

Project 008 Noise Outreach

The Pennsylvania State University

University Members

Penn State Applied Research Laboratory Team Lead
Penn State Earth & Environmental Systems Institute

Kathleen Hodgdon
Bernd Haupt

Advisory Committee Members

Gulfstream Aerospace Corporation
Port of Portland Sr. Noise Analyst
Volpe National Transportation Systems Center

Robbie Cowart
Jason Schwartz
Juliet Page

Project Lead Investigator

Kathleen Hodgdon
Research Associate
Applied Research Laboratory
Pennsylvania State University
ARL North Atherton Street
P.O. Box 30 (Mail Stop 2210H)
State College PA 16804-0030
Phone: 814-865-2447
Email: kkh2@psu.edu

University Participants

Pennsylvania State University

- P.I.: Kathleen Hodgdon, Research Associate
- Researcher: Maurie Caitlin Kelly, Research Associate
- Researcher: Bernd Haupt, Senior Research Associate
- FAA Award No.:13-C-AJFE-PSU Amendment 36
- Period of Performance: July 31, 2017 to July 31, 2018
- Task(s):
 1. Stakeholders Interactions
 2. Content Development
 3. Site Navigation and Infrastructure Enhancement

Project Funding Level

This project supports the Outreach efforts at Penn State with \$25K of FAA funds. Matching funds are anticipated to satisfy cost share on all tasks.

Investigation Team

For 2017-2018 the investigation team includes:
P.I.: Kathleen Hodgdon Research Associate
Researcher: Bernd Haupt Senior Research Associate

Project Overview

Aviation noise issues can be complex. The NoiseQuest website is designed to support noise mitigation through information. NoiseQuest, located at www.noisequest.psu.edu, is an international resource that is designed to implement global education on aviation noise topics. The site presents aviation noise information that provides centralized web based

educational outreach for all communities. This supports Outreach efforts for airports too small to have their own outreach programs, and provides additional outreach for airports with an existing outreach program.

The PSU Outreach team has continued to expand and enhance the NoiseQuest website. Over the last year we completed site reconfiguration and restructuring to a device agnostic format to make the site more mobile friendly. The content was reviewed and refreshed as part of the restructuring of the site to be accessible across all platforms.

Task 8.1- Stakeholders Interactions

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Objectives

The Outreach project seeks to improve airport and community interactions by providing information and education on aviation noise topics. The team interacted with stakeholders and identified publications and concepts for content to be shared on the NoiseQuest site.

Research Approach

Interactive outreach with stakeholders was conducted to identify concerns that could be addressed by expanded content topics. Efforts to obtain additional GIS noise contour data for the NQ Explorer were not conducted during the completion of the site redesign. The site user statistics were monitored to better inform the site development.

Milestones

We communicated with aviation stakeholders to identify updates for existing content and opportunities for new content development.

Major Accomplishments

We continue to interact with airport noise managers and community groups to identify topics of interest, successful implementations of outreach, or other approaches taken to resolve aviation noise issues. We continue to monitor our site statistics to gain insights on site usage (see Appendix A for Site Statistics).

Publications

Contents are published at www.noisequest.psu.edu.

Outreach Efforts

We interact with airport noise managers and stakeholders from across the country.

Awards

None

Student Involvement

None

Plans for Next Period

We will continue to monitor site statistics to determine site usage patterns. To promote greater site usage, we will work to get additional stakeholders to link to NoiseQuest and to provide recommendations for content.

Task 8.2- Content Development

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Objectives

This task focuses on identifying and developing content that addresses aviation noise impact and outreach education.

Research Approach

The Outreach team seeks to identify content that presents updates on aviation noise research, addresses noise issues, or meets the educational outreach needs of aviation stakeholders on specific topics.

Milestones

The team maintained existing site areas and added new content.

Major Accomplishments

The content organization was reviewed as part of site restructuring to be accessible across all platforms. General content across the site was updated. Content on AEDT, NextGen and Performance-Based Navigation were updated and enhanced.

Publications

Site developed at www.noisequest.psu.edu

Outreach Efforts

We develop the Outreach content by reaching out to stakeholders for content ideas and development.

Awards

None

Student Involvement

None

Plans for Next Period

Content is currently in development. The plans for the future included generating enhanced content to further engage the public. The existing site content will be enhanced with content, graphics, videos and presentations. New content topics will be identified and relevant features added to the site. This would include features such as additional videos and images across site, additional Supersonics low boom “sonic thump” content, additional helicopter and rotorcraft noise abatement content, and additional GIS noise contours for NQ Explorer. We plan to add an NQ Explorer tab under Community Tools once we have more contours added to that section of the site. Other topics will be identified based on stakeholder engagement.

Task 8.3- Site Navigation and Architecture Redesign and Development

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Objectives

Efforts under this task maintain the site architecture and enhance site navigation.

Research Approach

This effort includes website management including backups, updates, and infrastructure enhancement. The team works to assure that the information on NoiseQuest is presented in an easily navigated user-friendly format.

Milestones

Review of the site was completed and updates and new content was posted to the site. During the review, broken links were identified and addressed.

Major Accomplishments

The site was reworked, with changes to the navigation features and content areas. To monitor usage of the entire site, website statistics can be viewed using Google Analytics. Changes were made to navigational aspects of the site to facilitate the ease of use across multiple platforms.

Publications

None

Outreach Efforts

The team works to ensure that the changes resulted in clarity and ease of navigation across multiple platforms. These actions were taken to facility ease of use on mobile devices so as to increase the mobile user base.

Awards

None

Student Involvement

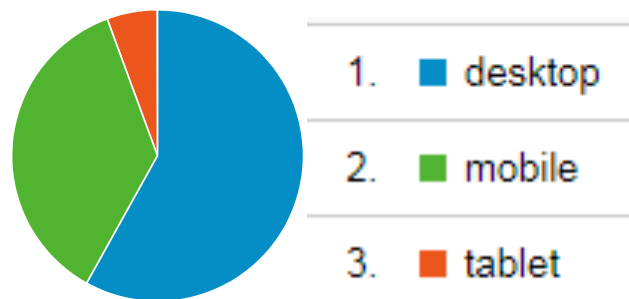
None

Plans for Next Period

The site is now device agnostic and user-friendly on all platforms simultaneously. We need to further address some of the previously observed issues related to Google Map's API within the NQ Mapper in the NQ Explorer. The team will continue website management which includes backups, updates, and infrastructure enhancement as warranted.

Appendix A. NoiseQuest Statistics Recent Usage

NoiseQuest	Page views	% Page views	Avg. Time on Page
Most Active Pages	18,710	100	0:01:48
Noise basics-basics	3,571	19.09	0:02:26
Home page	2,809	15.01	0:01:18
National airspace-types of airports	2,383	12.74	0:04:07
Community tools-FAQ	1,571	8.40	0:03:01
Noise effects-reducing noise	872	4.66	0:04:40
Community tools-glossary	756	4.04	0:01:24
NQ explorer	586	3.13	0:01:38
Community tools-homebuyers	459	2.45	0:00:56
Sources of noise-overview	361	1.93	0:02:46
Noise basics-noise models	363	1.94	0:02:10



Device	Users	% Users
Category	10,431	100
desktop	6,058	58.08
mobile	3,787	36.31
tablet	585	5.61