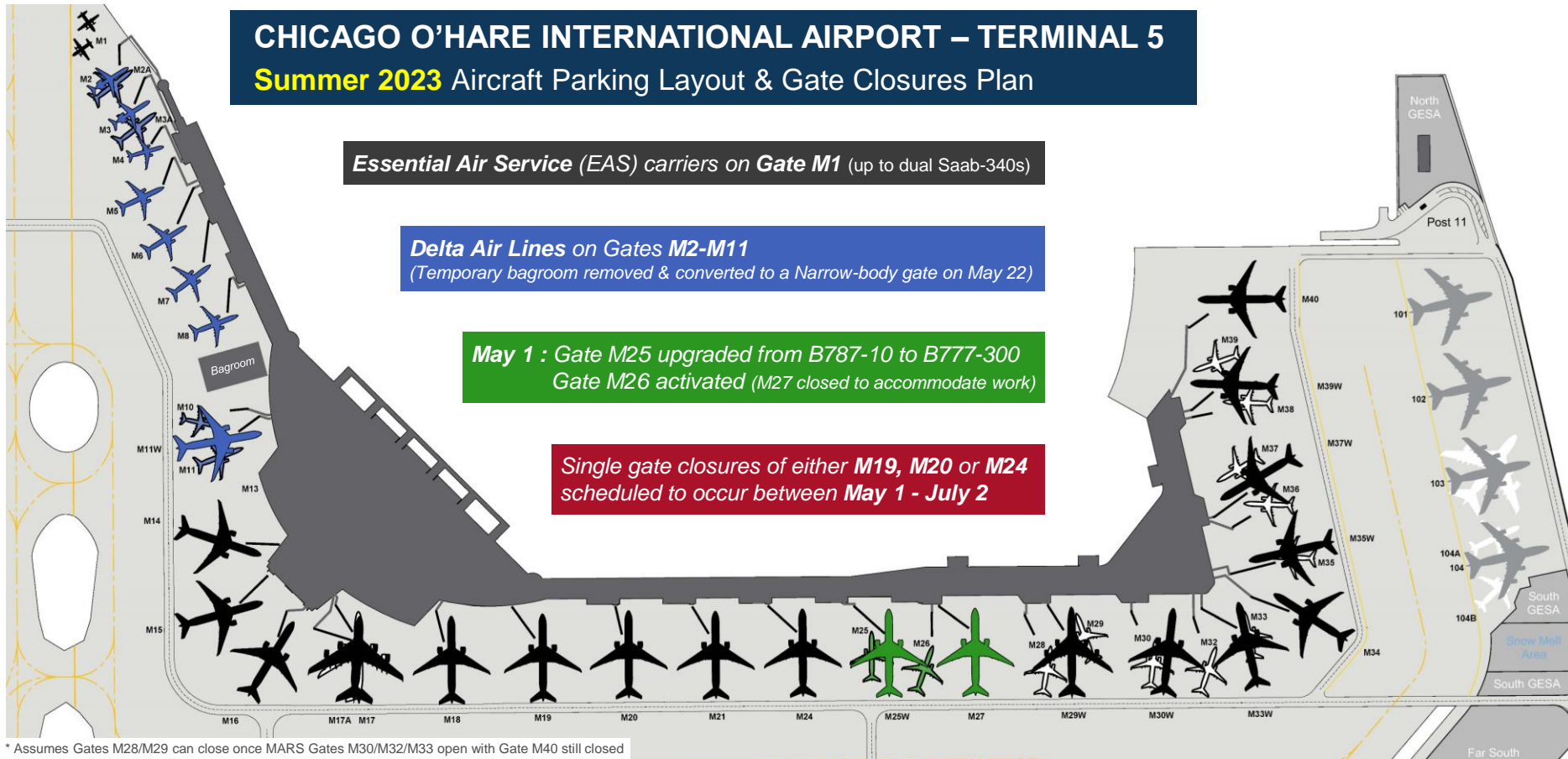
## Summer 2023 Aircraft Parking Layout & Gate Closures Plan

**Essential Air Service (EAS) carriers on Gate M1** (up to dual Saab-340s)

**Delta Air Lines on Gates M2-M11**  
(Temporary bagroom removed & converted to a Narrow-body gate on May 22)

**May 1 : Gate M25 upgraded from B787-10 to B777-300**  
Gate M26 activated (M27 closed to accommodate work)

**Single gate closures of either M19, M20 or M24**  
scheduled to occur between **May 1 - July 2**



\* Assumes Gates M28/M29 can close once MARS Gates M30/M32/M33 open with Gate M40 still closed

\*\* Current schedule assumes no winter conditions delays to pavement work

Source: Chicago Department of Aviation; TY Lin Design Plans & Bulletin #031; Ricoondo (September 6, 2022)

# CHICAGO O'HARE INTERNATIONAL AIRPORT TERMINAL 5

## Summer 2023 Gate Capacity & Closure Schedule

- **18 International Wide-body Common Use Gates** from start of Summer Season (March 26) until July 2 **Maximum of 19 available after July 3**
- Gates M25 & M27 upgraded from B787-9/-10 to full wide-body capable (B777-300) on May 1
- Single wide-body gate closures from May 1 until July 2 to accommodate PBB replacement work
- Temporary Bagroom removed & Gate M9 turned over to Delta Air Lines on May 22
- Gate M11 available for SkyTeam international arrivals (1 wide-body or 2 narrow-bodies)
- Gates M25/M27, M30/M33, M35/M37, M39/M40 can accommodate either 2 wide-bodies or 3 narrow-bodies

M40	B777-300 3	B777-300 3	B777-300 3	B777-300 3	B777-300 3
M39	B777-300 3	B777-300 3	B777-300 3	B777-300 3	B777-300 3
M37	B777-300 3	B777-300 3	B777-300 3	B777-300 3	B777-300 3
M35	B777-300 3	B777-300 3	B777-300 3	B777-300 3	B777-300 3
M34	B777-300	B777-300	B777-300	B777-300	B777-300
M33	B777-300 3	B777-300 3	B777-300 3	B777-300 3	B777-300 3
M30	B777-300 3	B777-300 3	B777-300 3	B777-300 3	B777-300 3
M29	A380 2	A380 2	A380 2	A380 2	A380 2
M27	B787-9	B777-300 3	B777-300 3	B777-300 3	B777-300 3
M25	B787-10	B777-300 3	B777-300 3	B777-300 3	B777-300 3
M24	B777-300	B777-300	B777-300	B777-300	B777-300
M21	B747-8	B747-8	B747-8	B747-8	B747-8
M20	B777-300	B777-300	B777-300	B777-300	B777-300
M19	B777-300	B777-300	B777-300	B777-300	B777-300
M18	B777-300	B777-300	B777-300	B777-300	B777-300
M17	A380	A380	A380	A380	A380
M16	B777-300	B777-300	B777-300	B777-300	B777-300
M15	B777-300	B777-300	B777-300	B777-300	B777-300
M14	B777-300	B777-300	B777-300	B777-300	B777-300
M11	DELTA GATE (Int'l)	DELTA GATE (Int'l)	DELTA GATE (Int'l)	DELTA GATE (Int'l)	DELTA GATE (Int'l)
M9	Temporary Bagroom	Temporary Bagroom			
M8					
M7					
M6	DELTA GATES	DELTA GATES	DELTA GATES	DELTA GATES	DELTA GATES
M5					
M4					
M3					
M2					
M1	EAS	EAS	EAS	EAS	EAS
Gate / Date	Mar 26 - Apr 30	May 1 - May 21	May 22 - Jun 11	Jun 12 - Jul 2	Jul 3...

Source: Chicago Department of Aviation; TY Lin Design Plans & Bulletin #031; Ricoondo (August 19, 2022)



## CHICAGO DEPARTMENT OF AVIATION

JAMIE L. RHEE, COMMISSIONER



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