

# Master Common Use Gate Space Plan and Terminal Capacity Parameters – Winter 2022/2023

April 19, 2022



# 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 April 7<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 Winter 2022/2023 terminal capacity parameters are based upon a methodology consistent with prior capacity declarations (including the Winter 2021/2022 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.
- The capacities resulting from this analysis are expressed for the entire Winter 2022/2023 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 Winter 2022/2023 is assumed to follow trends established in the Summer 2022 as scheduled in March 2022.
- COVID-19-related measures (including social distancing guidelines and any health screening) are not assumed to affect Winter 2022/2023 capacity.

# COMMON USE PROCESSING CAPACITY CORE TERMINALS

Process	Unit	Common Use units used as a basis for capacity declaration
		Winter 2022/2023
<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., April 2022.

# COMMON USE PROCESSING CAPACITY TERMINAL 5

Processing unit variation between  
Winter 2021/2022 and Winter 2022/2023

Process	Unit	Common Use units used as a basis for capacity declaration		
		Summer 2019 (pre-COVID-19)	Winter 2021/2022 (prior equivalent season)	Winter 2022/2023
International Arrivals				
Federal Inspection Station <sup>1/</sup>	Primary positions	72	October 31 – November 30: 46 December 1 – March 26: 56	46
International Baggage Reclaim	Devices	9	8	8 <sup>2/</sup>
Transfers Recheck	Common-use positions	24	16	16
Domestic and Precleared Arrivals				
Domestic Baggage Reclaim	Devices	1	1	2 <sup>3/5/</sup>
Departures				
Check-in <sup>4/</sup>	Positions	143	141	128 <sup>5/</sup>
Security Screening <sup>6/</sup>	Lanes	9	13	13
Baggage Departure Processing	In-line EDS machines	Unchanged from prior seasons		5 <sup>7/</sup> (capacity limited by CBIS)
Baggage Makeup	Makeup positions	174	120	October 30 – November 30: 144 December 1 – February 28: 156 March 1 – March 25: 162
Passenger Assistance Desks	Positions	Not declared (none)	Not declared (1 provided)	1
Bus Gates	Gates	Not declared	Not declared	1 (M13)

NOTES: 1/ US Customs and Border Protection (CBP) are assumed to staff up to 37 positions if available, similar to Summer 2019.

2/ Includes 6 devices with 215 linear foot presentation length and 3 devices with 195 linear foot presentation length.

3/ Winter 2022/2023 capacity based upon 1 device with 175 linear foot presentation length and 1 device with 150 linear foot presentation length. Winter 2021/2022 capacity based upon a single 135 linear foot presentation length device.

4/ Positions 28A/B are removed from Winter 2020/2021 onwards.

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

6/ Security screening provided for TSA Precheck as well as standard process in Winter 2021/2022 and Winter 2022/2023. Previous seasons only had standard process.

7/ 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., April 2022.

# TERMINAL 5 – TICKET COUNTER PHASING SCHEDULE (VANDERLANDE)

Ticket Counter (TC) Belt	Side	Desks Served	Nr. of desks	October 30-31, 2022	November 2022	December 2022	January 2023	February 2023	March 1-25, 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 desks connected to belt<sup>1/</sup></b>	-	-	<b>146</b>	<b>146</b>	<b>142</b>	<b>130</b>	<b>94</b>	<b>106</b>	<b>110</b>
B: Desks using neighboring belts	-	-	0	0	4	16	52	40	36
<b>C=A+B: Total usable desks</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 desks	-	-	18	18	18	18	18	18	18
<b>E=C-D: Total Common Use desks</b>	-	-	<b>128</b>	<b>128</b>	<b>128</b>	<b>128</b>	<b>128</b>	<b>128</b>	<b>128</b>



## LEGEND

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

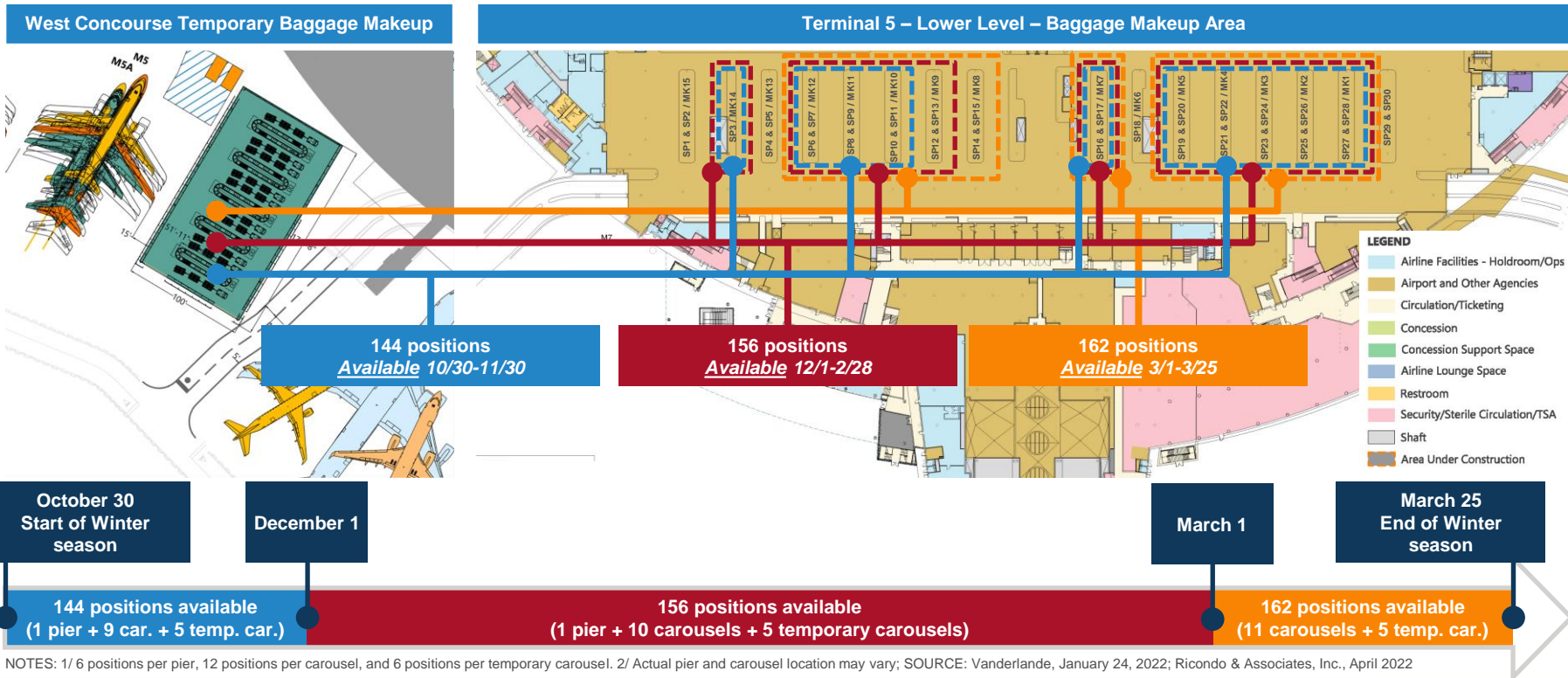
NOTE: 1/ Assumes lowest desk count for each month. The number of desks available may be higher at certain times.  
SOURCES: Vanderlande, April 14, 2022; Ricondo & Associates, Inc., April 2022.

- Any remaining in-lobby CT80 machines are not assumed to impact check-in desks during Winter 2022/2023.
- Baggage checked in at desks served by an unavailable TC belt will be carried to TC5/TC6. Any portering that may be required will be provided as needed based on flight operations.



# TERMINAL 5 – KNOWN WINTER 2022/2023 CONSTRUCTION ACTIVITIES

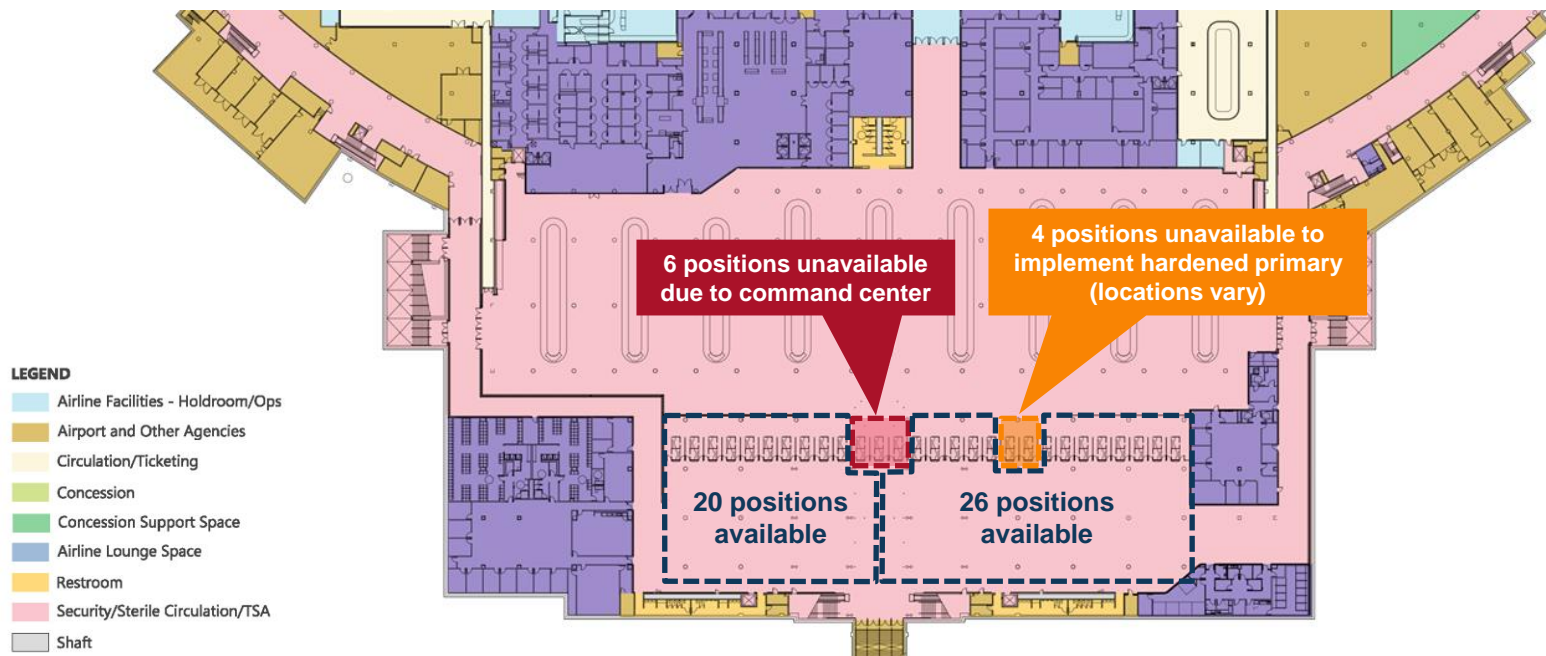
## BAGGAGE MAKEUP



NOTES: 1/ 6 positions per pier, 12 positions per carousel, and 6 positions per temporary carousel. 2/ Actual pier and carousel location may vary; SOURCE: Vanderlande, January 24, 2022; Ricondo & Associates, Inc., April 2022



# TERMINAL 5 – KNOWN WINTER 2022/2023 CONSTRUCTION ACTIVITIES FEDERAL INSPECTION STATION

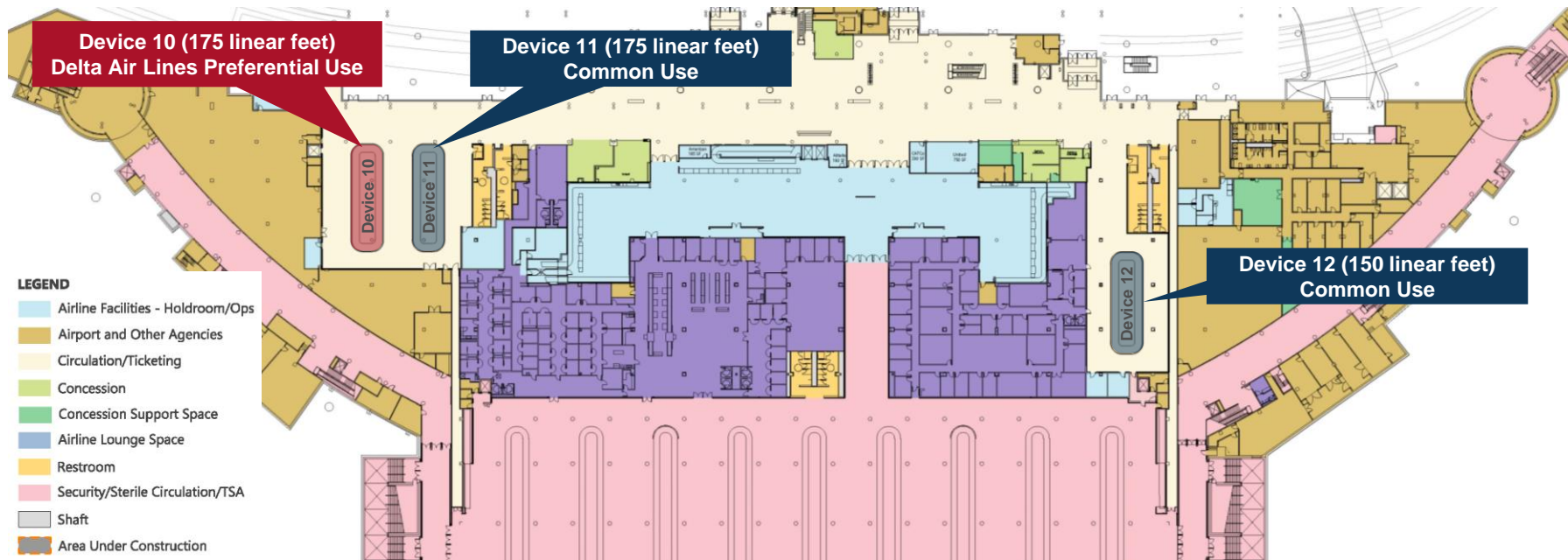


- 46 primary positions will be available throughout Winter 2022/2023.
- Up to 4 positions will be unavailable to implement hardened primary. Their location will vary throughout the season.

SOURCE: Austin Power Partners, February 2, 2022; Connect Chicago Alliance, March 2022; Ricondo & Associates, Inc., April 2022.

# TERMINAL 5 – KNOWN WINTER 2022/2023 CONSTRUCTION ACTIVITIES

## DOMESTIC BAGGAGE RECLAIM

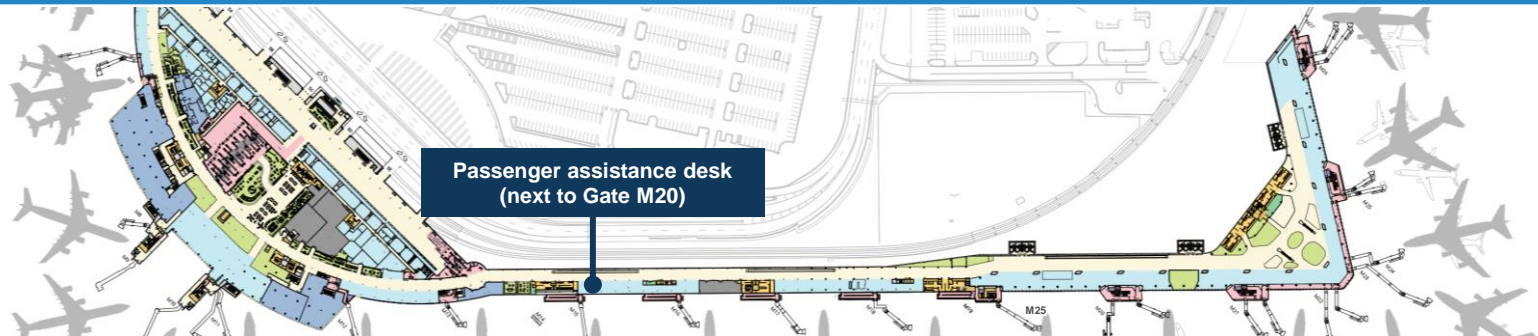


**The declared capacity assumes two domestic baggage reclaim devices (one 150 linear foot device and one 175 linear foot device), a 140% increase in presentation length compared with Winter 2021/2022.**

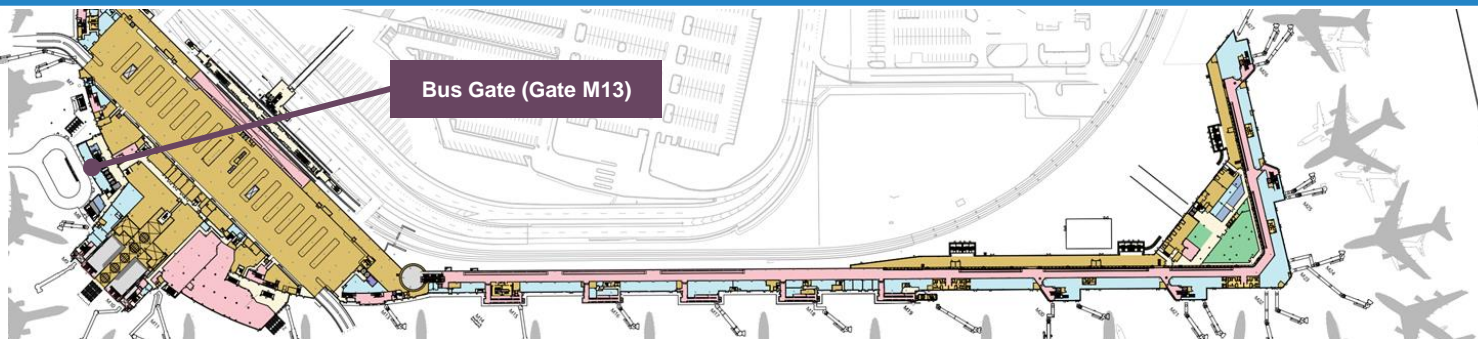
SOURCES: Chicago Department of Aviation, O'Hare International Airport -Terminal Area Assignment, February 2015.; APP, February 2021.; Ricondo & Associates, Inc., April 2022 (analysis).

# TERMINAL 5 – BUS GATES AND PASSENGER ASSISTANCE DESKS

Terminal 5 – Upper Level



Terminal 5 – Apron Level

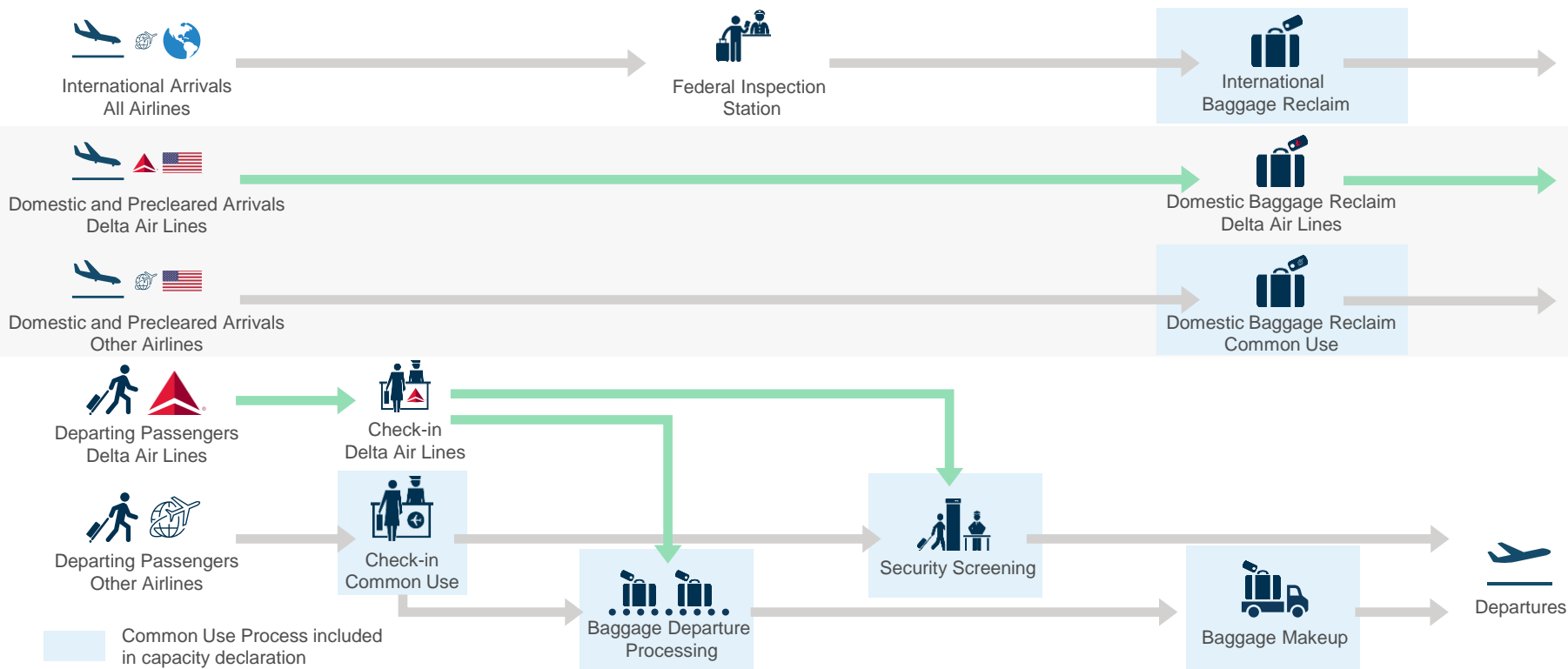


LEGEND

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

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

# CORE TERMINALS – WINTER 2022/2023 CAPACITY PARAMETERS

## OCTOBER 30, 2022 – MARCH 25, 2023

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	Domestic Baggage Reclaim	All day	Devices	1 <sup>2/</sup>	Domestic seats per hour <sup>3/</sup>	600
 Departures	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 2021) 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 (Air Choice One, Boutique Air, Cape Air, and Key Lime Air).

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

# TERMINAL 5 – WINTER 2022/2023 CAPACITY PARAMETERS

## OCTOBER 30, 2022 – MARCH 25, 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	All day	Primary positions	46	Seats per hour	3,800 <sup>2/</sup>
	International Baggage Reclaim	All day	Devices	8 <sup>3/</sup>	Seats per 5-hours	13,000 <sup>2/</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	10/30 – 11/30: 144 12/1 – 2/28: 156 3/1 – 3/25: 162	Seats per 4-hours	10/30 – 11/30: 6,700 12/1 – 2/28: 7,300 3/1 – 3/25: 7,600

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 6 devices with 215 linear foot presentation length and 3 devices with 195 linear foot presentation length. Capacity based upon 1 device with 175 linear foot presentation length and 1 device with 150 linear foot pres. 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.

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., April 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 Winter 2022/2023 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 Winter 2022/2023

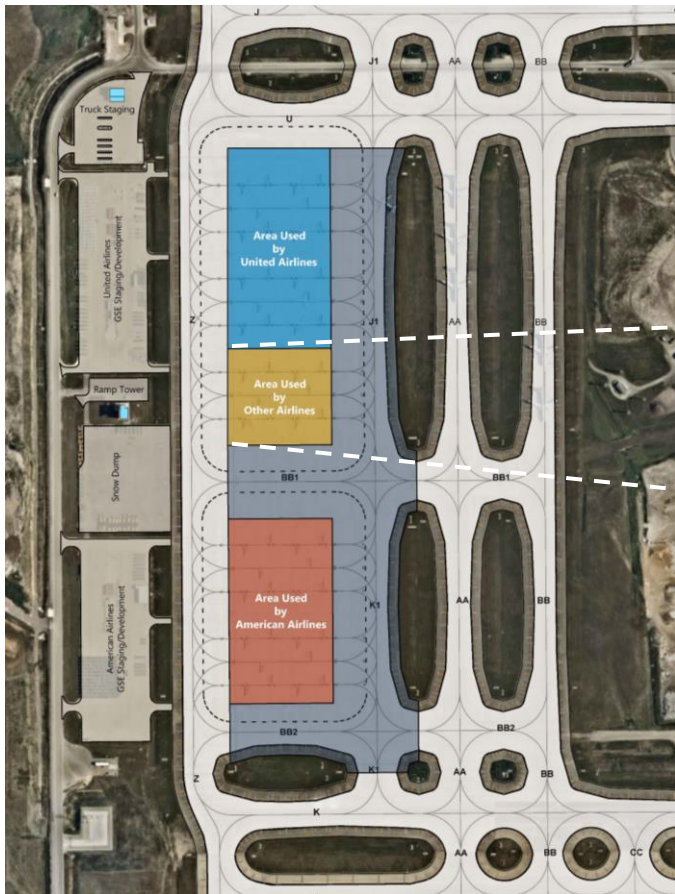
## O'HARE CORE AREA

Central Deicing Pad

Terminal 5

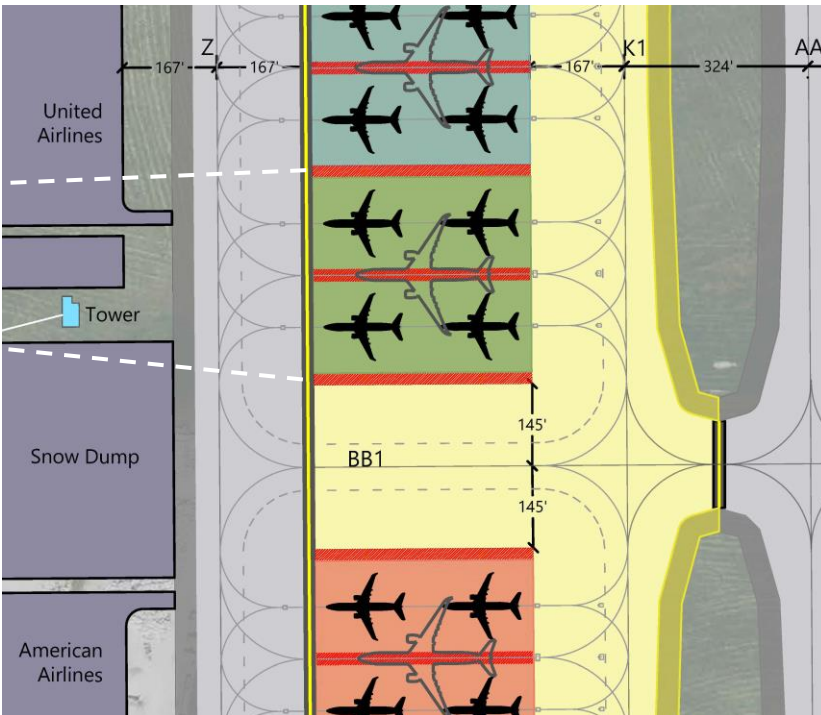
Source: Nemap Aerial (July 25, 2021)





## 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

## Aircraft Parking Layout & Gating Allocations : Winter 2022-23

Gates M1A & M1B accommodates two small aircraft operating Essential Air Service (EAS) routes at O'Hare

Gates M2-M11 are operated by Delta Air Lines that may accommodate their international partners

Gate M9 is taken up by a temporary bagroom structure required during reconstruction of the Terminal 5 baggage system (through Summer 2023)

M13 is an interior building holdroom with a bus station (used to transport passengers to remote parking positions or domestic terminals)

101-104 are hardstand positions that may be used as remote gates



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

The logo for O'Hare 21 is displayed in white and red text against a blue background. It features a white airplane icon to the left of a large white 'O', followed by a red star, then the word 'HARE' in white, and the number '21' in red.

O'HARE 21

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JAMIE L. RHEE, COMMISSIONER

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