

40th Annual Airport Law Workshop



October 9, 2024

## **Keynote Presentation**

## CDA Overview

Two Airports, One Department

O'Hare and Midway are owned and operated by the City of Chicago

The Chicago Department of Aviation (CDA) administers all aspects of the Airports

O'Hare and Midway Airports operate financially as two separate enterprise funds per federal regulations

Both Airports are financially self-sustaining per federal regulations All 77 neighborhoods are represented in CDA's workforce

CDA employees over 1,600 City residents

More than 44,000 people are employed at O'Hare and 9,300 at Midway

Chicago's Airport System is critical to the local economy

Provides more than 700,000 full-time equivalent jobs across nine counties



#### NO STATE OR LOCAL TAXPAYER DOLLARS ARE USED TO PAY FOR AIRPORT OPERATIONS

#### MANAGING DEPUTY COMMISSIONERS





Roberto Diaz





Frank Grimaldi



**Robert Rodriguez** 



Isaiah "Danny" Vega



**David Winters** 

Commissioner Jamie Rhee

First Deputy Commissioner **Duane Hayden** 



**Tracey Payne** 

Amber Ritter

### CDA Divisions



Airfield Operations		าร	Air Service Marketing		Concessions			5
	Custome Service		Design and Constructio		F	acil	ities	
Findnce			Human In esources		tergovernmental Affairs			
Media/ Landside Communications Operations Real Estate							ate	
Workforce Development			ID Badging		Safety/Security			
Cargo		argo	ІТ		Legal			
Terminal Operations			Vehicle Services		Planning			

### **AIRSIDE AND LANDSIDE OPERATIONS**

#### AIRSIDE

- Daily safety inspections of runways and taxiways, identifying and reporting problems for resolution and repair.
- Airside Operations manages maintenance, construction, snow removal, and emergency response on the airfield.

#### LANDSIDE

- Often the first and last point of contact for the traveling public.
- Landside Operations is responsible for moving passengers around the airport.

#### LANDSIDE OPERATIONS OVERSEES AND MANAGES THE FOLLOWING:

Ground transportation, parking and revenue, snow removal, and facility management, airport wayfinding signage, taxicabs, limousines, and rideshare relations, charter buses and hotel shuttles, commercial vehicle holding area, limousine lot and lot for transportation network providers

### Chicago is a Unique Aviation Hub with a Central Location



O'Hare ranked #1 in the U.S. for Connectivity and #9 globally (OAG Megahubs 2024 Index) O'Hare and Midway are hubs to: American Airlines, United Airlines, Southwest Airlines

Both O'Hare and Midway offer service from Delta Air Lines, Southwest Airlines, Frontier, and Volaris A large O&D population, strong business market, stable convention business and growing tourism support Chicago's Airports

### What Is O'Hare 21?

## \*O\*HARE21

**OMP Phase 2** 

Terminal 5 Expansion Terminal 3 Concourse L Three-Gate Expansion

Terminal Area Plan Capital Improvement Projects

Airport Access

CHICAGO'S VISION FOR A MORE EFFICIENT AND ACCESSIBLE INTERNATIONAL GATEWAY

# Airfield Transformation that Impacted the National Aviation System

- The O'Hare Modernization Program (OMP) reconfigured the airfield with parallel runways to increase capacity, reduce delays, and prepare for future travel demands.
- Prior to the OMP, the airfield's layout contributed to significant congestion and delays at O'Hare.
- Certain federal restrictions were put in place, limiting operations, and resulting in capacity constraints that impacted the national and international aviation system.



#### Historic Airfield Reconfiguration Reduces System Impact Delays by 66%

**O'Hare - 2001** 



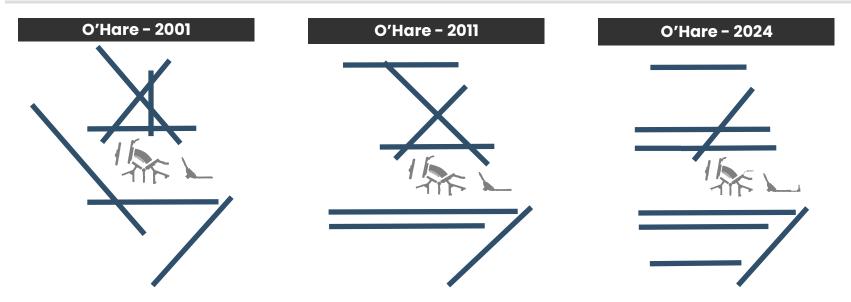
O'Hare - 2011

O'Hare - 2021



#### O'HARE MODERNIZATION PROGRAM

### Successful Delivery of the O'Hare Modernization Program Airfield Projects



OMP includes: four new runways, two extended runways, two new Air Traffic Control Towers, facility relocations, and sound-insulation of more than 11,500 homes and 124 schools

### Incorporating Sustainable Measures Into OMP

- North Air Traffic Control Tower is the first in the U.S. with a vegetated green roof and to earn a LEED Silver Certification
- Approximately 98% of all construction demolition materials (concrete, asphalt, soil) have been reused on-site and diverted from landfills.
  - Preserved natural resources
  - Saved over 29 million gallons of diesel fuel, keeping more than 297,000 tons of CO2 emissions out of the atmosphere
- Over 85% of construction materials were obtained from local and regional sources, contributing to the region's economy, and reducing emissions
- The OMP used more than \$22 million worth of recycled content materials
- O'Hare is the first airport in the U.S. to receive FAA approval to utilize recycled asphalt shingles in the mix of asphalt layers of runways and taxiways
  - More than 8 million rooftop shingles have been kept out of landfills as a result

#### 2018 AULA Governs the Way CDA Does Business and Supports Further Capital Investment in O'Hare's Infrastructure

Almost \$3.4 billion has been spent since 2018 to revitalize O'Hare Additional projects funded via the AULA:

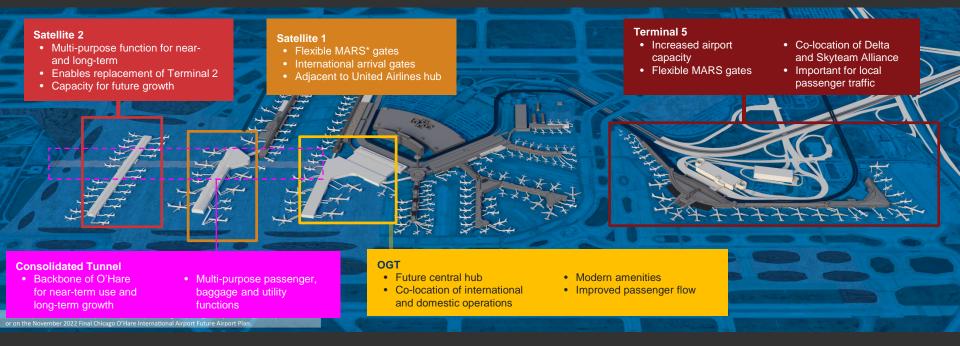
#### Airside

- Concourse L 3-Gate Expansion
- Replacement of Roof and HVAC in Terminal 1
- Replacement of HVAC in Rotunda
- Northeast Cargo Phase 3

#### Landside

- Airport Transit System Extension and Modernization
- Multi-modal Facility opening
- Terminal Area Fire Main Replacement and Lower-Level Utility Repair Project
- Pedestrian Tunnels Refurbishment
- Emergency standby power generation system
- Replacement of High-Temperature Water Generators
- Parking Garage Structural Rehabilitation

### The Terminal Area Plan Provides the Long-Term Development of O'Hare's Passenger Terminal Facilities



\*MARS gates (Multiple Aircraft Ramp System) accommodate multiple aircraft sizes for streamlined operations

### The O'Hare Terminal Area Plan Will Deliver Important Benefits to the Airlines and City

The benefits of the TAP have not changed since the AULA was signed in 2018

Address Aging Facilities	Improve Efficiency	Improve Passenger Experience	Accommodate Demand
Some of the Airport's facilities are approaching 60 years old and nearing the end of their useful life Terminal 2 opened in 1962 and has undergone limited renovations	Aging terminals and systems including baggage handling systems are inefficient with multiple operational challenges Improve efficiency of airfield taxi flows Reduce split international and domestic operations	Provide upgraded, modern terminal facilities Reduce delays Improve amenities and commercial offering Integrate domestic and international terminal operations	Provide sufficient terminal space and gates to accommodate forecast demand at acceptable levels of service Expand and configure gates to provide increased flexibility for modern aircraft
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## The FAA Prepared the TAP Environmental Assessment (EA) to Assess the Potential for Environmental Impacts

Key issues evaluated include noise, air quality, historic/architectural, and wetlands

- Housing units exposed to an increase in noise have already been mitigated via the City's on-going Residential Sound Insulation Program
- Ultimate decrease in air emissions by reducing taxi times
- Determination of no adverse impacts to existing historic/architectural elements
- No significant impacts to wetlands

The FAA issued a Final EA and Finding of No Significant Impact (FONSI)/Record of Determination (ROD) on November 21, 2022 After issuance of the FONSI/ROD and approval of the Future Airport Layout Plan (ALP):

- Design can advance and construction can begin immediately
- TAP projects may be eligible for AIP and other grant funding
- Design and assumptions must remain consistent with TAP EA



### **Terminal 5 Expansion**

#### **Project Completed in 2023**

- 📀 10 additional gates
- 350,000 additional square feet
- Expanded core area for additional amenities
- New 22,000 square-foot Delta Sky Lounge
- Reconfigured international arrivals facility and security checkpoint
- Baggage handling system to increase throughput capacity



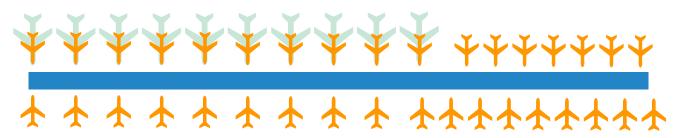


**OGT and S1 Gate Positions Provided** 

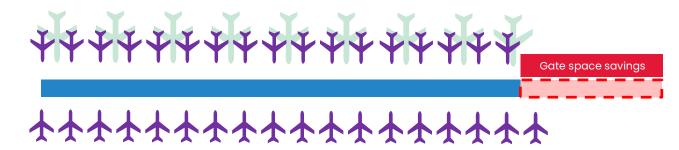
Narrowbody Widebody 38 19

#### Why Mars Gates?





CONCOURSE LENGTH WITH MARS CONFIGURATION





#### Delta Air Lines is Now Located In Terminal 5 With a New Delta Sky Club:

Spacious premium lounge space	22,000 plus square feet	Digital tools expedite check-in process		
Relax and recharge before flights	Board flights directly from the Sky Club for ultimate convenience			

### Celebrating Chicago's Rich Diversity Through Art

Terminal 5's extraordinary new public art collection includes works by more than 20 Chicago artists.

The \$3.5 million art installation is the City's largest single acquisition of works by Chicago artists in the last 30 years.

Recent installations can also be seen at the Multi-Modal Facility, as well as existing exhibits on display throughout the terminals and airport campus.

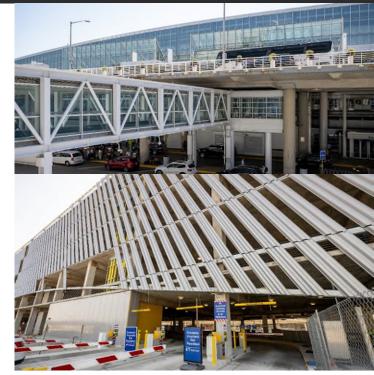


### **Terminal 5 Parking Garage**

- ~1,700 garage spaces
  - 660 spaces remain in surface lot
  - Doubles the available parking
  - Comparable to Terminal 1, 2 & 3 parking

First Level opened August 2024

- Initial phase adds 20% more parking spaces and ties in existing pedestrian bridge
- Direct access to terminal via pedestrian bridge
- Estimated completion October 2024



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Elevate T3 was awarded the largest single competitive grant given by the FAA in 2023 -- \$50 million from the Bipartisan Infrastructure Law (BIL), and an additional \$40 million in 2024 for a total of \$90 million in BIL funding.





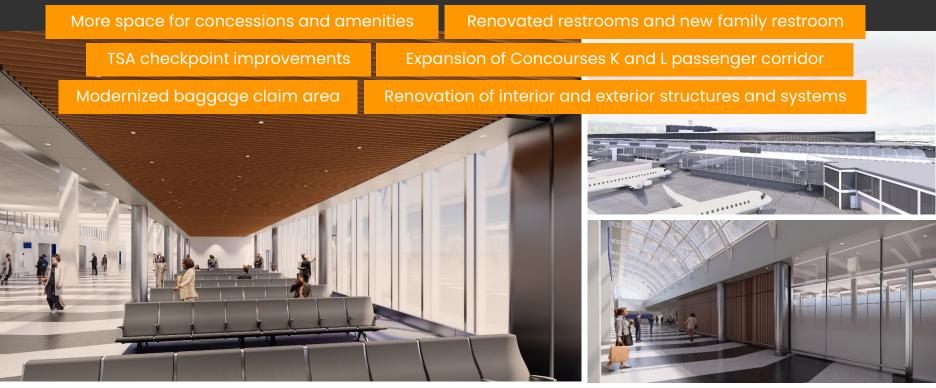
ElevateT3

FINANCED BY THE BIPARTISAN INFRASTRUCTURE LAW

\*O\*HARE2

INVESTING IN AMERICA

#### Elevate T3 Improvement Program Improves Efficiency and Accessibility:



### Satellite 1



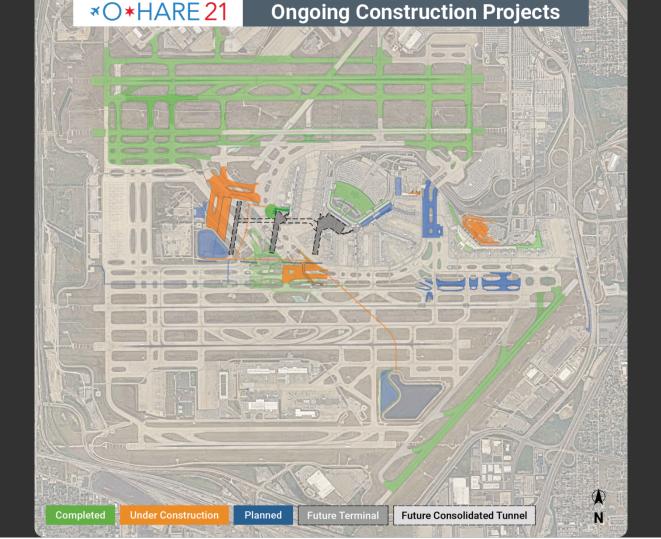
International and domestic passengers

19 gates to accommodate different aircraft types

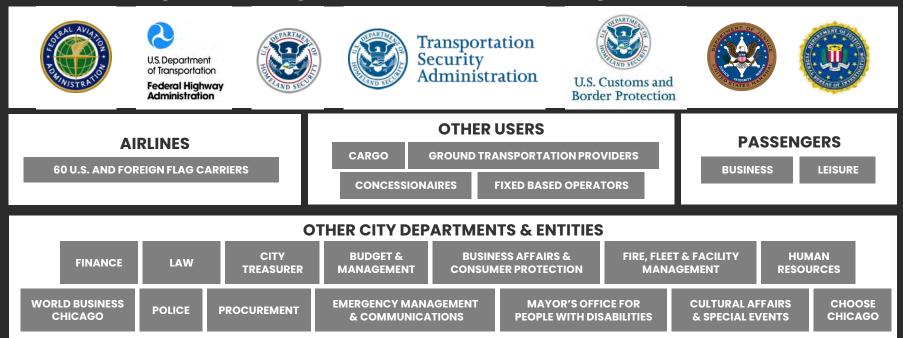
High-performance systems to reduce energy use and greenhouse gas emissions

Curved roof to minimize heating and cooling needs

~3,800 construction jobs



#### Airports are Dynamic Places with Many Stakeholders



#### **ASSIST AGENCIES**

51<sup>st</sup> Street Business Association | AeroStar Avion Institute | African American Contractors Association – AACA | Angel of God Resource Center | Association of Asian Construction Enterprises | Austin African American Business Networking Association ] Better Business Bureau of Chicago/Northern Illinois | Black Contractors Owners and Executives | Black Contractors Institute | Chicago Avion Institute | Contractor Advisors Business Development Institute | Chicago Avion Institute | Common ID avelopment Institute | Chicago Avion Institute | Common ID avelopment Institute | Chicago Avion Institute | Common ID avelopment Institute | Chicago Avion Institute | Common ID avelopment Institute | Chicago Avion Institute | Chicago Avions Business Development Institute | Chicago Avion Institute | Chicago Avions Business Development Institute | Chicago Avions Business Development Institute | Chicago Avion Institute | Chicago Avions Business Development Institute | Chicago Avions Business Development | Black Architecture and Engineering Companies | Cosmopolitan Chamber of Commerce | Edicado Avions Business Development Corporation | Greater Southwest Development Corporation | Fresh Sart Home Community Development | HIRE360 | Hispanic American Construction Industry Association | Illinois Black Achitecter | LGBT Chamber of Commerce of Illinois | National Association | Minority Contractors | National Black Wall Street NPF | National Black Wall Street NPF | Native American Chamber of Commerce of Illinois | NDIGO Foundation | Reinber/Push Coalition | Revolution Nervolution Nervolutes | US Minority Contractors | Notice Chamber of Commerce of Illinois | NDIGO Foundation | Reinber/Push Coalition | Revolution Owners & Executives | US Minority Contractors Association Accessible of Incluser Association | Reinber/Push Coalition | Revolution Owners & Executives | US Minority Contractors Association Accessible | Veteran Business Project | Wo

## Construction in a Highly Regulated Environment on one of the Busiest Airfields in the World is an Ambitious Undertaking

#### **Guiding Principles**

- Collaboration with the Federal Aviation Administration
- Consistent engagement with construction leadership and operating stakeholders to maintain safety and compliance

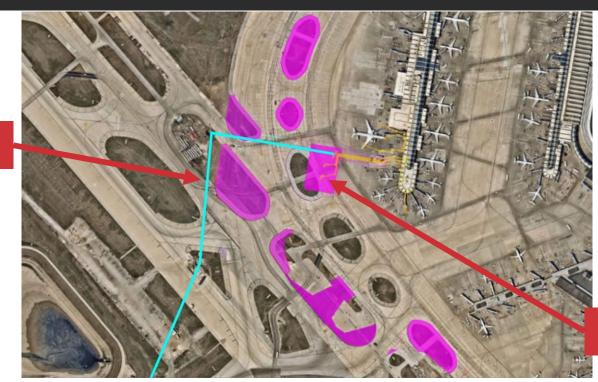
#### **Applicable Federal Regulations**

- AC 150/5320-6G Airport Pavement Design and Evaluation
- AC 150/5340-1M Standards for Airport Markings
- AC 150/5345 46E -Specification for Runway and Taxiway Light Fixtures
- AC 150/5345-44K -Specification for Runway and Taxiway Signs
- AC 150/5320-6G Airport Drainage Design

- Part 139.305 Paved areas
- Part 139.307 Unpaved areas
- Part 139.309 Safety areas
- Part 139.311 Marking, signs, and lighting
- Part 139.327 Self-inspection program
- Part 139.341 Identifying, marking, and lighting construction and other unserviceable areas



### Concourse C Temporary Gates and New Storm Sewer



STORM SEWER (108-inch)

> TEMPORARY GATES



#### LOWER CONCOURSE C EXTENSION

20





### TAXIWAY A/B EAST/WEST RELOCATION





### TAXIWAY A/B EAST/WEST RELOCATION





### Examples of Situations that Affected Work Schedules and Planned Work

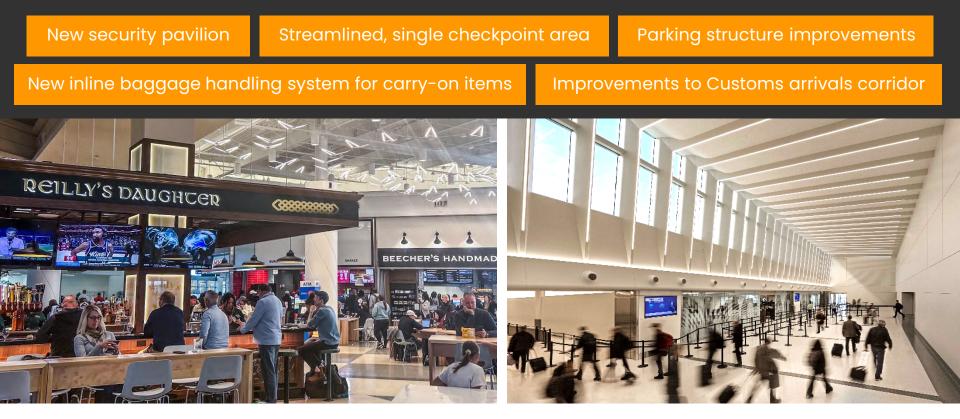
#### Taxiway A/B East/West Relocation

- Extensive airfield operation coordination
  - Gain access to manholes for investigation of active fiber/power used for critical airport components
  - Taxiway/runway closures to perform work
- Additional repairs to existing manholes
  - Removal of 50+ miles of existing fiber replaced with 80+ miles of new fiber optic cable used by FAA/CDA/Airlines
    - Required team to cover almost entire airfield, between new and old structures

#### **Concourse C Temporary Gates**

- Ongoing ramp operations
  - Maintenance of ground service equipment parking and battery charging infrastructure
  - Modification to pushback maneuvers for adjacent widebody aircraft gates
- Coordination between multiple stakeholders
- Balance of new gate openings with offsetting gate closures to maintain compliance with lease agreements
- Maintain schedule published by FAA for charting airfield changes and taxiway openings

### The Midway Modernization Program is Complete





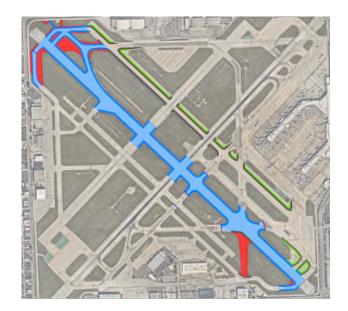
Grand reopening of the Midway Central Market marked the final phase of the \$400 million capital improvement program



\$75 million investment from Midway Partnership70,000 sq ft of concessions space30+ New Restaurants30+ New Shops56% ACDBE participation rate

### Runway 13C-31C and Associated Taxiways Rehabilitation

- 2020 APMS pavement study found the runway would benefit from repaving.
- The runway will remain operational.
- Taxiway geometry will be updated based on FAA requests and newer AC guidance
- Plans for mill and repave asphalt on Runway 13C-31C and associated taxiways
- Provide new runway guard lights at six locations
- Modify adjacent soils as needed



## Conversion of RWY 13L-31R to TWY H and TWY E Reconfiguration

- Modification of taxiway and runway geometry to create a new central holding pad.
- Runway 13L-31R will be converted to a taxiway.
- Accounts for less than 1% of airport operations.
- Allow greater flexibility to aircraft ground movements.
- Enhance terminal core efficiency and flexibility to accommodate future demand.





### O'Hare was ranked 6th busiest airport in the U.S. and 13th globally in terms of cargo tonnage in 2023

#### O'Hare Cargo Facilities

- Airside
  - Approximately
    2 million square feet of cargo facilities
  - Space for 40 jumbo freighters (including the B747-8F)
  - Four separate ramps
- Landside
  - 2 million square feet of cargo facilities



### O'Hare and Midway Noise Compatibility Commissions

#### O'Hare Noise Compatibility Commission

Established in July 1996, the O'Hare Noise Compatibility Commission (ONCC) began with an invitation from the City to suburban mayors to begin constructive discussions on aircraft noise issues. Since forming, the ONCC has achieved the following:

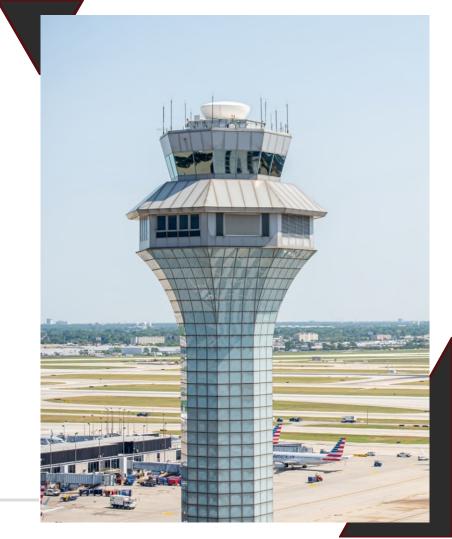
- grown to 42 member communities and 19 school districts,
- sound insulation of more than 12,000 homes
- sound insulation of 124 schools
- developed and approved a new Fly Quiet Program for O'Hare, which was submitted to the FAA for review and approval

#### Midway Noise Compatibility Commission

In February 1996, the Midway Noise Compatibility Commission (MNCC) was established to oversee noise management efforts around Midway in partnership with the City of Chicago and surrounding suburbs. The MNCC has achieved the following:

- Sound insulation of more than 10,000 homes
- Sound insulation of 41 schools
- Airport Noise Management System (ANMS) has recorded that nearly 55% of communities impacted by airport noise have had reductions in levels

The mission of the Chicago Department of Aviation (CDA) is to enhance the economy and connectivity of Chicago through the accountable administration of O'Hare and Midway airports. The CDA is continually committed to fostering economic growth and ensuring that its airports are safe, sustainable, accessible, and reflect the city's diverse and unique character.





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## THANK YOU!