



O'HARE NOISE COMPATIBILITY COMMISSION

LAX/COMMUNITY NOISE ROUNDTABLE

NOVEMBER 16, 2022



The O'Hare Noise Compatibility Commission (ONCC) is the only inter-governmental agency that is dedicated to reducing aircraft noise in the communities around O'Hare International Airport.

ONCC:

- Oversees noise management efforts
- Participates in planning of noise mitigation projects to be implemented at the airport
- Oversees an effective and impartial noise monitoring system
- Advises City on O'Hare-related noise issues



INTERGOVERNMENTAL AGREEMENT

The term of the intergovernmental agreement is 5 years, and it is renewed by each member's governing body every five years. There is an ad hoc governance committee that recommends changes, in collaboration with City of Chicago legal staff. The agreement must be passed by resolution by each member, including the City of Chicago.



GOVERNANCE

ONCC officers are elected annually by the general membership. The Executive Committee, consisting of the Chair, Vice-Chair, Treasurer, Committee Chairs of each of the standing committees and additional at large members, governs the Commission.

ONCC PROCESS

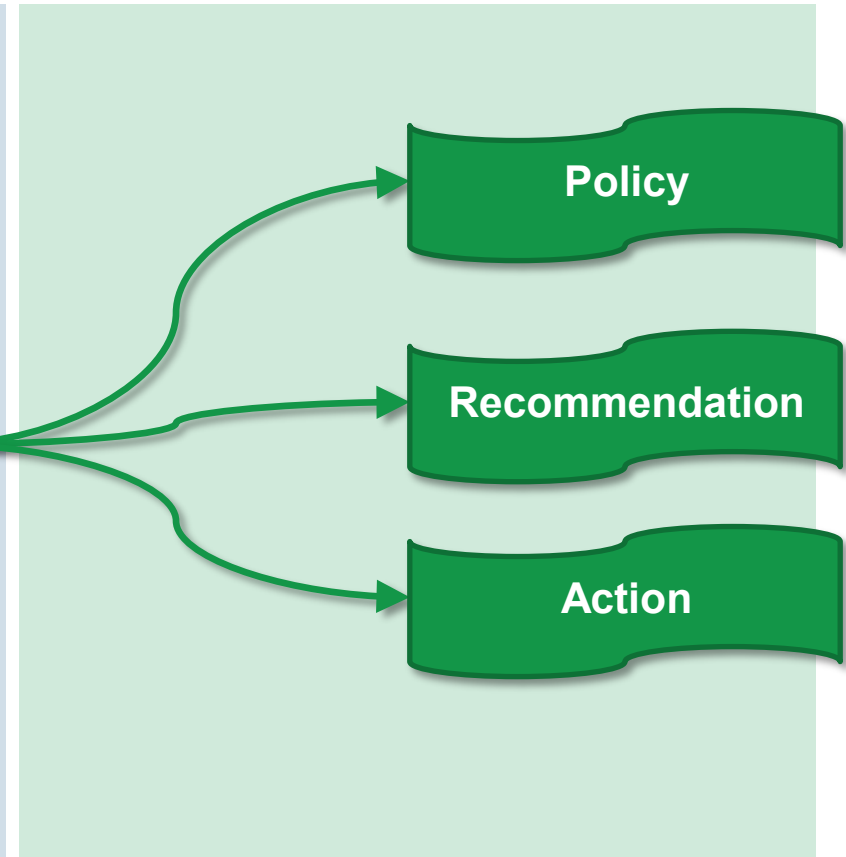
1 Committee Recommends



2 ONCC Approves



3 Take Action



COMMITTEES



RESIDENTIAL SOUND INSULATION COMMITTEE

The ONCC Residential Sound Insulation Committee was formed to provide input and oversight to the Residential Sound Insulation Program.

- The program has provided over \$344 million in federal and airport funds to sound insulate more than 11,500 homes.
- Program began in 1995 as a demonstration program with 10 homes.



SCHOOL SOUND INSULATION COMMITTEE

The School Sound Insulation Committee provides input and oversight to the School Sound Insulation Program and helped to develop the criteria.

- 124 schools have been sound insulated at a cost of approximately \$350 million.
- It is the largest school sound insulation program in the world.

COMMITTEES



TECHNICAL

The Technical Committee identifies and promotes technological advancements that are designed to reduce aircraft noise.

- Monitors airport operations and noise abatement programs, adherence to Fly Quiet Program through tracking and outreach, Noise monitors
- Oversees airport noise management system
- Developed Fly Quiet Award Program – measuring compliance with FQ program
- Identify and promote technological advances designed to improve aircraft noise



FLY QUIET

- The Fly Quiet Committee is made up of 11 ONCC members and three community/advisory non-voting members.
- The members were selected by the ONCC chair with consent from the Executive Committee. Committee members were intended to represent each of the four quadrants around O'Hare.
- The Fly Quiet committee was formed to develop a program that would evaluate and modify existing Fly Quiet Program.

ISSUES AT O'HARE



O'HARE MODERNIZATION PROGRAM (OMP)

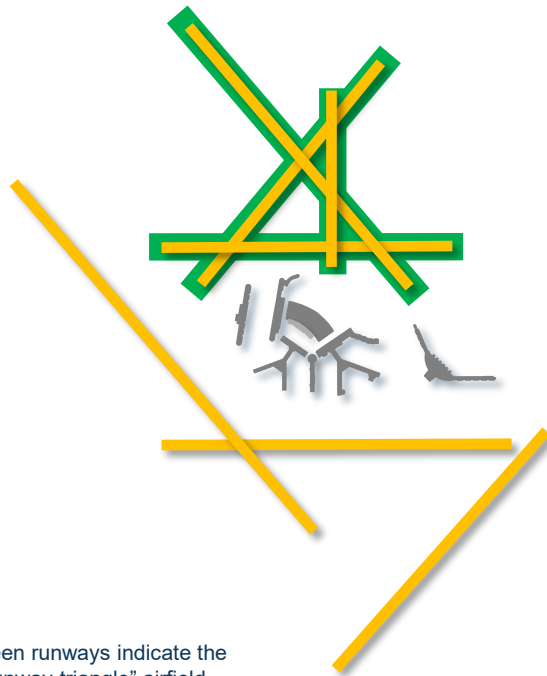
Since 2005, O'Hare has undergone a massive airfield construction program to realign runways at O'Hare, known as the O'Hare Modernization Program (OMP).

- The airfield was originally configured in a triangular shape with dual parallel runways,
 - Created during World War II
 - Inefficient
 - Not conducive to safe, efficient operations at a modern airport.



COMPLETION OF THE O'HARE MODERNIZATION PROGRAM (OMP) RESULTS IN A MODERN, EFFICIENT RUNWAY LAYOUT THAT SETS THE STAGE FOR O'HARE TO REGAIN ITS ROLE AS A LEADING GLOBAL HUB AIRPORT

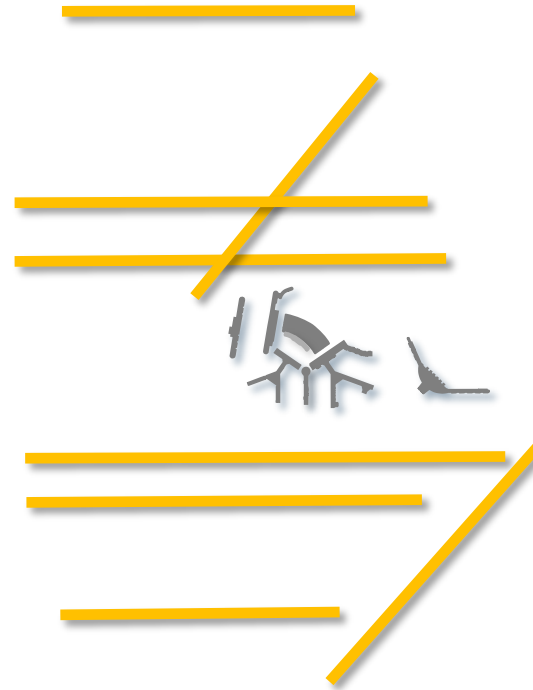
2005



Note: Green runways indicate the original "runway triangle" airfield.

- 3 Sets of Dual Parallel Runways
- Dual independent Arrivals in Poor Weather Conditions

2022



- 6 Parallel East-West Runways
- Triple Independent Arrivals in all Weather Conditions

*"...the essence of any successful plan to provide significant delay reduction at O'Hare involves **correcting the existing "runway triangle"** and realigning the airfield in sets of parallel runways that can handle more traffic, **safely and efficiently in all weather conditions.**"*

NEW FLY QUIET PROGRAM

- The original Fly Quiet program was developed over 25 years ago before the development of the OMP which reconfigured the airfield.
- Now that the airfield realignment is complete, the airport is in need of a new fly quiet program, which the CDA tasked the ONCC to develop.
- ONCC created Fly Quiet committee with the goal to come to a consensus on a new plan to minimize and equally distribute aircraft noise at night.



NEW FLY QUIET PROGRAM

- The ONCC developed and oversaw three Fly Quiet tests and a temporary Interim Fly Quiet Program, with support of the CDA, to provide better balance of operations at night.
- These efforts were conducted to determine if the airport could function while runways were rotated on a weekly schedule.
- The tests did bring predicable relief to communities and were used to inform the development of the new permanent program.



NEW FLY QUIET PROGRAM CRITERIA

1. Establish a Nighttime Noise Abatement Program that achieves a more balanced distribution of noise exposure.
2. Establish Weekly Runway Rotation Schedule. Each period should consist of one arrival and one departure runway and a secondary plan for opposite wind conditions. All available runways should be utilized.
3. Establish Flight Path Rotation Schedule – Establish a weekly departure procedure rotation schedule to compliment the runway rotation schedule in order to achieve a more balanced and equitable distribution of noise exposure.
4. Alternate Periods of East and West Flow.
5. Avoid Consecutive Impacts
6. Utilize Runways Full Length for Departures.
7. Avoid Overuse of Any Single Runway.
8. Require ONCC Fly Quiet Committee Review

ALTERNATIVE B3 – OVERVIEW

12 Week Rotation
- 6 Configurations

North/South Airfield

Vector Headings Only
- 2 Headings per Configuration

8 East/West Weeks

4 Crosswind Weeks

WEEK	CONFIGURATION	AIRFIELD	FLOW	DEPARTURE	HEADING	ARRIVAL	LONG RUNWAY
1	Q	North	West	27L	1- 275°	27C	9R-27L
2	M	South	East	10L	1- 100°	10C	10L-28R
3	L	Crosswind	East	4L	VH with Turn	4R	9R-27L
4	O	South	West	28R	1- 260°	28C	10L-28R
5	P	North	East	9R	1- 080°	9C	9R-27L
6	I	Crosswind	West	22L	VH with Turn	22R	10C-28C
7	Q	North	West	27L	2 - 295°	27C	9R-27L
8	M	South	East	10L	2 - 110°	10C	10L-28R
9	L	Crosswind	East	4L	VH with Turn	4R	9R-27L
10	O	South	West	28R	2 - 245°	28C	10L-28R
11	P	North	East	9R	2 - 065°	9C	9R-27L
12	I	Crosswind	West	22L	VH with Turn	22R	10C-28C

ALTERNATIVE B3 – OVERVIEW

RUNWAY ROTATION SCHEDULE (WEEKS 1-6)



PRIMARY

SECONDARY

	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
PRIMARY	Q-1 VH 275° WEST FLOW	M-1 VH 100° EAST FLOW	L VH w/ Turn EAST FLOW	O-1 VH 260° WEST FLOW	P-1 VH 080° EAST FLOW	I VH w/ Turn WEST FLOW
SECONDARY	P-1 VH 080° EAST FLOW	O-1 VH 260° WEST FLOW	I VH w/ Turn WEST FLOW	M-1 VH 100° EAST FLOW	Q-1 VH 275° WEST FLOW	L VH w/ Turn EAST FLOW



Designated Long Runway



ALTERNATIVE B3 – OVERVIEW

RUNWAY ROTATION SCHEDULE (WEEKS 7-12)



PRIMARY

SECONDARY

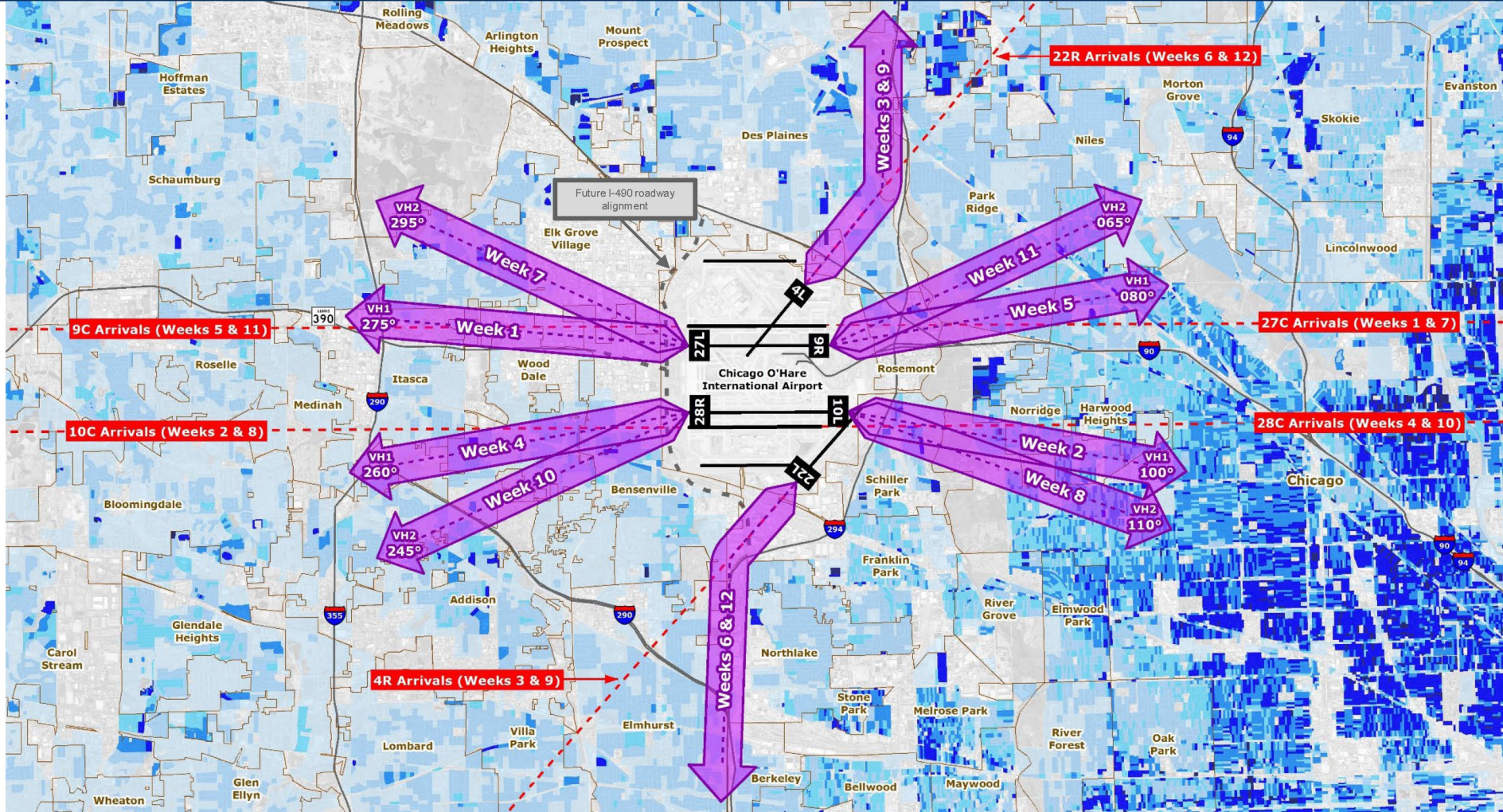
	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12
PRIMARY	Q-2 VH 295° WEST FLOW	M-2 VH 115° EAST FLOW	L VH w/ Turn EAST FLOW	O-2 VH 245° WEST FLOW	P-2 VH 065° EAST FLOW	I VH w/ Turn WEST FLOW
SECONDARY	P-2 VH 065° EAST FLOW	O-2 VH 245° WEST FLOW	I VH w/ Turn WEST FLOW	M-2 VH 115° EAST FLOW	Q-2 VH 295° WEST FLOW	L VH w/ Turn EAST FLOW



Designated Long Runway



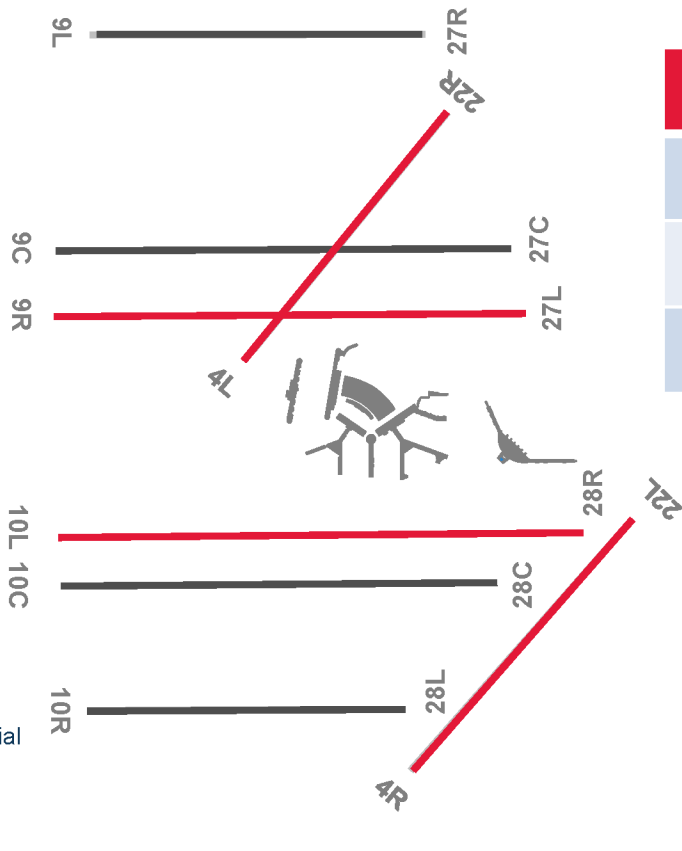
ALTERNATIVE B3 – OVERVIEW



NOTE: ARROWS DEPICT THE DEPARTURE HEADING, NOT THE ACTUAL FLIGHT LOCATIONS

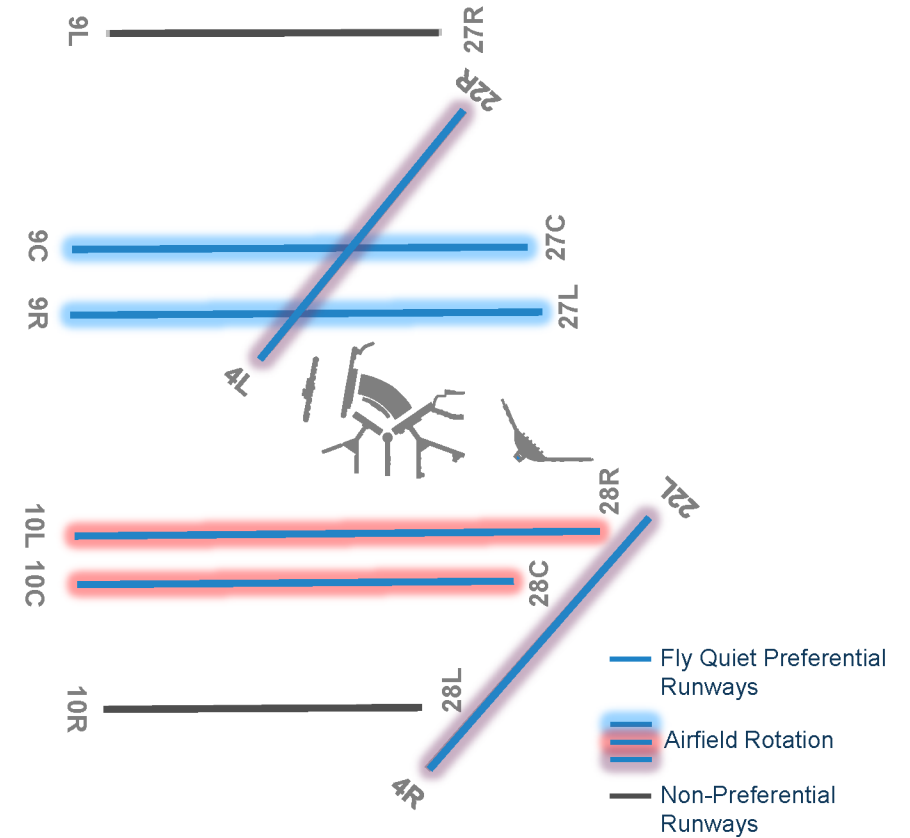
FLY QUIET COMPARISON

EXISTING FLY QUIET

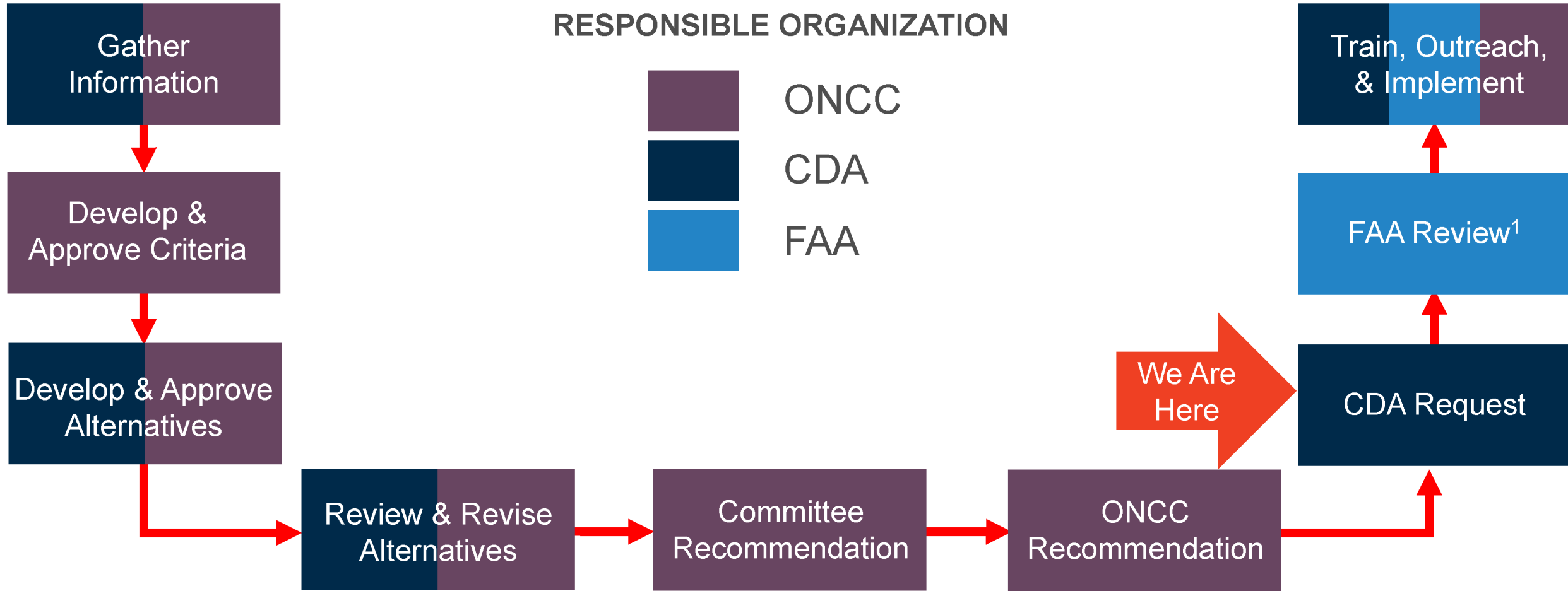


EXISTING FLY QUIET	FEATURE	PROPOSED FLY QUIET
4	Preferential Runways	6
Determined by FAA	Runway Utilization	Scheduled
7	Departure Procedures	10

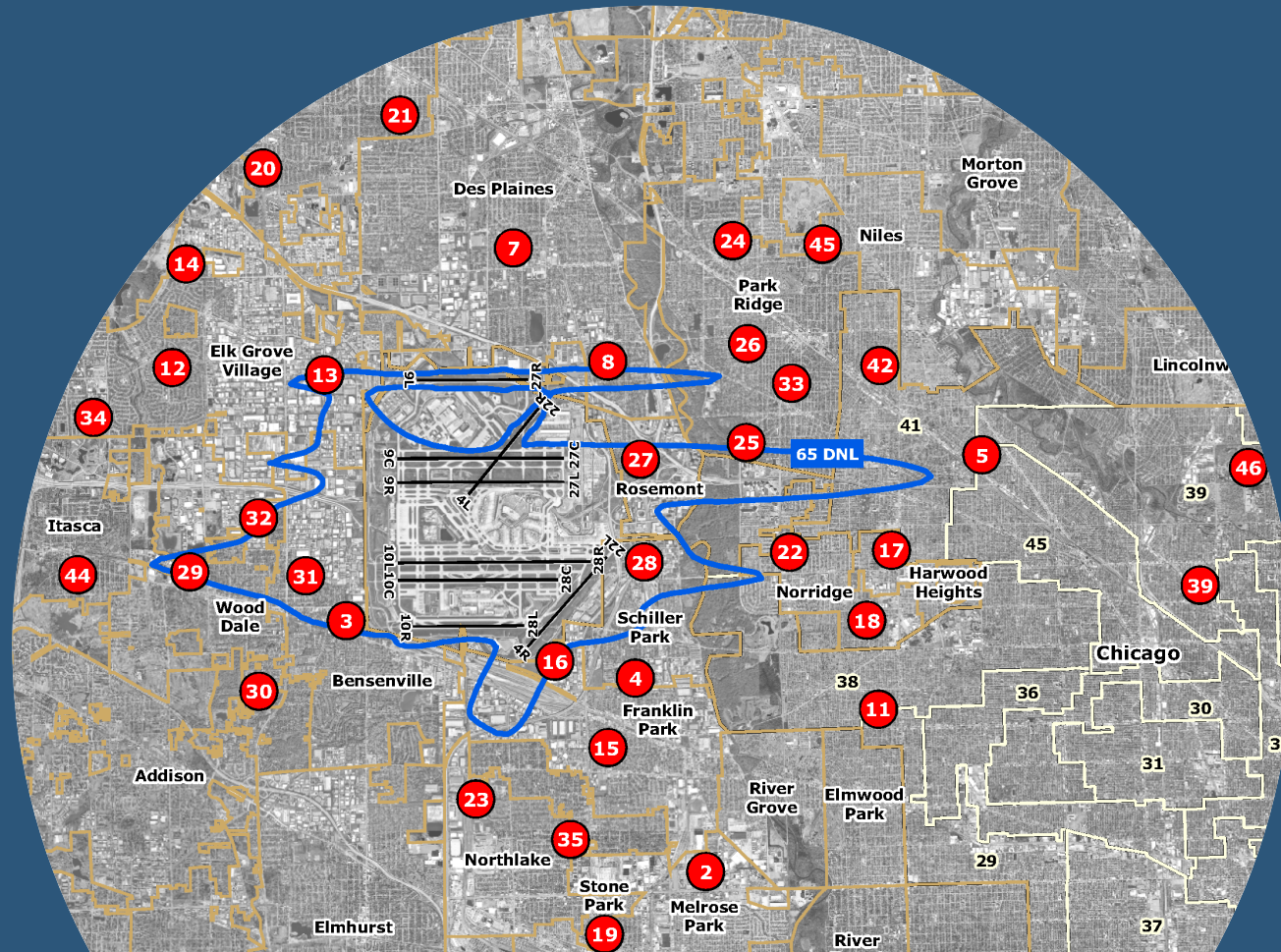
PROPOSED FLY QUIET



FLY QUIET 21 PROCESS



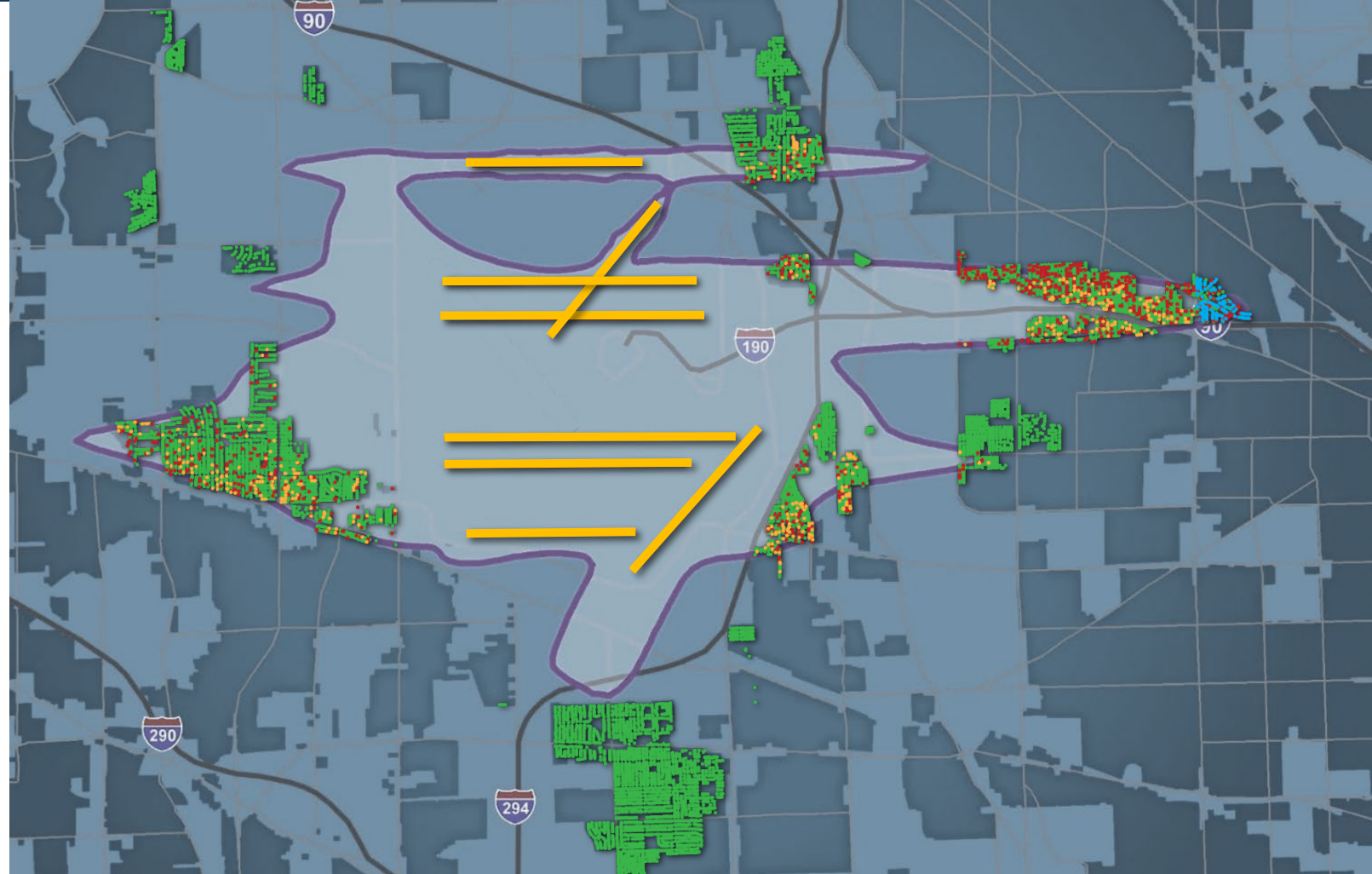
PROGRAMS



O'HARE RESIDENTIAL SOUND INSULATION PROGRAM

● ————— ●
**Began as a 10 Home
Demonstration in 1995**
● ————— ●

- Runways
- O'Hare Modernization Program Build-Out Noise Contour (65 DNL)
- Compatible Land Use (Industrial, Forest Preserve, etc.)
- Completed **11,544**
- Construction **355**
- Design **548**
- Not enrolled **751**



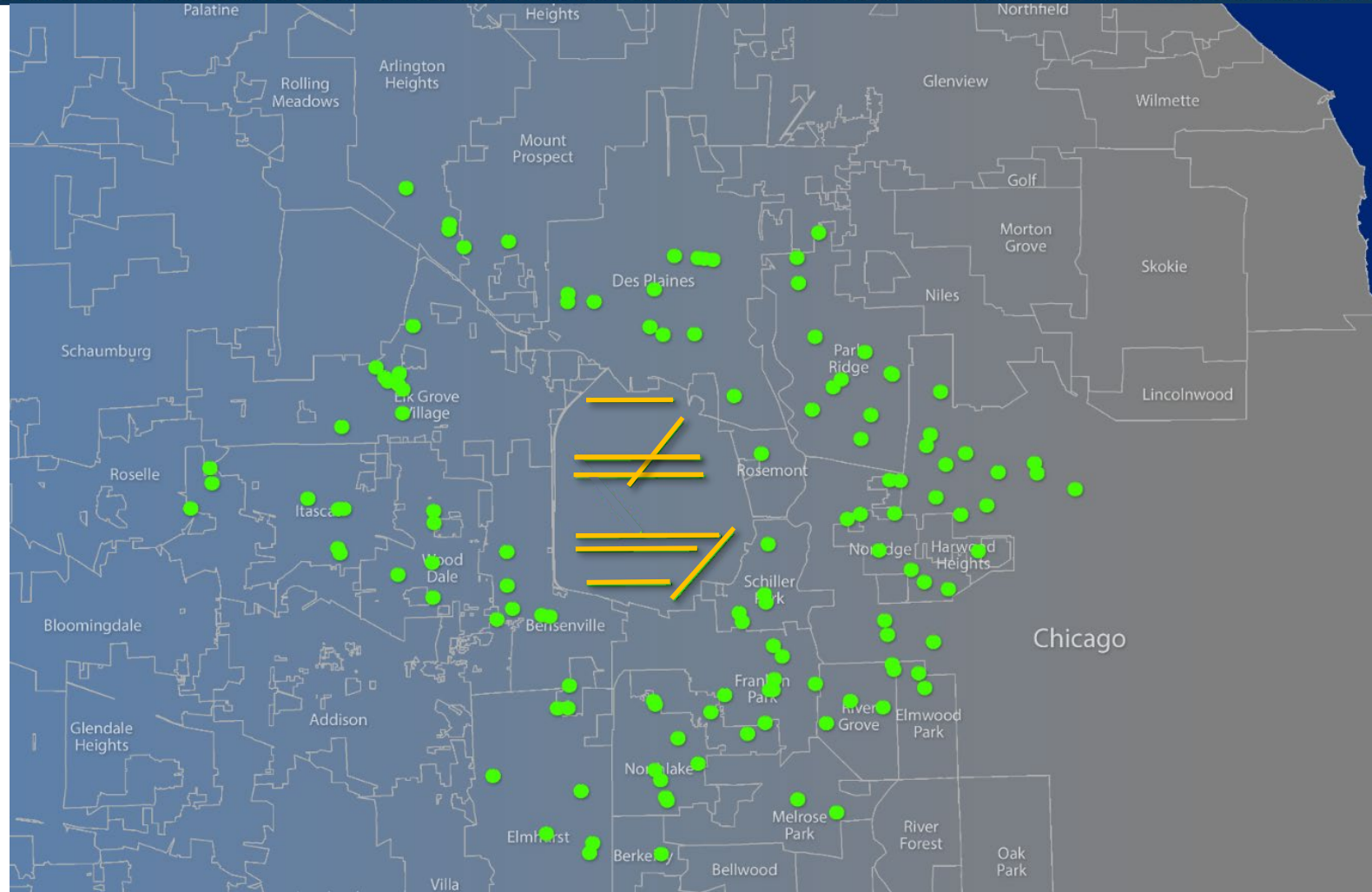
O'HARE SCHOOL SOUND INSULATION PROGRAM

CDA began Voluntary SSIP in 1982

124 Schools Complete

\$352 Million Spent

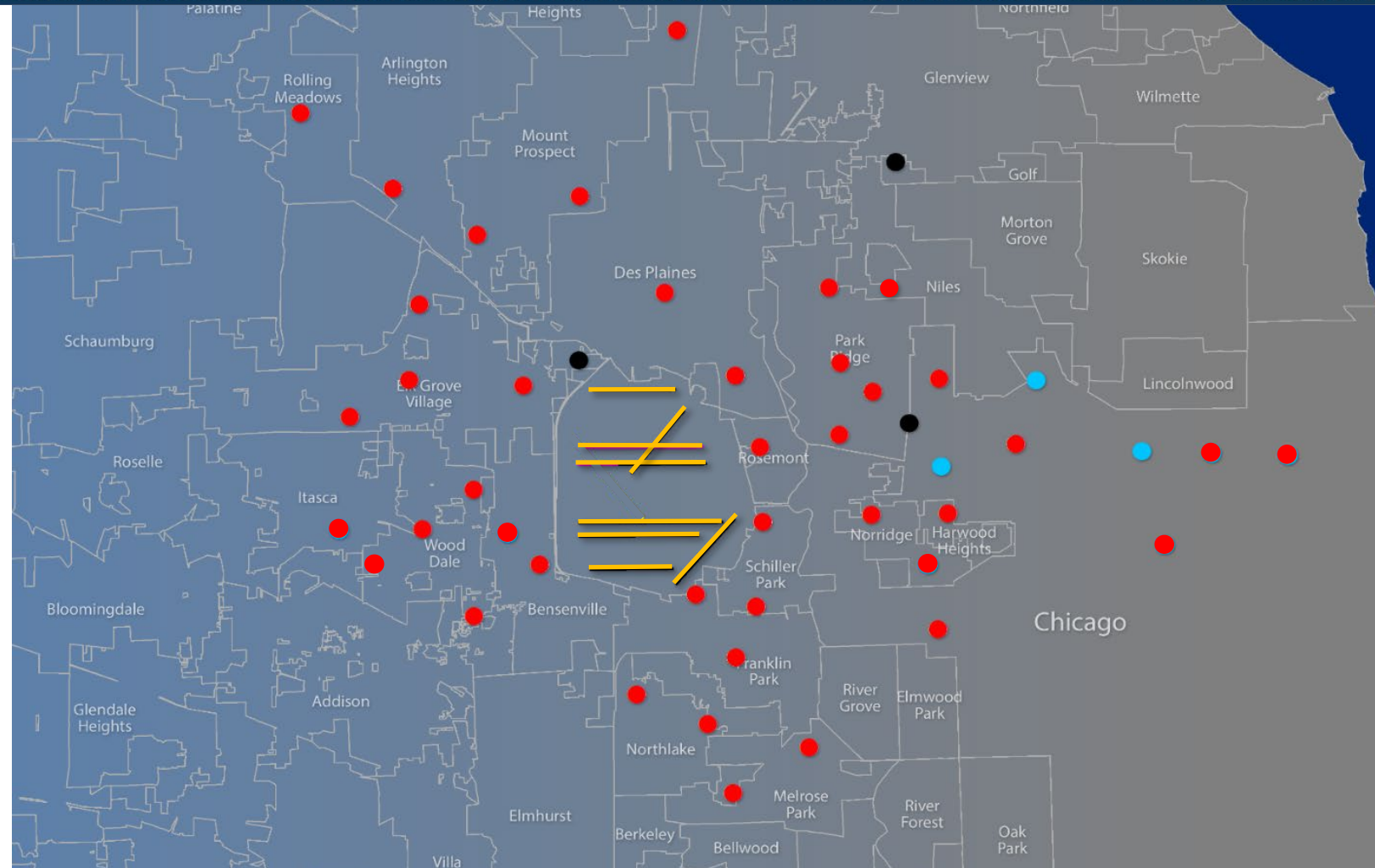
-  Runways
-  Completed



O'HARE PERMANENT NOISE MONITORS

- 40 permanent noise monitors – soon to be 43
- 10 portable noise monitors – deployed to residents and community facilities

- Runway
- Permanent Noise Monitors
- Future Noise Monitors
- Decommissioned Monitors



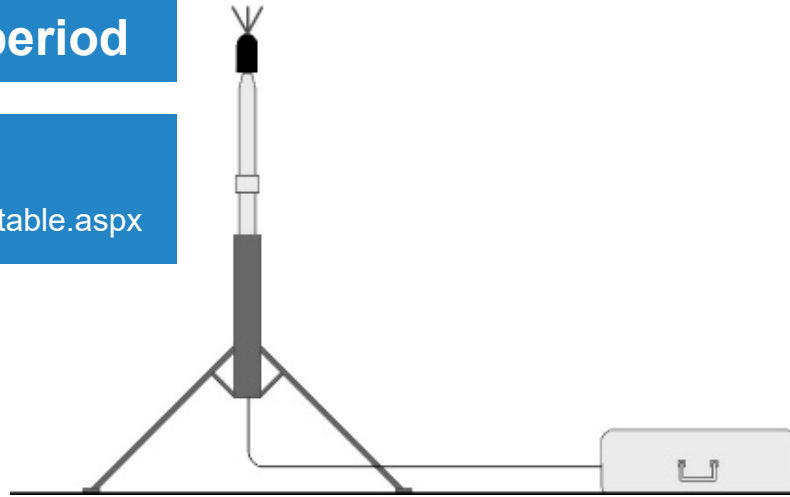
PORTABLE NOISE MONITORS

CDA deploys portable noise monitors at no cost to homeowners

Reports specific information about aircraft noise levels during a sample two-week period

Applications available at

<https://www.flychicago.com/community/ORDnoise/ANMS/Pages/portable.aspx>



What has worked



- ONCC believes in replacing confrontation with cooperation by bringing together the city of Chicago and suburban communities, the airlines, the Federal Aviation Administration (FAA), air traffic controllers and airline pilots to reduce the impact of aircraft noise in communities surrounding O'Hare.
- This approach has produced significant results — decreased aircraft noise, allowed for creation of nighttime runway rotation plan (Fly Quiet) and increased spending on sound insulation programs.
- Focus on:
 - Open dialog, cooperation not confrontation.
 - Partnerships
 - Close collaboration



THANK YOU!



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