

Burlington International Airport
Noise Mitigation Implementation Plan



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Prepared for:

City of Burlington, Vermont
1200 Airport Drive, #1
Burlington, VT 05403

Prepared by:

The Jones Payne Group

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Introduction

The City of Burlington (City) has the responsibility to manage and administer the noise mitigation measures approved by the Federal Aviation Administration (FAA) in the updated 2020 Noise Compatibility Program for Burlington International Airport.

The purpose of this Noise Mitigation Implementation Plan (Plan) is to achieve land use compatibility for areas located within the FAA approved 65 DNL and higher (65+ DNL) noise contour, as identified in the 2018 /2023 Noise Exposure Map document (NEM) and in accordance with FAA regulations, and subject to FAA approval.

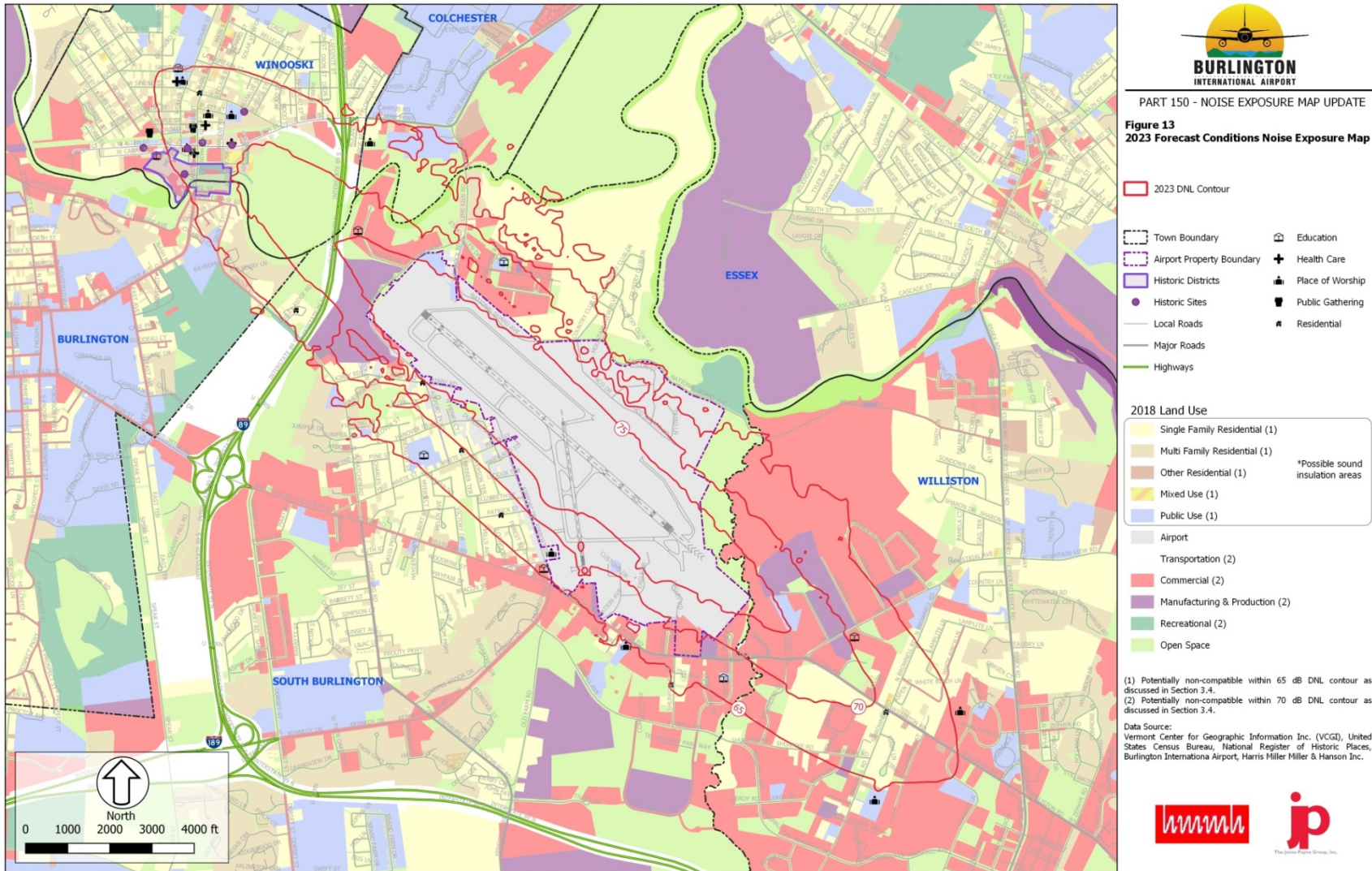
On August 27, 2020, the FAA issued its Record of Approval for the updated Noise Compatibility Program (NCP). The Noise Mitigation Implementation Plan reflects the FAA approved measures contained in the NCP and provides guidance reflecting the prioritization and implementation of the programs. This document was developed with the input of the members of the Airport's Sound Committee which is comprised of local residents and affected municipalities.

This Plan specifies the types of measures to be undertaken, actions needed for implementation and administration, estimated costs, funding sources, and project phasing and timelines. The noise mitigation measures contained in the NCP include the following:

- Voluntary sound insulation of eligible single-family and multi-family homes
- Voluntary acquisition and relocation of residents of single family parcels in the 75 DNL and higher where the majority of the non-compatible parcel is located within the 75 dB DNL contour in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (49 CFR Part 24, Uniform Act).
- Voluntary purchase assurance (with sound insulation) for eligible single-family parcels located within the 65 DNL up to the 75 DNL, with an aviation easement.
- Voluntary sales assistance for single family parcels located within the 65 DNL up to the 75 DNL, which are determined to be not eligible for sound insulation based on the results of acoustical testing. An aviation easement will be required.
- Voluntary sound insulation of noise sensitive buildings

This Noise Implementation Plan creates compatible land use within the 65+ DNL 2023 noise contour [see Figure 1]. All programs are voluntary and are to be implemented according to procedures acceptable to the FAA in order to establish federal funding eligibility. This plan presumes a \$5 million annual budget, however, it is contingent on the receipt of federal funds which cannot be guaranteed.

Figure 1: 2023 Forecast Conditions Noise Exposure Map



SUMMARY

Summary

In 2019, the City updated its Part150 Noise and Land Use Compatibility Study which resulted in Noise Exposure Maps for the years 2018 and 2023. This update was triggered by the change of fighter aircraft used by the Vermont Air National Guard and the anticipated change in noise exposure associated with replacement of the F-16 with the F-35A.

The purpose of this Plan is to provide noise mitigation to the most noise-impacted eligible homes. Prioritization of participation begins with properties in the highest noise contours and continues to the lower level contours located within the 65+ DNL noise contour with an effort to balance the mitigation efforts between the affected cities and towns.

Burlington International Airport (BTV) Noise Mitigation Plan

- Voluntary Participation
- Approximately 2,600 Impacted Residential Units
- Estimated Annual Cost -\$5 million
 - Residential Sound Insulation
 - Land Acquisition & Relocation
 - Purchase Assurance for Single Family Parcels
 - Sales Assistance for Single Family Parcels
 - Sound Insulation of Noise Sensitive Buildings

The existing Voluntary Land Acquisition and Relocation Program is amended to include only those properties where a majority of the non-compatible parcel is located in the 75+ DNL noise contour. The City has identified nine (9) potentially eligible properties located within the 75+ DNL noise impact areas¹. There are five property owners who have previously rejected participation in the Land Acquisition and Relocation Program. The remaining four properties, which the majority of the property is not located in the 75+ DNL, are eligible for the voluntary land acquisition and relocation program. The City recommends these four properties consider participation in the sound insulation program. A further discussion regarding these properties can be found in Chapter 5.

A Voluntary Residential Pilot Sound Insulation Program (Pilot Program) available to an estimated 10 residential homes will be developed to assess the efficacy of certain sound insulation measures given the climate, location, construction techniques, and type of building stock in the area. The purpose of the Pilot Program is to provide a preliminary assessment of the residential homes to develop the construction processing, methods, and techniques that work more efficiently and cost effectively, thus maximizing the mitigation funds.

¹ The NCP identified 10 properties; however, one property is zoned industrial/commercial and is not eligible. This plan reflects the removal of the property.

SUMMARY

The Voluntary Residential Sound Insulation Program (RSIP) includes approximately 2,600 potentially eligible single- and multi- family residential homes located within the 65+ DNL noise contour. Properties will be prioritized by two factors:

1. Noise level, beginning with the highest noise contour and working outwards and
2. Municipality, to distribute Program funds so every affected city is represented annually

This strategy will help to stabilize the neighborhoods and residential homes. The estimated total cost of the Voluntary Sound Insulation Program is \$85 million including the Pilot Program.

The Voluntary Purchase Assurance Program will provide a mechanism for homeowners who have a unique qualifying circumstance to sell their home directly to the City. The home must pre-qualify for sound insulation. After acquisition by the City, the home will receive an acoustical treatment package and then be resold on the open market for fair market value. If the home is determined to be ineligible for the Sound Insulation Program, the home can be moved to the Sales Assistance Program. Proceeds from the sale of the home would be used to fund further acquisitions under the Purchase Assurance or Sales Assistance Programs. The FAA's Record of Approval indicates the City may apply for funding for the cost of the acoustical treatment package only. The FAA will not provide funding for the acquisition of the homes.

A Voluntary Sales Assistance Program will be offered for single-family owner occupied homes located within the 65+ DNL noise contour that have been deemed ineligible for participation in the RSIP. Multi-family homes are not eligible for this program. This is due to majority of multi-family homes are non-owner occupied and the occupants would not benefit from this Program. The purpose of the Sales Assistance Program is to maintain neighborhood cohesion and provide mitigation benefits to the most impacted properties first. Properties will be prioritized beginning in the highest noise levels working outward. There are approximately 878 properties potentially eligible for this program; however final eligibility cannot be determined until after the properties are acoustically tested for eligibility for the Voluntary Residential Sound Insulation Program. The FAA's Record of Approval states the City may seek funding for the cost of the avigation easement only. The cost of acquiring the home will be not be eligible for federal funding.

The Voluntary Sales Assistance Program will allow participating owners the ability to sell their home on the open market with a guarantee from the City to assist if the home should sell for less than Fair Market Value (FMV). To satisfy FAA requirements, the property owner will convey an avigation easement to the City, which will be recorded against the property. The property owner will be responsible for marketing and selling their property. The listing price of the property will be the Fair Market Value as established by appraisal, following federal appraisal guidelines. The City will provide a cost differential of up to 5% of the FMV, taking into consideration the property's appraised value and the property's purchase price on the open market. Once a property sells through the Voluntary Sales Assistance Program, the property is noise compatible due to the presence of an avigation easement or has been deemed compatible through acoustical testing. A subsequent property owner will not be eligible for any of the programs under this Noise Implementation Plan.

SUMMARY

The City will seek funding from the FAA for these programs. Noise grants are typically funded at 90 percent by the FAA and 10 percent by the City. FAA funding cannot be committed in advance and implementation will be based on the receipt of grant funding.

Table 1 includes an analysis of the individual programs and their anticipated costs. The entire program cost cannot be determined by totaling the 100% participation column since a property may fall into more than one program category.

Costs have not been identified for the Sound Insulation of Noise Sensitive Buildings.

Table 1: Summary of Estimated Costs by Program

Program	Potentially Eligible Homes	Estimated Cost Per Home ²	Estimate Maximum Cost based on 100% Participation
Land Acquisition & Relocation	9	\$339,000	\$3M
Residential Sound Insulation	2,627	Single Family: \$45,000 (65-70 DNL) \$50,000 (70-75 DNL) Multi Family: \$25,000 (65-70 DNL) \$30,000 (70-75 DNL)	\$85.5M
Purchase Assurance	878	\$341,000	\$62M
Sales Assistance	878	\$59,000	\$13M

² Costs are based on estimates provided in the 2020 Updated Noise Compatibility Program

Voluntary Residential Sound Insulation Program

Overview – Voluntary Residential Sound Insulation

A Voluntary Residential Sound Insulation Program will be offered to all eligible residential properties located within the 65+ DNL noise contour. These properties are located within Chittenden County.

The Voluntary Residential Sound Insulation Program will apply acoustical treatments designed to reduce aircraft noise to a home. The treatments include, but are not limited to, upgrading windows, doors and ventilation systems to achieve an interior noise level of 45 DNL. This large-scale program will incorporate the assessment results of the Voluntary Residential Pilot Sound Insulation Program (Pilot Program).

**Voluntary
Sound Insulation Program**

- 2,627 Impacted Residential Units
- Located within the 65+ DNL and higher
- Total Program Cost - \$85 Million
- Annual Program Cost - \$4.5 Million
- Average Cost Per Unit:
 - Single Family - \$45,000-\$50,000
 - Multi-Family - \$25,000-\$30,000
- Anticipates 50 Homes Per Year
- Ensures Neighborhood Cohesion
- Acoustical Rated Products

The Voluntary Sound Insulation Program will follow FAA guidelines³ to ensure the program installs the proper treatments and achieves the necessary noise reduction. There are approximately 2,600 single-family and multi-family homes that would be eligible for this program. The project will be divided into phases. A phase is a group of homes that will be designed and constructed in one package.

The table below identifies the approximate number and type of homes by noise contour band.

Table 2: Voluntary Residential Sound Insulation Program, Housing Homes, by Type⁴

Home Type	65-70 DNL	70-75 DNL	Total
Single-family	781	97	878
Multi-family	1,563	186	1,749
Total	2,344	283	2,627

³ FAA Order 5100.38D, Change 1, Appendix R

⁴ BTV Noise Compatibility Program Update, 2019

Voluntary Residential Sound Insulation Program

Objective

The purpose of this program is to mitigate estimated noise exposure attributable to civilian and military aircraft operations in an environmentally sensitive manner. Simultaneously, maintaining the City's and affected community's desire to:

- Preserve the residential areas located near the airport,
- Ensure the communities remain stable, and
- Continue to provide a source of affordable housing for the region.

The program will provide relief from aircraft noise for residents by upgrading interior living areas. By replacing windows, doors and ventilation systems with acoustically rated products noise reduction is achieved for the property.

The FAA designates the noise impact areas as the properties located within the 65+ DNL noise contour.

Project Eligibility

To be eligible for the Voluntary Residential Sound Insulation Program, a property owner must:

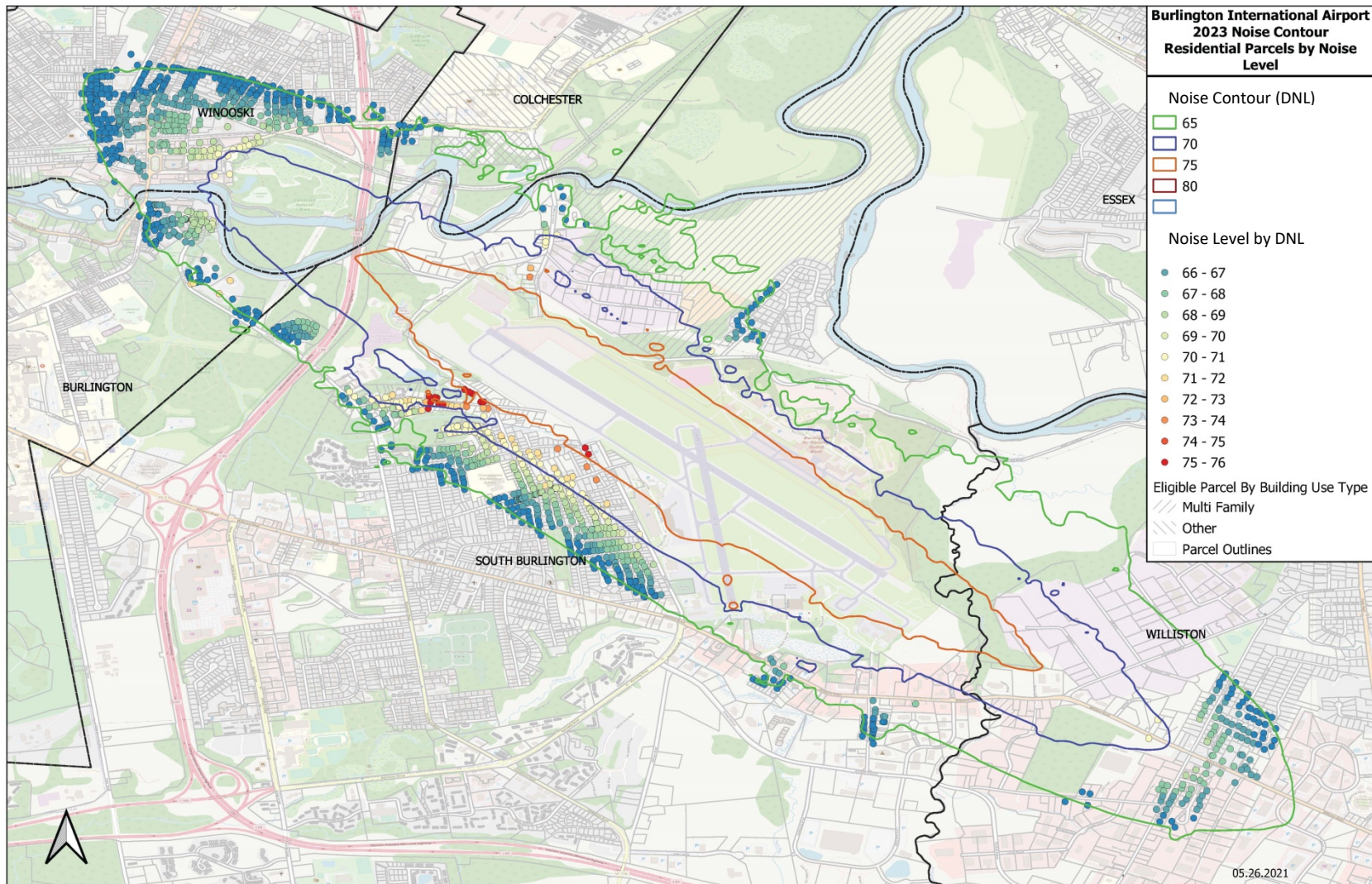
- Own a legally permitted eligible residential structure located within the project boundaries;
- Ensure the structure is free of major building code violations that impact life safety;
- Have an existing interior noise level of 45 dB DNL or higher as determined by an acoustical test;
- Enter into a Homeowner Participation Agreement with the City.

Project Area

The Residential Sound Insulation Program project area includes the 65+ DNL of the 2023 noise contour. The geographic area is located within Chittenden County and comprised of six local municipalities located to the east, west, north and south of the airport. These areas are defined as City of Burlington, Town of Colchester, Town of Essex, City of South Burlington, Town of Williston and City of Winooski.

The following map identifies all residential properties within the 65+ DNL noise contour. Each property will be assigned a preliminary noise level which will assist with prioritization of the properties.

Figure 2: 2023 Noise Exposure Map, Residential Parcels by Noise Level (DNL)



Voluntary Residential Sound Insulation Program

An analysis of the housing type by noise level band for each municipality is provided below. This information is based on data obtained during the NCP process. The actual number of properties will be refined during program development.

City of Burlington

This area contains approximately 341 residential homes which may be eligible for the Residential Sound Insulation Program. The table below details the housing homes in this area.

Table 3: City of Burlington Housing Homes, by Type and Noise Level

Home Type	65 - 70 DNL	70 - 75 DNL	Total
Single-Family	51	0	51
Multi-Family	209	81	290
Total	260	81	341

Town of Colchester

This area contains approximately 22 residential homes which may be eligible for the Residential Sound Insulation Program. The table below details the housing homes in this area.

Table 4: Town of Colchester Housing Homes, by Type and Noise Level

Type of Home	65 to 70 DNL	70 to 75 DNL	Total
Single-Family	9	0	9
Multi-Family	13	0	13
Total	22	0	22

City of South Burlington

This area contains approximately 810 residential homes which may be eligible for the Residential Sound Insulation Program. The table below details the housing homes in this area.

Voluntary Residential Sound Insulation Program

Table 5: City of South Burlington Housing Homes, by Type and Noise Level

Type of Home	65 to 70 DNL	70 to 75 DNL	Total
Single-Family	356	96	452
Multi-Family	344	14	358
Total	700	110	810

Town of Williston

This area contains approximately 112 residential homes which may be eligible for the Residential Sound Insulation Program. The table below details the housing homes in this area.

Table 6: Town of Williston Housing Homes, by Type and Noise Level

Type of Home	65 to 70 DNL	70 to 75 DNL	Total
Single-Family	105	1	106
Multi-Family	4	2	6
Total	109	3	112

City of Winooski

This area contains approximately 1,342 residential homes which may be eligible for the Residential Sound Insulation Program. The table below details the housing homes in this area.

Table 7: City of Winooski Housing Homes, by Type and Noise Level

Type of Home	65 to 70 DNL	70 to 75 DNL	Total
Single-Family	260	0	260
Multi-Family	993	89	1,082
Total	1,253	89	1,342

Town of Essex

There are no residential homes located within the 65+ DNL noise contour in the Town of Essex.

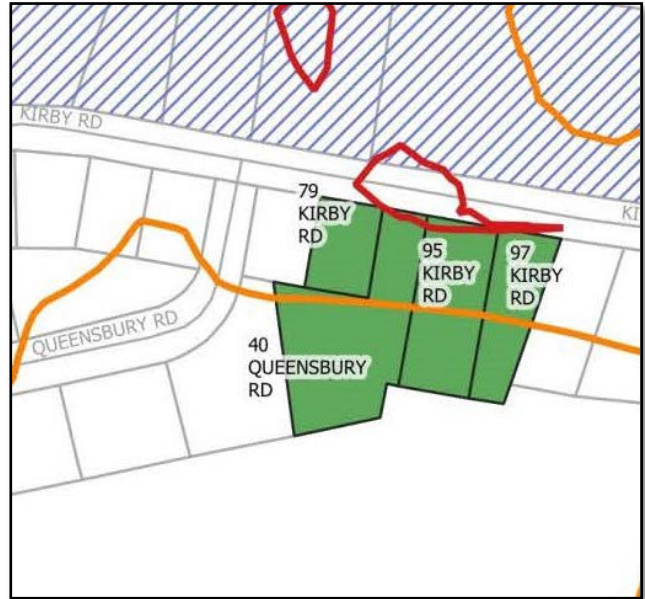
Voluntary Residential Sound Insulation Program

Prioritization of Properties

This prioritization plan for the Residential Sound Insulation Program outlines the recommended approach for the selection and phasing of approximate 2,600 residential homes located within the approved 2023 Noise Contour. This plan assumes a 100% voluntary participation rate; however final participation and eligibility will be determined through participant response and acoustical testing.

Homes Located in the 75 DNL

Homes located in the 75 DNL and higher are not eligible for sound insulation. However, use of high resolution terrain elevation data in the noise models resulted in several small isolated areas (pockets) of 75 DNL within the 70 DNL contour. This resulted in four properties being classified in the 75 DNL contour⁵. The City recognizes that future NEM updates may shift these 75 DNL “pockets” to other areas in the neighborhood. The properties are located along Kirby Rd, and are contiguous to each other. Each property slightly touches the edge of the 75 DNL “pocket”. Acquisition of these properties will disrupt the continuity of the neighborhood. The City proposes to allow the four (4) homes to be eligible for this program.



Analysis of Factors Considered for Prioritization of Homes

Programs can utilize a variety of factors to prioritize homes. Some program select purely based on noise level so a group of homes may be located in a variety of municipalities or neighborhoods. Another method is to choose groups of homes based on a street block so that all homes on one street are treated at the same time but may have a small range of noise levels. The City has analyzed the following factors the development of the recommended prioritization plan for each phase of the program include the following:

- Noise Contour Level,
- Community Equity,
- Housing Type, and
- Anticipated Funding

⁵ The five homes are 79 Kirby Rd, 95 Kirby Rd, 97 Kirby Rd, 40 Queensbury Rd and 106 Ethan Allen Drive.

Voluntary Residential Sound Insulation Program

A summary of each factor is provided and how this factor influenced prioritization. A final recommendation for the prioritization approach is provided at the end of the report.

Noise Contour Level

The noise contour level of a home is determined based upon the location of the property in relation to the noise contours in the approved 2023 Noise Contour. Homes will be prioritized based upon location starting at the highest noise exposure contours first. This is a particularly straightforward approach if all potentially eligible properties are located within one municipality or community. The table below outlines the number of residential homes located in each DNL contour.

Table 8: Estimated Potentially Eligible Homes by DNL Contour

Municipality	70-75 DNL (# of homes)	65-70 DNL (# of homes)	Total Potentially Eligible
All Municipalities	283	2344	2627

Consideration: Based on this factor, selection for participation would be offered to homes in the higher noise contour bands, working outward to the lower DNL contour level bands. Priority will be provided to the 283 residential homes located with the 70-75 DNL contour prior to the residential homes located within the 65-70 DNL contour.

Community Equity

The approved 2023 Noise Exposure Map includes residential homes in five (5) municipalities: the cities of Burlington, South Burlington and Winooski and the towns of Colchester and Williston. The table below shows the number of residential homes in each Municipality and exterior DNL.

Table 9: Potentially Eligible Homes by Municipality and DNL Contour

Municipality	70-75 DNL (# of homes)	65-70 DNL (# of homes)	Total Potentially Eligible	% of Total
Burlington	81	260	341	13%
Colchester	0	22	22	1%
South Burlington	110	700	810	31%
Williston	3	109	112	4%
Winooski	89	1253	1342	51%
All Municipalities	283	2344	2627	100%

An important element of the implementation of the noise mitigation program is community relations. When a group of homes are selected based on noise level, if there is more than one impacted municipality, selecting homes based solely on the noise contour level may result in the perception that one community is receiving priority while others must wait

Voluntary Residential Sound Insulation Program

longer. A methodology to allow for participation of homes from multiple municipalities will be employed.

Consideration: Based on this factor, for each phase selection for participation would be offered to the highest noise levels in each municipality. For example, if the current phase is the 67-68 DNL, an effort to include properties from each municipality for each group.

Housing Type

Potentially eligible residential homes are categorized by single family and multi-family homes. Multi-family properties can range from 2-100 homes per parcel. Table 3 lists the number of residential homes by housing type in in each municipality and exterior DNL.

Table 10: Potentially Eligible Homes by Housing Type, Municipality and DNL Contour

Municipality	70-75 DNL (# of homes)		65-70 DNL (# of homes)		Total (# of homes)
	Single	Multi	Single	Multi	
Burlington	0	81	51	209	341
Colchester	0	0	9	13	22
South Burlington	96	14	356	344	810
Williston	1	2	105	4	112
Winooski	0	89	260	993	1342
All Municipalities	97	186	781	1563	2627

Consideration: Based on this factor, selection for participation for each phase would be offered to the highest noise levels in each municipality with a consideration for the housing type. Multi-family homes can include multi-home apartment houses, duplexes, condominiums, townhouses and apartment complexes. Since multi-family buildings can range from 2-100 homes per parcel, selection must ensure all homes of a multi-family building are selected to participate at the same time.

Recommended Prioritization and Implementation

Based on the analysis of the above-listed factors and considerations, the recommended approach for prioritization for participation is as follows:

- 1) Establish available funding – The residential sound insulation program will determine the number of homes available for participation based upon actual funding.
- 2) Each phase (50 homes) the selection of homes will be selected based on the following percentages when all municipalities have qualifying homes for that group.

Voluntary Residential Sound Insulation Program

Municipality	% of Homes per Group	Number of Homes per Group
City of Winooski	75%	37
City of South Burlington	15%	7
City of Burlington	7%	4
Town of Williston	2%	1
Town of Colchester	1%	1

When multi-family homes are selected for participation, the RSIP will ensure all homes per parcel are selected for participation. For non-typical multi-family homes and/or larger complexes (50+ homes), it is recommended these properties are assembled into a multi-family only phase to ensure consistency in the windows and doors for the entire property. Accordingly, these dedicated phases may not meet the above recommended distribution of homes by Municipality.

Project Schedule

An estimated 2,600 residential homes located within 65+ DNL noise contour may be eligible for sound insulation. This program will commence upon the receipt of FAA grant funds.

Program participation will be offered to the homes in the most impacted noise contour first. Additional homes will be offered participation moving outward to the next level DNL, utilizing an interpolated 1 dB assignment for each home or multi-family building.

The City estimates it will apply for funding for approximately 50 homes a year with an estimated annual construction cost of \$4.5 million. The project schedule (assuming full participation) and assuming no unforeseen delays, estimates a 26 year project timeframe assuming a 100% voluntary participation rate.

Estimated Costs and Benefits

There are approximately 2,600 housing homes potentially eligible for participation in the Voluntary Sound Insulation Program located within the 65+ DNL noise contour. The estimated average cost to sound insulate properties is shown below.

Voluntary Residential Sound Insulation Program

Table 11: RSI Program, Estimated Cost by Housing Type

Home Type	Number of Homes	Estimated Home Cost	Estimated Total Cost
Single-Family (70-75 DNL)	97	\$50,000	\$4.9M
Single-Family (65-70 DNL)	781	\$45,000	\$35.1M
Multi-Family (70-75 DNL)	186	\$35,000	\$6.5M
Multi-Family (65-70 DNL)	1,561	\$25,000	\$39.0M
Total Estimated Program Costs			\$85.5M

Funding Sources – Voluntary Sound Insulation

The City will request funding from the FAA for this program as depicted in Table 6. Noise grants are typically funded at 90 percent by the FAA and 10 percent by the City. FAA funding cannot be committed in advance. Property owners may incur expenses such as attorney’s fees to review the Homeowner Participation Agreement, replacement of window coverings or repairing building code issues or other work that will be identified by the consultant team at the time of the design assessment visit. The consultant team will advise the property owners of these costs by prior to any decision by a homeowner to sign the Homeowner Participation Agreement.

Table 12: Estimated Average Sound Insulation Program Costs, By Funding Source

Funding Source	% of Contribution	Estimated Funding
FAA	90%	\$77M
City of Burlington	10%	\$8.5M
Total	100%	\$85.5M

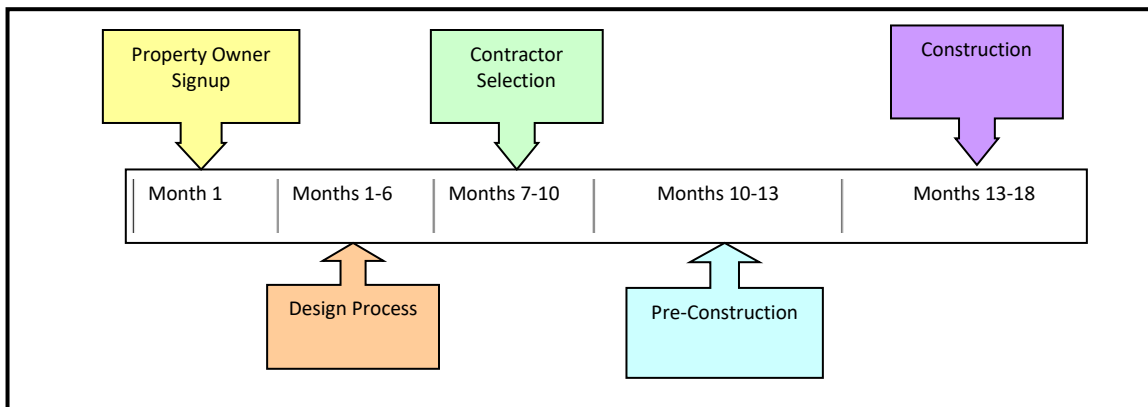
The Sound Insulation Process

The process of installing insulating acoustical products into a home takes approximately 18 months from the time the homeowner is contacted by the City’s representative to participate until construction is finished on the home. The estimated length of time for this process is a function of the total number of participants in a construction package, FAA grant cycles and the time needed for the custom windows and doors to be manufactured.

Voluntary Residential Sound Insulation Program

The figure below depicts the sound insulation phases and timeline. Once a property owner agrees to participate in the RSI Program, the City's consultant team will conduct an acoustical test to determine the home's interior noise level. If the test results indicate the home is above 45 DNL, an assessment will be schedule to develop a recommended construction plan, including products (doors, windows) and materials. During the design process, the property owner will select from the variety of available products, including the style and finish of doors and windows to be used as replacements. Upon completion of the design process, the City will prepare a construction package comprised of approximately 50 homes for bid by BTV⁶. After award of the construction contract, the pre-construction phase begins with the contractor ordering the required custom acoustical products and mobilizing the construction crew. Upon receipt of the products, the property will be scheduled for construction. The construction process takes approximately 30 days per home. The occupant(s) remains in their home during the construction phase. Most work, all products installed and systems operational, is accomplished within ten (10) business days. The contractor has the remaining time to finalize construction and close all permits.

Figure 3: RSI Program Phases and Timeline

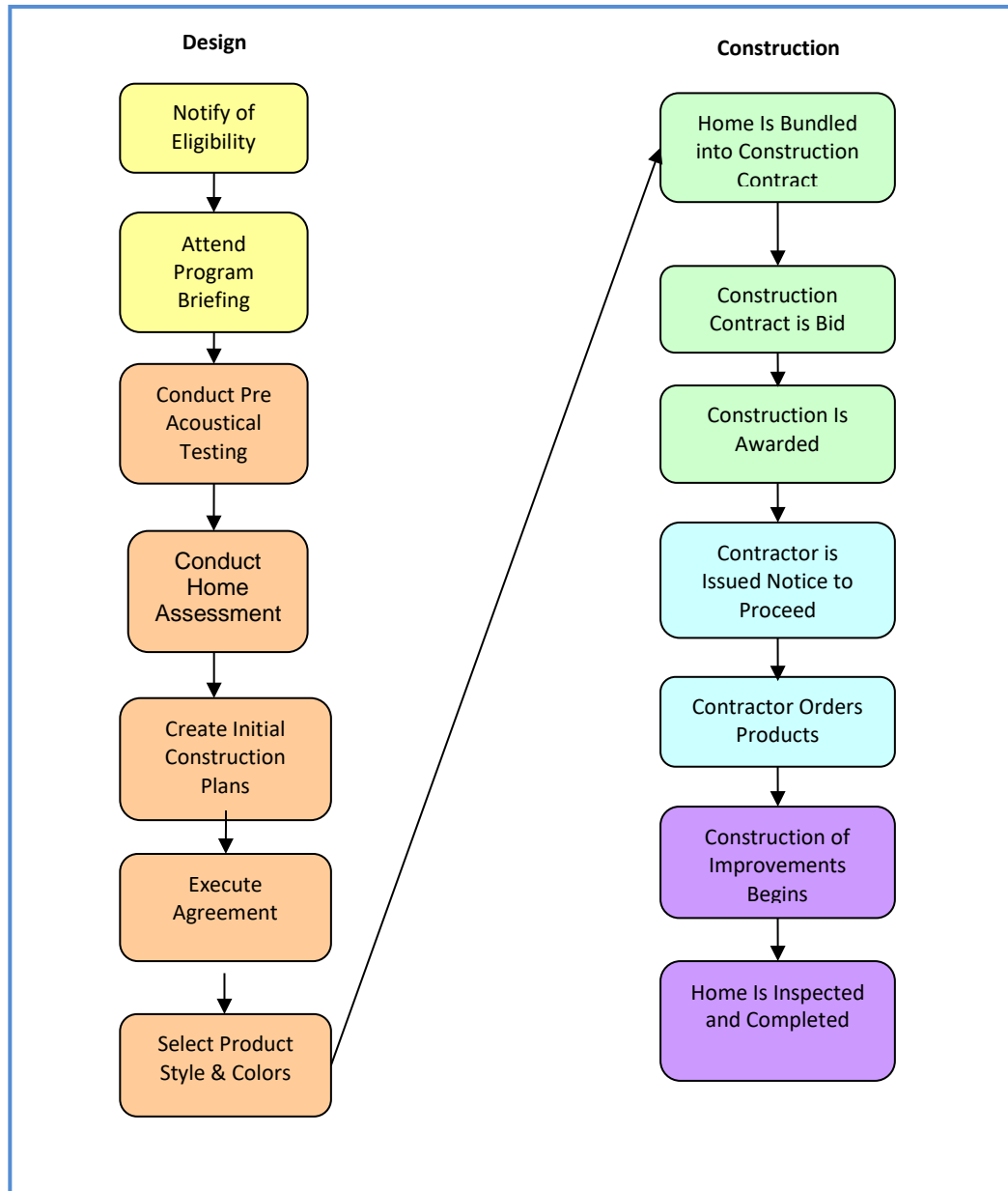


⁶ This is based on participation and total number of homes per year.

Voluntary Residential Sound Insulation Program

The major milestones achieved during each phase of the sound insulation process are shown below.

Figure 4: RSI Program Major Milestones



Voluntary Residential Sound Insulation Program

Pilot Program

As an assessment tool, the City will undertake a Pilot Program to refine the program policies, products and implementation techniques. The Pilot Program will offer sound insulation treatments to estimate up to 10 residential homes.

The purpose of the Pilot Program assessment is to:

- Identify acoustical treatment recommendations, product alternatives, policies, and procedures that are appropriate for the housing homes in the area around BTV.
- Provide an opportunity for noise impacted homeowners to experience the benefits of sound insulation in their neighborhood.
- Create an opportunity for the City of Burlington to showcase homes that received sound insulation under the Pilot Program.
- Identify funding efficiencies.
- Refine management strategies.

Property owners in the Pilot Program will enter into an agreement with the City for the design and installation of the acoustical products.

Voluntary Land Acquisition and Relocation Program

Overview

A voluntary Land Acquisition and Relocation Program will provide for the purchase of single family properties where a majority of the parcel is located within the 2023 75+ DNL contour.

Land Acquisition & Relocation Program

- 10 Eligible Single Family Properties
- Located within 75+ DNL Contour
- Total Program Cost – \$3 Million
 - Annual Program Cost - \$500,000

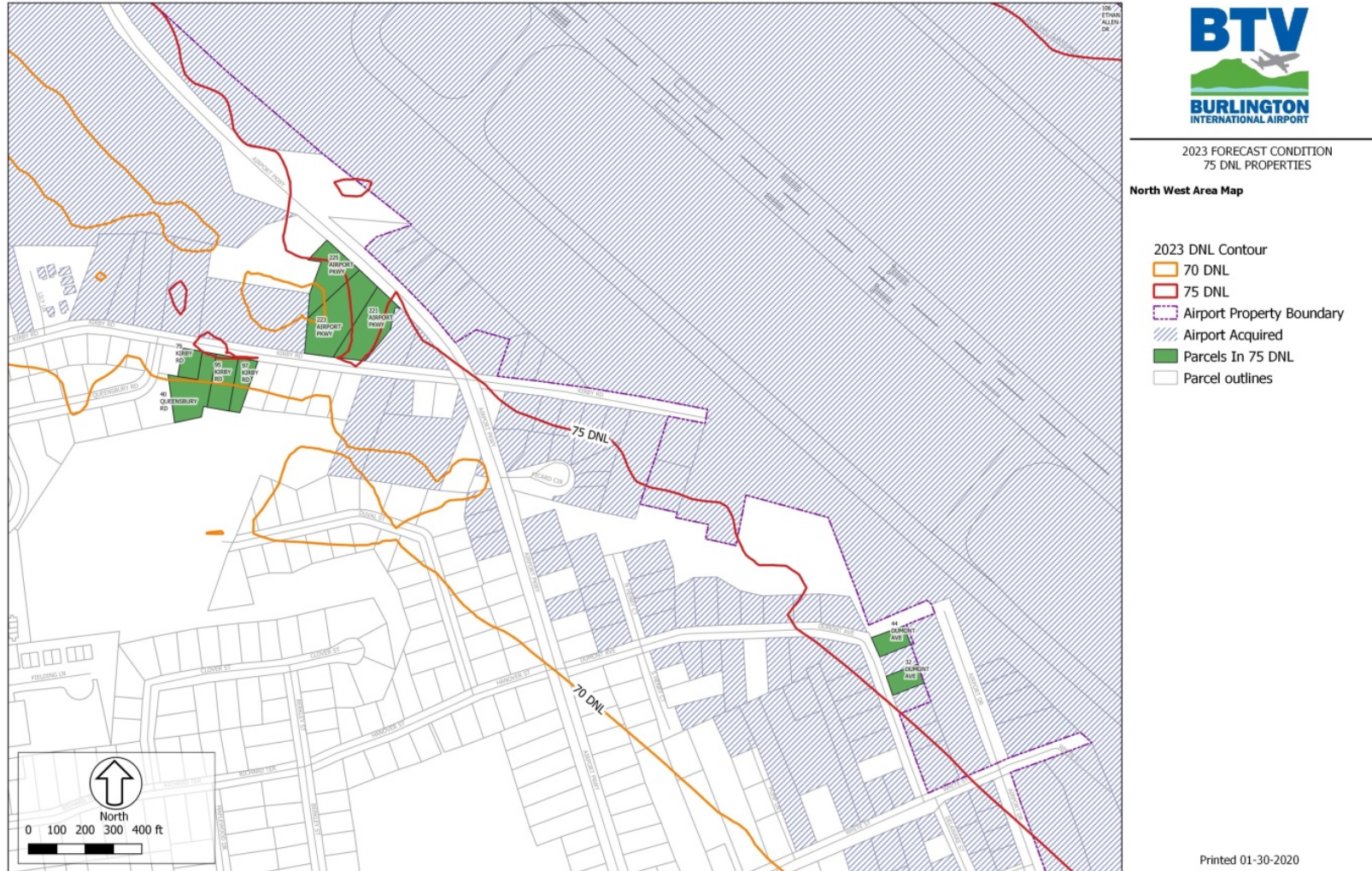
Objective

This measure converts incompatible residential land use to uses that are more compatible with aircraft noise levels.

Project Area

There are 9 properties identified as touching the 75 DNL contour (Figures 5). Five of the properties were included in the most recent AIP grant for land acquisition and each owner rejected the City's offer to purchase. Use of high resolution terrain elevation data in the noise models resulted in several small isolated areas (pockets) of 75 DNL within the 70 DNL contour. This resulted in five properties being classified in the 75 DNL contour. Four of the properties, located along Kirby Rd, are contiguous to each other and slightly touch the edge of one of the 75 DNL pockets. Acquisition of these properties disrupts the continuity of the neighborhood. The fifth property is located north of the Airport on a very large parcel which touches the 75 DNL but the building is not located near the 75 DNL contour.

Figure 5: Properties Located within the 75 DNL 2023 Noise Contour, South of Airport



Voluntary Land Acquisition and Relocation Program

Project Eligibility

Eligibility for the Voluntary Land Acquisition and Relocation Program is limited to non-compatible parcels where the majority of the parcel is located within the 75 dB DNL contour. Each property considered for inclusion in the program also must meet any other eligibility requirements that the FAA may adopt.

Implementation

The Voluntary Land Acquisition and Relocation Program will follow the Uniform Relocation Assistance and Real Property Acquisitions Policies Act (URA). Eligible property owners will be paid for their property at Fair Market Value, and provided relocation assistance in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (the “Uniform Act”) and implementing Department of Transportation (DOT) regulation. The City, in coordination with the applicable communities, developed a Noise Land Inventory and Reuse Plan for the acquired properties.⁷

Project Schedule

There are 9 properties located within the 75 DNL contour. Five of the properties have previously declined participation in this program. Four additional properties are affected due to terrain and noise modeling settings used in the noise modeling software. The City advise the owners of the 4 homes of their ability to participate in this program. Should they decline, they will become eligible for sound insulation. Once an eligible property owner decides to sell, the City will apply for grant funds to acquire the home. The City is estimating there may be one property per year who decides to sell. The estimated annual budget is \$500,000.

Estimated Costs and Benefits

The table below depicts the estimated costs to acquire and provide relocation assistance to the 9 homes located primarily within the 75+ DNL contour.

Table 13: Land Acquisition and Relocation Program Estimated Costs

Incompatible Land Use	Estimated Total Cost
Single Family Homes	\$3M

Funding Sources

The City will seek funding from the FAA for these programs. Noise grants are typically funded at 90 percent by the FAA and 10 percent by the City. FAA funding cannot be committed in advance

Voluntary Purchase Assurance Program

Overview

Qualified incompatible single family parcels within the 65 DNL - 75 DNL contours would be provided an opportunity to participate in a Purchase Assurance Program (PA Program). If a homeowner elects the PA Program, the City would acquire an aviation easement. If the home qualifies for sound insulation, it will receive an acoustical treatment package and then be resold on the open market for fair market value. Proceeds from the sale of the home would offset much of the cost of acquiring homes.

Purchase Assurance Program

- 878 Potentially Eligible Units
- Partially Eligible for FAA Funding
- Located within 65 to 75 DNL contour
- Extenuating Circumstances to Participate
- Requires Aviation Easement
- Must Qualify for Sound Insulation
- Estimated Annual Cost: \$500,000

Objective

This measure provides impacted homeowners of single family properties within the project area an opportunity to sell their property to the City while providing the City an aviation easement. Prior to acquiring the property, the City will conduct an acoustical test to determine if the home is eligible for sound insulation. If the home determined to be eligible, the City will purchase the home from the owner, sound insulate and resell on the open market. If the home is not eligible, the home will be placed into the Sales Assistance Program. These measures will convert the incompatible residential land use to be more compatible with aircraft noise levels.

Project Area

There are 878 single family homes located within the 2023 Noise Exposure Map across five (5) municipalities. The table below summarizes the number of potentially eligible homes by municipality.

Table 14: Voluntary Purchase Assurance Program, Homes by Municipality

Municipality	Single Family Homes (#)
Burlington	51
Colchester	9
South Burlington	452
Williston	106
Winooski	260
Total	878

Project Eligibility

This measure pertains to owner-occupied single family eligible properties within the 65 dB DNL noise level or higher for which the land use is considered non-compatible. Property owners must sell their property to the City and provide an avigation easement to participate in the Purchase Assurance Program. The property must be acoustically tested and be deemed eligible for the sound insulation program. There is no relocation benefits associated with this program.

Implementation

The City shall identify the eligible owners and approach them with the opportunity to sell their home to the City. Selection of homes will be based on the highest noise contour level. This will help to maintain neighborhood continuity and market value.

The home must be acoustically tested to ensure it will be eligible for the sound insulation program. If the home does not qualify for sound insulation, it will be moved to the Sales Assistance Program.

Upon acquisition of the home, the City would include home in the sound insulation program. The homes will be prioritized for sound insulation to minimize the amount of time the home remains unoccupied.

Upon receipt of an acoustical treatment package, the home would be placed on the open market for sale with an avigation easement attached

Appraisal Process

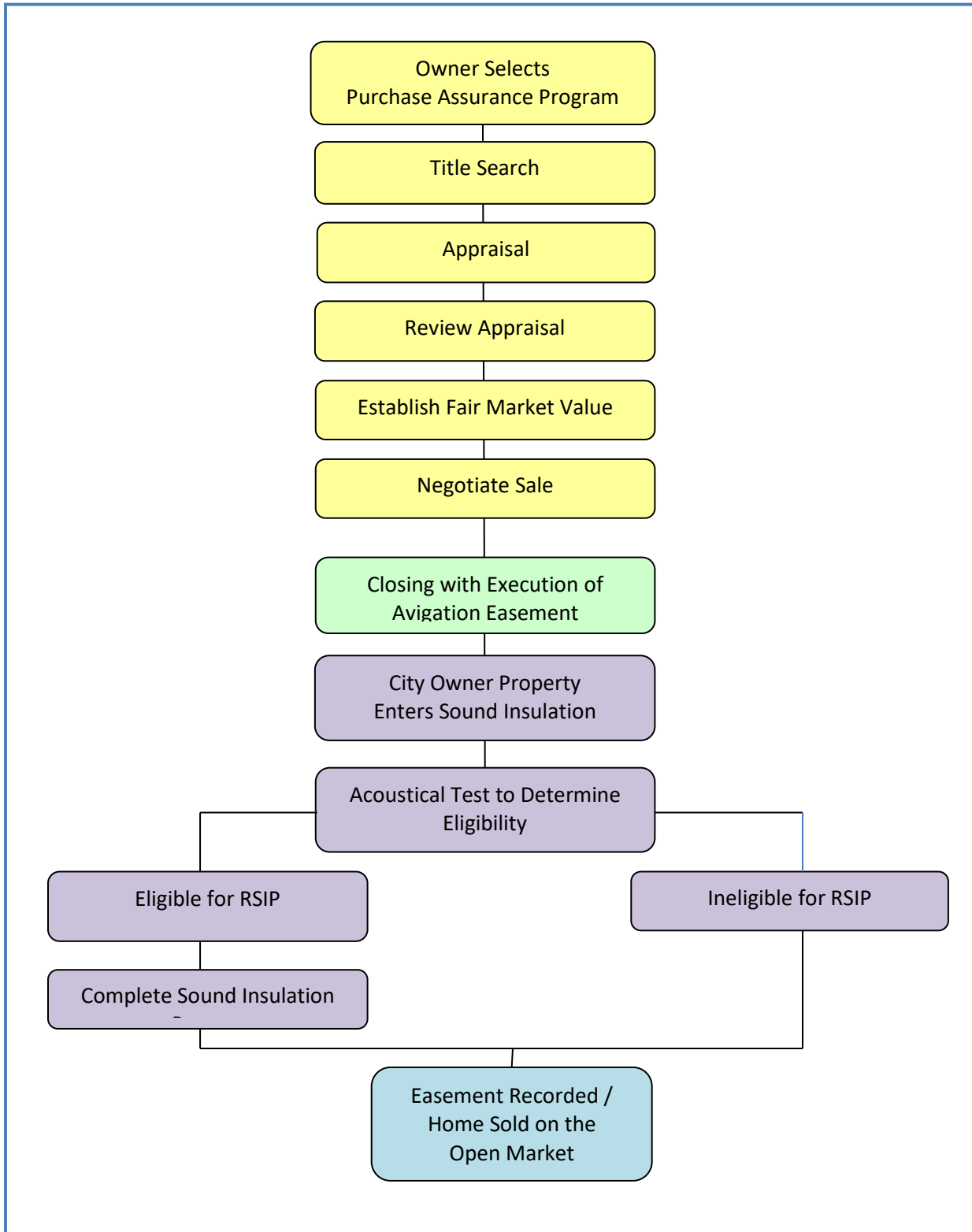
The appraisal process for the Voluntary Sales Assistance Program shall follow federal guidelines. The City shall obtain an appraisal of the FMV of the property by a certified appraiser. A certified

Voluntary Purchase Assurance Program

appraiser ("review appraiser") will review the appraisal and will generate a written document known as the Review Appraiser's Statement (RAS). The RAS will set the fair market value (FMV) for the property. All appraisals and the RAS must be prepared and performed in accordance with: 42 USC CHAPTER 61, "Uniform Relocation Assistance and Real Property Acquisition Policies for Federal and Federally Assisted Programs; 49 CFR Part 24, "Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs"; the Uniform Standards of Professional Appraisal Practice ("USPAP"); and all state, local and FAA standards.

The Program milestones are shown in Figure 6.

Figure 6: Purchase Assurance Program Flow Chart



Voluntary Purchase Assurance Program

Project Schedule

Participation will be limited to one home per year or \$500,000 for either the Purchase Assurance or Sales Assistance Program until funds from future sales builds up a reserve to allow more homes to be acquired.

Estimated Costs and Benefits

The estimated average cost is \$341,000 per parcel. The cost to acquire the home will be fully funded by the City. The City may apply for FAA grants funds to provide a sound insulation package.

The NCP included a calculation for the potential cost for this program which did not reflect the resale of the home and the net proceeds to be used to offset noise mitigation program costs. Below is the update cost estimate to reflect the new calculation:

Potentially Eligible Homes:	878
Total Estimate to Acquire All Homes:	\$299,398,000
Estimated Cost to Acquire ⁸ :	\$296,000
Estimate Sound Insulation Package ⁹ :	<u>\$45,000</u>
Total Estimate per Home:	\$341,000
Total Estimate of Net Proceeds for All Homes:	\$237,277,000
Estimated Fair Market Value ¹⁰ :	\$325,600
Estimated Costs Associated with Sale ¹¹ :	<u>(\$55,000)</u>
Estimated Proceeds from Sale per Home:	\$270,248
Total Estimated Actual Program Cost:	\$62,120,000

This program will allow a homeowner the ability to sell their home if the home does not qualify for sound insulation.

Funding Sources

The City will provide the funding for the Purchase Assurance Program. The City will request funding from the FAA for the sound insulation portion of the process. All proceeds from the sale of properties will be utilized to fund additional homes in the Purchase Assurance Program

⁸Based on estimate contained in NCP

⁹ Based on estimate contained in NCP

¹⁰ Estimated cost is based on a 10% increase in sale price due to acoustical treatment package

¹¹ Estimated cost is based on a 7% real estate commission and 10% soft costs

Voluntary Sales Assistance Program

Overview

A Voluntary Sales Assistance Program for single-family homes for owner-occupied homes located within the 65+ DNL noise contour

The Sales Assistance Program will provide eligible property owners with the ability to sell their home on the open market and relocate outside the noise impact area with assistance from the City, if needed.

Sales Assistance Program

- 878 Potentially Eligible Units
- Partially Eligible for FAA Funding
- FAA funding limited to value of easement
- Located within 65 to 75 DNL contour
- Must be Ineligible for Sound Insulation

Priority will first be given to properties in the highest noise contours, and continue outward to the rest of the eligible properties located within the 65+ DNL noise contour utilizing the most current market absorption rate. The Sales Assistance Program will follow FAA guidelines, to ensure the participating property owners receive the appropriate benefits. There are approximately 878 homes eligible for this program. Eligible owners must have owned their home on or before June 4, 2020.

Owners participating in the Sales Assistance Program will list their property for sale on the open market for the FMV established by appraisal. Should the property sell for less than the FMV, the City will provide a form of compensation up to 5%¹² of the FMV to encourage the sale of the property to encourage the sale of the property. Owners participating in the Sales Assistance Program must convey an aviation easement to the City.

Once a property sells through the Sales Assistance Program and an easement is placed on the property, it is then considered noise compatible under FAA criteria and a subsequent property owner will not be eligible for any of the programs under this Plan.

Objective

Under the Sales Assistance Program, the City will not acquire the property. The City will assist eligible homeowners with the sale of their property on the open real estate market for FMV as determined by appraisal in accordance with federal regulations regarding grant eligibility and the expenditure of aviation funds.

Project Area

The Sales Assistance Program project area includes the 65+ DNL noise contour.

¹² This value was reduced from 20% to 5% based on FAA policy on typical easement values.

Voluntary Sales Assistance Program

Project Schedule

The Sales Assistance Program will commence following the FAA's approval of the NCP and grant funding is received. Once a property sells through the Voluntary Sales Assistance Program, the property is then considered noise compatible under FAA criteria and a subsequent property owner will not be eligible for any of the programs under the Noise Implementation Plan.

To maintain stable housing market values the City will budget \$500,000 per year towards the Purchase Assurance and Sales Assistance program.

Implementation

The property owner will enter into an agreement with the City agreeing to participate in the Sales Assistance Program. The property owner will be responsible for marketing and selling their home through a licensed real estate agent, including listing the property on the open market. The listing price is based on the FMV as established by appraisal following federal appraisal guidelines. If the property does not sell at FMV within a reasonable timeframe, the City will provide a differential payment that shall not exceed 10% of the FMV.

Once a property sells through the Voluntary Sales Assistance Program, the property is then considered noise compatible under FAA criteria and a subsequent property owner will not be eligible for any of the programs under the Noise Implementation Plan.

Appraisal Process

The appraisal process for the Voluntary Sales Assistance Program shall follow federal guidelines. The City shall obtain an appraisal of the FMV of the property by a certified appraiser. A certified appraiser ("review appraiser") will review the appraisal and will generate a written document known as the Review Appraiser's Statement (RAS). The RAS will set the fair market value (FMV) for the property. All appraisals and the RAS must be prepared and performed in accordance with: 42 USC CHAPTER 61, "Uniform Relocation Assistance and Real Property Acquisition Policies for Federal and Federally Assisted Programs; 49 CFR Part 24, "Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs"; the Uniform Standards of Professional Appraisal Practice ("USPAP"); and all state, local and FAA standards.

The following depicts the major milestones that are achieved during each phase of the sales assistance process.

Figure 7: Voluntary Sales Assistance Program Flow Chart



Project Eligibility

To be eligible for the Voluntary Sales Assistance Program, a property owner must:

- Have title to a single-family home located within the 65+ DNL noise contour on or before June 4, 2020.
- Enter into a Voluntary Sales Assistance Agreement with the City, and convey an avigation easement to the City.

Estimated Costs & Benefits

There are an estimated 878 housing homes eligible for participation in this program component. The estimated average cost is \$14,800 per single-family home. The estimated budget for the Voluntary Sales Assistance Program if all potential homes participated is \$12,994,400 as shown below.

Voluntary Sales Assistance Program

Table 15: Sales Assistance Program Estimated Average Cost

Type of Home	Estimated Home Cost	Number of Homes	Total Cost
Single-Family	\$14,800	878	\$13M

The Sales Assistance Program provides a level of assurance to a property owner they will receive FMV for their property if they choose to relocate by providing a cost differential. The local municipalities will retain their residential neighborhoods and ad valorem tax base. The community will be stabilized by avoiding vacant properties.

Funding Sources – Voluntary Sales Assistance Program

The City will seek funding from the FAA for these programs. Noise grants are typically funded at 90 percent by the FAA and 10 percent by the City. FAA funding cannot be committed in advance.

The following table depicts the costs by funding source if all eligible properties utilized this funding.

Table 16: Sales Assistance Program Estimated Costs, By Funding Source

Funding Source	% of Contribution	Estimated Cost
FAA	90%	\$11,7M
City	10%	\$1.3M
Total	100%	\$13M

Voluntary Sound Insulation of Noise Sensitive Buildings

Overview

Qualified incompatible non-residential land uses within the 65 and up to the 75 dB DNL contours would be included in a sound insulation program. For qualified properties, the City will provide an acoustical treatment package designed to reduce interior noise levels to 45 DNL and provide a minimum reduction of 5 dB from the existing interior noise level in accordance with FAA guidelines.¹³

Sound Insulation of Noise Sensitive Buildings

- 24 Noise Sensitive Units
- Eligible for FAA Funding
- Located within 65 to 75 DNL contour
- Acoustically Rated Products

The Program shall identify the eligible property owners and approach them with the opportunity to receive an acoustical treatment package.

Objective

The purpose of this program is to mitigate estimated noise exposure attributable to civilian and military aircraft operations in an environmentally sensitive manner. The program will provide relief from aircraft noise for non-residential by upgrading interior living areas. By replacing windows, doors and ventilation systems with acoustically rated products noise reduction is achieved for the property.

The FAA designates the noise impact areas as the properties located within the 65+ DNL noise contour.

Project Eligibility

There are approximately 24 noise sensitive buildings, including places of worship, learning centers, and care centers, located within the 65 and 70 DNL contours.

Implementation

The City shall identify the eligible property owners and approach them with the opportunity to receive an acoustical treatment package.

Project Schedule

The current priority is to provide insulation to the residences, however, the City may decide to prioritize a noise sensitive structure based upon on the availability of funding. Once funding is available, the City may include acoustical testing of noise sensitive building(s) in the annual program budget. For buildings that qualify for sound insulation, the City will prioritize the need of the facility with those of the currently eligible residential homes.

¹³ FAA Order 5100.38D "Airport Improvement Program Handbook", Appendix R "Noise Compatibility Planning/Projects", Change 1, effective date February 26, 2019.

Voluntary Sound Insulation of Noise Sensitive Buildings

Estimated Costs and Benefits

Costs for these parcels have not been developed. A more in depth study of these facilities will need to be undertaken to develop cost estimates and prioritization.

Funding Sources

Funding would be provided by the FAA and the City utilizing AIP grant funds.