

FACT SHEET



RESIDENTIAL SOUND INSULATION PROGRAM AT O'HARE INTERNATIONAL AIRPORT

Background

Since 1995, the Chicago Department of Aviation (CDA) has administered the Residential Sound Insulation Program (RSIP) in communities surrounding O'Hare International Airport. As one of the most aggressive programs in the world, it has provided over \$200 million in federal and airport funds to sound-insulate over 10,900 homes. In 1996, the O'Hare Noise Compatibility Commission (ONCC) was formed to provide input and oversight to the implementation of all noise programs, including the RSIP.

Purpose

The RSIP is designed to reduce the effects of aircraft noise inside the home. The goal of the Program is to achieve a quieter environment and better quality of life within the homes in the highest impacted areas affected by aircraft noise. The noise reduction level goals of the RSIP are to reduce aircraft noise levels in residences by at least 5 decibels and to attain an interior noise level of 45 dB. By properly sound-insulating eligible homes, homeowners not only gain a quieter interior, but may also benefit from long-lasting improvements and increased efficiency in their heating and cooling utilities. The RSIP is designed and directed by experts experienced in the use of construction techniques that have been tested and shown to be successful in minimizing interior noise.

Eligibility

A home must meet the following criteria to be eligible for the RSIP:

1. Home's annual day/night average sound level is equal to or greater than 65 decibels (65 DNL) within the FAA-approved O'Hare Modernization Program (OMP) Build-Out Noise Contour as defined by the FAA's Record of Decision for the Environmental Impact Statement (2005) except in cases of block rounding described below;
2. Home must have been constructed before September 30, 2005; and
3. Home must be on a block where an individual home is within the 65 DNL noise contour, and in such cases, homes on both sides of the street and up to the next intersection or street change are eligible.

Dwelling units can be in single-family, multi-family, or mixed use buildings. In cases of mixed use buildings, only the residential portion of the building will be sound-insulated. Sequencing of the homes is recommended by the CDA and approved by the ONCC. Homes are only eligible for one round of sound insulation.

Funding

Prior to the O'Hare Modernization Program, the RSIP was funded entirely by approved airport revenue sources. Currently, the FAA provides 80% of the funding using Airport Improvement Program (AIP) grants, while the City of Chicago provides the remaining 20% using approved airport revenue sources.

Types of Insulation

Once a home is enrolled in the RSIP, there are several measures that can be done to the home in order to reduce aircraft noise impacts. Typical sound insulation measures could include:

- Acoustically-rated windows;
- Solid-core wood entry doors (known as prime doors);
- Replacement of sliding glass doors;
- Solid wood baffle air conditioner covers;
- Acoustically-rated storm doors; and
- Thermally-glazed windows in non-living spaces.

Note: Work will only be performed in dwelling units. Common areas of multi-family buildings such as shared laundry rooms, hallways, entrances, stairwells, etc. are not included in the RSIP.

Pre-Construction Activities

The CDA conducts informational briefings for homeowners to attend in order to learn about the sound insulation process. Participation in the RSIP is for eligible homes by invitation only.

The CDA maintains an RSIP Showroom at the Aviation Administration Building (10510 W. Zemke Road, Chicago, IL 60666) with full-size samples of windows, prime doors, and storm doors. The RSIP Showroom is a great amenity for program participants.

For every home participating in the RSIP, a home inventory appointment is scheduled and each homeowner selects a sound insulation package that is most beneficial to the dwelling.

Construction and Post-Construction Activities

After a contract is awarded to a construction contractor, a field measurement appointment is scheduled for each home. At this appointment, the contractor measures every window and door opening exactly and confirms the homeowner's selection. All acoustical doors and windows in the O'Hare RSIP are custom-made for each home.

The sound insulation construction work in each home takes one or two weeks depending on the option package selected. At the end of construction, each homeowner receives a warranty package for the sound insulation labor and materials.

Noise audits are performed on 20% of the buildings. A post-construction noise audit will take place in homes where pre-construction noise audits were performed. The audit may take place during the home inventory. The homeowner will advise the program staff of the selected styles and materials to be used for the sound insulation for the building(s). Noise audits are performed to ensure the building modifications have decreased the interior noise level.