



## *Nantucket Memorial Airport Master Plan Update*

# CHAPTER 1 - INTRODUCTION & PUBLIC OUTREACH PROGRAM



**January 2015**

Prepared for:  
**Nantucket Memorial Airport Commission**

Prepared by:  
**Jacobs Engineering**



## ***Nantucket Memorial Airport Master Plan Update***

**Funding for this Master Plan / Sustainability Study**

was provided by the

**FAA and MassDOT Aeronautics Division**

under the

**Airport Improvement Program (AIP)**

**Grant Number 3-25-033-57-2013**



# ***Nantucket Memorial Airport Master Plan Update***

## **2013 NANTUCKET MEMORIAL AIRPORT MASTER PLAN & SUSTAINABILITY PROGRAM**

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## Nantucket Memorial Airport Master Plan Update

### Introduction

The Nantucket Memorial Airport Commission (the Commission) last prepared an airport master plan in 1999 and more recently an Airport Layout Plan Update was completed in 2010. The ALP Update documented airport facilities, prepared aviation forecasts, and developed an aviation facilities needs assessment. Since then, a number of improvements have taken place, including:

1. Completion of an improved airport terminal building;
2. Construction of a new Airport Rescue and Firefighting (ARFF) building;
3. Grading of a gravel auto parking lot to provide an additional 107 auto parking spaces;
4. 500' extension to Runway 33;
5. Construction of a new airport administration/FBO building;
6. Construction of Taxiway J



In addition to the recent facility improvements, the FAA's Airport Design Advisory Circular 150/5300-13 which serves as the basis for airport design has been updated (September 2012). This requires a review of airport facilities to ensure compliance with the new criteria.

The purpose for this master plan update is to provide the Commission with guidance for the reasonable, responsible and sustainable development of Nantucket Memorial Airport (ACK) to meet the transportation needs of Nantucket Island now and into the future. As such, a master plan Working Group developed and adopted a Mission Statement and the Goals and Objectives stated below on November 12, 2013 to serve as the foundation for the development of the airport as outlined in this master plan.

### Airport Mission Statement (DRAFT)

The mission of ACK is to provide operationally safe, environmentally responsible, and economically sustainable air service to the residents, businesses, and visitors to the island of Nantucket.

### Airport Master Plan Goals and Objectives

1. Enhance public outreach procedures;
2. Analyze changes in air carrier, general aviation, and corporate jet traffic activity;
3. Conduct origin and destination surveys of current airport users to better understand travel demand and air service needs;
4. Initiate FAA-18B GIS base mapping with an initial focus on surface facilities, as well as habitat management;
5. Assess and update the land use of all airfield parcels and abutter properties;
6. Clearly identify present and future corporate aircraft needs;
7. Prepare an updated Financial Feasibility Plan.





### Chapter 1. Public Outreach Program

#### 1.1 Goals

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The master plan provides an opportunity for Nantucket Airport to identify needs, prioritize programs and projects and establish a firm foundation for future capital projects. The master plan effort is also a chance for the airport to re-establish solid footing with the Town, residents, users, and agencies. The public participation program is designed to be a structured, predictable process that will actively shape the master plan.

The goals of the public participation program are:

- Foster two-way education;
- Build trust in the airport administration;
- Assist with identifying airport priorities; and
- Begin building strong community support for the airport and its programs.

#### 1.2 Approach

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Three levels of outreach are needed to reach a variety of people with different interests. One level of outreach involves highly invested stakeholders who will provide thoughtful and timely input and will be the backbone of the study (Working Group). Many members of the general public will want to keep up to date on the planning without spending a lot of time reading lengthy documents. And for others, reading about the study in the newspaper or getting periodic e-mail updates will be sufficient.

Approaches to getting and receiving information are varied.

- Face to face meetings and interviews with stakeholders and residents are critical for listening and learning.
- Small-group meetings with the Working Group and others as well as larger, community-wide meetings provide opportunities for face-to-face contact to exchange information and viewpoints to help break down barriers between people and the airport.
- Public information pieces ranging from newspaper articles to flyers, fact sheets, webpage, brochures, utility bill stuffers and display boards communicate quickly. Any form of public information provides basic, easy-to-find and easy-to-digest information.

#### 1.3 Initial Public Outreach Activities

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##### *Scoping activities*

During master plan scoping in 2012, the Airport met with the Surfside Association, a neighborhood organization located close to the Airport, and held a public meeting during peak season in August 2012. These meetings provided input for the scope on a broad range of issues, from noise mitigation to Airport finances to revenue options.



## ***Nantucket Memorial Airport Master Plan Update***

### ***Master Plan Kickoff Open House***

In 2013, to help kick off the Master Plan, the Airport held an **“open house” meeting** on August 15, 2013. The widely advertised open house was held at Hangar 3 at the Airport and was designed to be educational without being a lecture. Tours of the Airport followed the presentation and discussion in the hangar. Over 70 people attended the open house.



### ***Open House and Presentation***

The open house portion of the meeting included a chance to meet and talk with Airport personnel and members of the master plan consulting team. The informal nature of the event fostered two-way communication and demonstrated openness.



The open house also provided information about the Airport. Eleven large informational boards were displayed around the hangar and addressed five key topic areas, and members of the master plan team answered questions and talked to people at the boards, one on one.

- Airport and Tower functions
- Fleet mix at ACK
- Passenger trends
- Sustainability and being a good neighbor
- Funding sources and issues





# Nantucket Memorial Airport Master Plan Update

## Sample Open House boards



### Environmental Stewardship and Sustainability


- Airport uses geothermal heating and cooling at terminal
- Airport is studying potential for solar power
- ACK's history of sustainable practices helped it get selected for "Carbon Neutral" program by MassDOT to become nation's first carbon neutral airport
- Ecological Management Plan to help guide airport best practices for habitat management and enhancement.
- ACK has ongoing commitment to reducing, reusing, retrofitting, and recycling.
- Electric vehicle charging station at Hangar 2



Native species monitoring and management under MESA Farms.

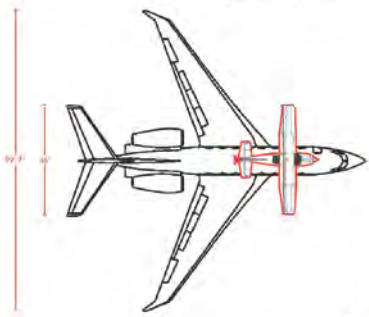



NANTUCKET MEMORIAL AIRPORT AND AIRPORT COMMISSION



### Changing Fleet Mix at ACK

- Mix of General Aviation aircraft is changing to more jets
- ACK Corporate Jet Fleet changing to wider wingspans
- Congestion and overflows result from wider wingspans changing fleet
- Overflow Parking causes altered flight track noise patterns

NANTUCKET MEMORIAL AIRPORT AND AIRPORT COMMISSION

The presentation and discussion part of the meeting was a chance for the Airport staff to update attendees on the status of projects at the Airport and to introduce the upcoming master plan process. Airport staff presented on a number of key topics:

- Changing fleet mix at ACK and its physical impact on the Airport aprons and taxiways
- Commercial passenger trends
- Airport sources of funding
- Innovative environmental initiatives
- Overview of the master plan process and schedule

A 25-minute question-and-answer/comment period followed the presentation.

### Perimeter tours

Following the question and answer/comment period, a number of attendees boarded an airport bus for tours of the perimeter of the airport and the ARFF. Three busloads toured the Airport and were exposed to aspects of the Airport and its operations that most do not see.





## Nantucket Memorial Airport Master Plan Update

### 1.4 Working Group

A 15-person Working Group was set up to be representative of the diverse Airport stakeholders. The Working Group is made up of a neighborhood group and residents, business representatives, a civic organization, an environmental organization, non-profit flying organization, Airport Commissioners and staff, two local airlines, and the Town planner.

#### Working Group Members

Diane Archer	Resident
Sam Bailey	Airport Business
Armando Cardenas	Island Air, LLC
Carol Dunton	Resident
Bob Egan	Nantucket Flying Association
Peter Farrell	Cape Air
Arthur Gasbarro	Airport Commission
Leslie Johnson	Resident
Tom Quigley	Surfside Association
Tom Rafter	Airport Manager
Allen Reinhard	Nantucket Civic League
P.J. Martin Smith	Chamber of Commerce
Ernest Steinauer	Mass. Audubon Assn.
Dave Sylvia	Airport Compliance Officer
Andrew Vorce, AICP	Town Planning Director

The **first Working Group meeting on November 12, 2013**, had 100 percent participation. Members traveled to the meeting or participated via conference call or video call. The meeting had several parts:

- Discussion of the role of the Working Group;
- A detailed review of the Master Plan process and schedule;
- A comprehensive review of recent airport projects;
- Update on environmental and sustainability activities; and
- Detailed review of existing conditions (trends in enplanements, business jet operations, air taxi operations, etc.).

Each member was asked to comment on what they considered the key issues to be addressed in the master plan.

Working Group key master plan issues:

1. Airport alternatives must be informed by finances
2. Capital Improvement Program must include all master plan projects
3. Fiscal analysis and rates and charges study should include the need to pay back the Town
4. Emphasize programs and techniques to reduce energy consumption
5. Cost of borrowing for capital projects should be included in total budget figure
6. Town and airport should collaborate on transportation and land use issues in comprehensive way
7. Several private roads should be considered to be converted to public roads for airport access
8. Protection of rare species critical
9. Understanding air traffic trends and implications is key
10. Community and quality of life issues for year-round residents are important
11. Must maintain good customer experience so people continue to choose to fly
12. Airport must continue to accommodate visitors from NYC metro area
13. 402 fuel issues: if 100LL avgas no longer available, what will happen to the 402s?
14. Greater emphasis on General Aviation at ACK is needed





## **Nantucket Memorial Airport Master Plan Update**

The **second Working Group meeting on February 25, 2014**, focused on aviation activity and forecast of aviation demand. Thirteen of fifteen Working Group members participated. Discussion included:

- Review of ACK mission statement;
- Baseline environmental and sustainability conditions;
- Aviation finances and the proposed Passenger Facility Charge;
- Different travel markets and trends in aviation activity since 2010; and
- Forecasts of aviation demand, what could affect demand, comparison with FAA Terminal Area Forecasts.

The **third Working Group meeting on May 29, 2014**, focused on potential Master Plan improvement concepts. Eleven of fifteen Working Group members participated. Discussion included:

- Safety and security concepts;
- Efficiency/revenue-enhancing proposals;
- Terminal and airfield capacity concepts; and
- Environmental and sustainability concepts.

The **final Working Group meeting on December 18, 2014**, reviewed and discussed potential projects and activities to include in the Capital Improvement Program (CIP). The five-year CIP is the next step in the Master Plan process, and this meeting was valuable to Airport staff because it featured a detailed discussion about proposed projects and how critical they are to the Airport's mission. The Working Group reviewed 18 potential projects and used preference polling for individuals to rank his/her priorities (see attached "Working Group Dec. 2014 Preference Polling"). Following the meeting, the Airport staff used the Working Group preferences to prioritize the short- and long-term Capital Projects. Airport staff balanced Working Group preferences with fiscal constraints over the next five to ten years and developed a revised ACK Priority Project List. This will become the basis for the Airport's Capital Improvement Plan (CIP) and the upcoming Financial Business Plan in early 2015. Nine of fifteen Working Group members participated in all or some of the meeting and were joined by four visitors. Topics covered included:

- Safety and security concepts (multi-phase terminal apron repaving, South Apron redesign, new jet airline parking position, taxiway improvements, information technology upgrades);
- Terminal and airfield capacity concepts (short- and long-term hold room improvements, 20-year terminal plan);
- Efficiency concepts (improvements to the Tower, storage facilities, need for housing for Airport manager);
- Revenue enhancement concepts (private-sector development options, selling or leasing surplus non-aviation parcels, review of rates and charges to establish equitable system); and
- Environmental and sustainability concepts (solar arrays, pilot-controlled ramp lighting, promote non-auto access, coastal bank protection concepts).

Meeting presentations and summaries are attached.

### **1.5 New Master Plan Web Page (<http://masterplan.nantucketairport.com>)**

The Nantucket Memorial Airport website has a new Airport Master Plan page that includes a comment form for use by the public to communicate about issues and ask questions. As they are completed, master plan documents will be posted.

Available on the new master plan web page:

- August 23, 2012, Public meeting presentation
- August 15, 2013, Open House boards and presentation



## ***Nantucket Memorial Airport Master Plan Update***

- Working Group membership and all meeting summaries, presentations
- Master Plan team organization chart
- Master Plan report outline
- Master Plan schedule (graphic)
- “Fly-friendly” noise handout pamphlet
- Master Plan chapters (posted on website as they are completed)

### **1.6 Additional Public Outreach**

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Public information pieces include traditional flyers, displays, fact sheets, webpage, brochures, and display boards as well as social media. The Airport introduced Twitter and Facebook at the start of the master plan effort. The Airport’s web page is linked to other affiliated organizations such as the Nantucket Flying Association so members can see what is going on with the master plan.

Public information to-date has included a series of three press releases each covering a different aspect of the master plan process. Hundreds of flyers for the open house meeting were distributed by neighborhood associations, posted throughout the Airport and the Town and posted on affiliated organizations’ websites. Graphically appealing display ads were placed in the Inquirer and Mirror newspaper three times before the open house meeting.



# Meeting Summary

## **Nantucket Memorial Airport Master Plan**

Working Group meeting, November 12, 2013, 2:30 p.m. • Public Safety Facility  
Attendees: See page 5.

### **Welcome**

Dan Drake, Airport Commission chair, opened the meeting. The master planning process is critical to developing a realistic master plan with implementable projects that benefit the airport, users, and the Town.

### **Welcome and Background**

Tom Rafter, Airport manager, described the airport master planning process. Every airport seeking FAA grants is required to prepare a master plan every 5–10 years and become part of the National Plan of Integrated Airport Systems. FAA defines the minimum master plan elements and approves two of the twelve + elements—the Airport Layout Plan (ALP) and Forecasts of Demand. If master plan forecasts differ from the FAA’s Terminal Area Forecast, the difference must be explained. The Working Group (WG) is an important part of the public participation program for the master plan. We will rely on WG members to participate in meetings; take back information to your organizations, neighbors, etc.; and bring information to the WG from others.

Airport master plans vary depending on the issues. ACK’s master plan will have at least three unique focus areas: financial plan, alternatives analysis, and public outreach. The fact the airport is on an island requires unique approaches to several master plan elements.

### **Introductions and Review of Working Group Role**

Anne McKinnon, Jacobs Engineering Group, prime master plan consultant, led introductions. The Working Group has broad representation: representatives from neighborhood and civic organizations; three residents; two airlines; a business at the airport, chamber of commerce; environmental group; non-profit organization; the Town; and airport staff and commission. Members’ tenure living, visiting, or working on the island ranges from 3 months to 62 years with an average of 29.8 years.

McKinnon proposed a plan for WG operations. Meetings start and end on time. The WG is intended to be an informal group that encourages an exchange of information and a conversation about issues. WG meetings are open to the public. Feel free to ask questions during the presentation if the answer will help follow the presentation. All meetings will have a Q & A/discussion period for in-depth discussion. Meeting summaries will be prepared to capture key discussions, action items, areas of agreement, and things to work on. Meeting summaries will be sent to WG members and posted on the new Airport Master Plan web page (<http://masterplan.nantucketairport.com/>). Tom Quigley, Surfside Assn., asked how the WG would communicate with the team between meetings. Rafter said the new webpage will have an e-mail posting system on the web page to make it easy to communicate with staff about the master plan. *Note:* the form on the webpage may be used, but it involves filling in many fields which are needed to get information from a member of the public. WG members might find it quicker to send communications directly to Tom Rafter and Janine Torres ([trafter@nantucketairport.com](mailto:trafter@nantucketairport.com) and [jtorres@nantucketairport.com](mailto:jtorres@nantucketairport.com)).



Role of Working Group: McKinnon said the Working Group's role is to advise the Airport Commission and staff and to give feedback from the groups they represent. The Airport Commission is responsible for approving the master plan and will make decisions necessary to complete the document. She said the WG will not vote. Andrew Vorce, Nantucket planning director, asked how issues about which there was disagreement would be handled. "Minority" opinions will be recorded, and the Commission will be responsible for understanding the different viewpoints.

### **Overview of Master Plan and Schedule**

Bill Richardson, Jacobs, reviewed the master plan team and "client team" (FAA and MassDOT) roles. He reviewed the schedule which is prescribed by FAA regulations. To date, work has focused on existing conditions data collection and analysis. Forecasts and alternatives will be developed this winter and reviewed at the WG meeting in late January or early February 2014.

### **Recent Airport Projects and Updates**

#### **Recent Projects—Completed**

- New ARFF building and Terminal building .
- Runway 33 extension 500' south. Allows more over-water landings. 97% federal- and state- funded.
- New Taxiway J enhances operational flexibility and safety.
- Gravel parking lot (107 spaces) accommodates seasonal rental car overflow.
- New FBO/Airport Administration building provides major improvement for flight crews.
- Electric vehicle charging stations.
- Geothermal HVAC for terminal.

#### **Recent Projects—Current**

- Runway Safety Area Runway 12-30; now addressing elevation differences in both sides of runway.
- Airport carbon-neutral sustainability project with MassDOT Aeronautics/Volpe Center.

Richardson said airfield projects such as the runway extension are funded 95%–97% using federal-state funds. Others are funded 80% using state funds. Only a small percent of local funds (3%) is typically needed for major airfield projects. Projects such as the terminal and the FBO required significantly higher state and local shares.

### **Existing Conditions Review**

Tom Rafter described the **Airport Layout Plan (ALP)** (slide 18), one of two master plan elements FAA must approve. Although electronic ALPs (eALP), which use digital aerial photography and survey to collect data, are now being required by FAA, this master plan will not develop an eALP. In the previous ALP, future aviation-related development (shown in yellow) included storage hangars, the bunker area, solar panels, and more. ALP projects must go through environmental review and permitting.

Noah Karberg, Airport Environmental Coordinator, reviewed **environmental and sustainability initiatives** (slides 19 & 20) including geothermal heating and cooling; study of solar; electric vehicle charging station at Hangar 2, and being selected by MassDOT to become the first carbon-neutral airport in the US. The airport is the third biggest land owner on the island and its ecological management plan helps guide best practices for habitat management. Under consideration is a habitat-enhancement program to coordinate all Town projects.

Steve Berardo, Jacobs, reviewed **aviation activity trends** (slides 21-23). Thirteen years of data were studied to determine who's using ACK. Aircraft operations were down 22% between 2000 and 2012. General Aviation traffic was also down significantly. Air taxi operations (Cape Air, Island Airlines, air taxis, NetJets) are down 26% but still represent the majority of commercial operations. Passenger enplanements go in cycles and consist of about five types of users: second homeowner, short-term visitor, seasonal worker, year-round resident, and day worker. Primary users of corporate jets—including air taxis—are second homeowners.



Berardo described characteristics of **year-round air service** at ACK as very short haul and competing with growing ferry service. These air services follow Federal Aviation Regulations (FAR) Part 135 for air taxi operations. Quigley requested the ferry-service traffic be added to slide 23, passenger enplanements. Yes. Berardo said fuel type (100LL avgas) and cost created a question mark surrounding the future of the C-402 and how that could affect Cape Air and Island Airlines.

**Seasonal air service** at ACK makes mainline connections using bigger planes than year-round air service. Berardo said seasonal service typically does not compete with ferry service. These services follow Federal Aviation Regulations (FAR) Part 121 for scheduled air service. Fewer 50-seat Regional Jets are coming to ACK. A question about this service is how airline consolidation will affect the number of flights at ACK. Quigley asked if Cape Air could step in where the Regionals are leaving. Berardo said Cape Air is governed by FAR Part 135 (nine seats or fewer), and FAR Part 121 is more costly. He said Cape Air has interline agreements with other airlines that provide coordinated schedules. Berardo said larger aircraft with big wing spans are an issue at ACK. Quigley asked if corporate air taxi activity (e.g. NetJets) had declined 2008-2010. Yes, and fractional ownership programs really took a hit. Overall corporate traffic has not rebounded to 2006-2007 levels. Berardo noted the corporate market on Nantucket was mature, and because not much new island development is anticipated, growth in the corporate aircraft market is not likely.

### Next Steps/Milestones/Schedule

Richardson said the team is working on trends, forecasts and fleet mix, facility needs and alternative concepts and will present findings for review at a WG meeting in late January or early February. Advance notice of the meetings—about three weeks—will be given.

Quigley asked how issues of concern to the community are incorporated and addressed, such as noise, impacts of changing aircraft size, etc. Security screening for GA may soon be required—how with ACK address that? Rafter said GA security screening is probably distant and will be addressed in a future master plan. The public meetings and WG meetings will bring community issues to the team which will be considered and addressed. Some may be addressed in the master plan, some may be addressed separately, and some may be deferred.

### Q & A/Discussion

Arthur Gasbarro said the alternative concepts must be informed by finances, and a Capital Improvement Program (CIP) that includes all master plan projects proposed must be tied to the alternatives. “Wants” and “needs” at the airport should be distinguished—one doesn’t build a church exclusively for Easter Sunday. Rafter concurred. The master plan requires identifying if the airport can afford projects or not and how projects will be financed. Drake said the airport will not undertake a capital project without knowing how it will be paid for. Rafter noted FAA requires rates and charges to be structured toward self-sufficiency. The master plan will benchmark ACK against other airports on a variety of issues such as incentive programs.

Carol Dunton requested material be sent to WG members in advance of meetings. Yes. She asked for data on ferry use and fare information for air travel and ferry travel. Yes.

Sam Bailey commented the 100LL avgas issue has been alive with no resolution in sight for a while. He said if a project costs \$1 million and federal government pays 90%, and if the town or airport must borrow the money and pay interest the financing costs while waiting for reimbursement, then these expenses should be included in the total budget figure. If the federal government won't pay its share of financing, the budget should show that the town's or airport's share is the 10% plus the interest costs.

Andrew Vorce said key issues for the master plan are land use and transportation. The Town is working on rezoning some areas around the airport. Maddequecham Valley Road is on Airport property and was once maintained by the airport. A series of private roadways could be converted to public along the western boundary



(Boulevard, Lovers Lane, Okorwaw Avenue and Monohansett Road) to provide access to the airport. What is the plan for the Delta Fields? He said working on transportation with the airport along with surrounding development in a comprehensive way could yield transit, pedestrian and bicycle improvements.

Ernest Steinauer said environmental issues were not discussed much today. Protection of rare species may conflict with airport plans, but the situation seems to be changing and must be a consideration.

Quigley commented on air traffic trends and mused about what it could mean if the trends continue. He concurred wants/needs must be clearly identified, and implored the team to pay close attention to the surrounding community's issues.

Allen Reinhard contributed the next day: ACK is a lifeline for residents and business. "Customer experience" in the broad sense and intimate sense at ACK must be good so people will continue to choose to fly. A choice of flights and having enough room in the terminal are some things needed to keep people flying and off the ferry.

Leslie Johnson said as the island changes, balancing needs and desires becomes more important. Year-round residents shouldn't always accommodate the summer influx; bigger is not always better. Quality of life issues for year-round residents need to be considered.

P.J. Martin Smith commented on the trends and the competition from ferry services. Chamber data show most visitors are coming from the New York City metro area and these visitors need to be accommodated.

Peter Farrell said the 100LL avgas issue seems immutable and options for 402 replacements can be discussed, but Cape Air will keep using the 402s.

Bob Egan contributed this by e-mail: NFA would like to see a much greater emphasis on General Aviation as it relates to seasonal and year-round residents. Nantucket Flying Association is working to introduce "air and space" into the local school curriculum and would be enhanced by a collaborative effort by the airport, NFA and many others. A flight school with "clubhouse" on the field would go a long way toward promoting GA on ACK.

Arthur Gasbarro added this by e-mail: The fiscal analysis and rates/charges study should incorporate the need to payback the Town. Include an analysis of a seven-year payback plan starting in FY16. The rate/charge increases should be implemented before the end of FY14 so as to be accepted by DOR in the FY16 Budget. Promote the new website when it has more information. Focus on the analysis of suitability of solar strip array along the easterly boundary (as shown as a red line on the current ALP). Also roof/hangar opportunities. It should be a behind the meter installation to defray onsite energy use. Examine electric vehicles as fleet replacements, including for suitable maintenance equipment.

#### Action Items

1. Working Group operations
  - a. Meeting notices will be sent three weeks in advance.
  - b. Whenever possible, meeting materials will be sent in advance.
  - c. Communication between WG meetings is encouraged. E-mail Tom Rafter and Janine Torres.
2. Data needed
  - a. Ferry boardings
  - b. Ferry and airplane fares
  - c. Provide analysis of the seven-year Town payback plan starting in FY16
3. Additional Issues for consideration in Master Plan
  - a. Coordinating transportation opportunities with the Town
  - b. Maddequecham Valley and network of private roads
  - c. Delta Fields plan
  - d. Quality of life issues in communities surrounding airport
  - e. Greater emphasis on General Aviation; flight school
  - f. Protection of rare species





The meeting adjourned at 4:34 p.m. If your recollection of the meeting is different, please let Janine Torres know as soon as possible ([jtorres@nantucketairport.com](mailto:jtorres@nantucketairport.com)).

## Nantucket Airport Master Plan Working Group meeting 11/12/13 Attendees

<u>Name</u>		<u>Organization</u>
Diane	<b>Archer</b>	resident *
Steven	Berardo	Jacobs Engineering
<b>Sam</b>	<b>Bailey</b>	Airport business
<b>Armando</b>	<b>Cardenas</b>	Island Airlines, LLC *
Dan	Drake	Chair, Nantucket Airport Commission
<b>Carol</b>	<b>Dunton</b>	resident
<b>Bob</b>	<b>Egan</b>	Nantucket Flying Association *
<b>Peter</b>	<b>Farrell</b>	Cape Air *
<b>Arthur</b>	<b>Gasbarro</b>	Vice chair, Nantucket Airport Commission
<b>Leslie</b>	<b>Johnson</b>	resident
Noah	Karberg	Airport Environmental Coordinator
Anne	McKinnon	Jacobs Engineering
<b>Tom</b>	<b>Quigley</b>	Surfside Association
<b>Tom</b>	<b>Rafter</b>	Manager, Nantucket Airport
<b>Allen</b>	<b>Reinhard</b>	Nantucket Civic League
Bill	Richardson	Jacobs Engineering
<b>P.J.</b>	<b>Martin Smith</b>	Director, Nantucket Chamber of Commerce
<b>Ernest</b>	<b>Steinauer</b>	Mass. Audubon Society
<b>David</b>	<b>Sylvia</b>	Compliance Officer, Nantucket Airport
<b>Andrew</b>	<b>Vorce</b>	Director of Planning, Town of Nantucket

Working Group members shown in **bold**

\* participated by telephone or video call



# Meeting Summary

## **Nantucket Memorial Airport Master Plan**

Working Group meeting, February 25, 2014, 1:30 p.m. • Public Safety Facility

Attendees: See page 5.

### **Welcome**

Dan Drake, Airport Commission chair, opened the meeting. Working Group meetings are noticed so the public may attend but the meeting will not be considered an Airport Commission meeting due of lack of a quorum.

### **Welcome and News**

Tom Rafter, Airport manager, gave an update on airport activities and issues:

- FUDS: The Bunker Road area has been designated a FUDS (Formerly Used Defense Site). The U.S. Army Corps of Engineers manages and directs environmental restoration of properties formerly owned by or leased to the United States and under the jurisdiction of the Secretary of Defense. Unexploded ordnance has been found and a work plan to deal with it is being prepared.
- Inquirer & Mirror article: Rafter said the headline of the Feb. 6 edition, “Airport looking at \$1.2 million deficit for 2015” was more jarring than the article itself. Rafter said the article focused primarily on the budget which is one tool for financial management.. He emphasized the improvements in the airport’s financial situation over last year. The deficit is down by more than half to about \$500,000.
- GA Building: Grand opening in April.
- Current air traffic statistics: Down in January; passenger traffic up slightly.
- Town remote ferry parking concept: The Town is exploring establishing a free parking lot on Fairgrounds Road with shuttle to the ferry. Airport will monitor this.
- Control Tower rehabilitation: The airport will issue an RFP March 5 to upgrade the Control Tower, keeping it in the same location, with construction expected to start in November 2015.
- Runway improvements: ACK has advertised for contractors for runway routine improvements.

Steve Rawding, MassDOT Aeronautics, announced that two Nantucket students were winners in the state level 2014 International Aviation Art Contest “Flying Saves Lives.” Eleanor Hofford and Samuel Hofford were winners and their work has been forwarded to the National Association of State Aviation Officials (NASAO) in Washington D.C. for national judging. Rafter suggested displaying the winning entries in the terminal.

### **Draft Mission Statement**

Anne McKinnon, Jacobs Engineering Group, led introductions. In addition to the Working Group, four visitors and three representatives from MassDOT Aeronautics were present.

McKinnon reviewed the proposed Mission Statement which was developed to better reflect the Airport’s multi-faceted mission. Rafter said the Mission Statement will be part of a detailed business plan due later. Tom Quigley, Surfside Assn., said he wants to ensure the mission includes responding to impacts on the community. The draft says “ACK is to provide operationally safe, environmentally responsible...air service” and Quigley said that appears to cover community impacts. It was agreed the draft Mission Statement is fine. It will become part of the business plan the Commission will review.



## Master Plan Elements

### *Existing Conditions*

Bill Richardson, Jacobs, described the **AIRFIELD INVENTORY** at ACK and how larger aircraft impact the airport's available apron space, hold rooms, security areas, and other terminal areas (slides 9-25). Armando Cardenas, Island Air, asked how many/what percent of operations are larger carriers. Steve Berardo, Jacobs, reported that per FAA ATADS, "Larger air carriers," United, Delta, US Airways and Jet Blue, operate only 4 months per year. In 2013 they generated 793 operations (arrivals and departures), while total annual operations at ACK = 120,947 (arrivals & departures). Larger carriers generated 0.66% of total annual operations (less than 1% of total). Richardson said airport pavement condition is fair to poor; Rafter noted rehabilitating the apron areas is a main focus.

Part of the Bunker Area is now a FUDS with other land continuing to be leased to Locally Unacceptable Land Uses (LULUs). Richardson said the master plan will look at options for the Bunker Area, such as solar or revenue-generating concerns.

Richardson reviewed runway issues and opportunities. Reducing runway occupancy time with an exit taxiway on Runway 33 could help promote use of over-water approaches and an exit on the far end of Runway 24 would minimize taxi noise and fuel burn. The South Apron is congested and should be addressed in the master plan. Quigley suggested a high-speed turnoff from Runway 6/24. Richardson said good idea; it will be studied in the master plan. Ernest Steinauer, Mass. Audubon, asked if parking spaces are allocated and if a reservation is needed. Rafter said no, it's first come, first served, with consideration of the duration of stay. Reservations are not allowed by FAA.

*Discussion:* Arthur Gasbarro, Airport Commission, said a bigger policy question for apron and taxiway improvements is the cost. The Airport should focus on maintaining what it has and should discuss expansion ideas in this context. Rafter and Richardson clarified the goals of the master plan are to identify needs and potential projects and then identify the costs and financial issues. The master plan will identify who benefits from proposed projects and will set priorities using a number of criteria. Rafter said the master plan must identify needs before dismissing potential projects for cost reasons.

Meredith deCarbonnel, Jacobs, reviewed **ENVIRONMENTAL AND SUSTAINABILITY CONDITIONS** (slides 28-34). Surveys to identify areas of environmental sensitivity and the 2013 surveys show population growth and large numbers of individual plants indicating management techniques are working well. Surveys also identify areas for habitat enhancement to mitigate future impacts. She said coastal resources are being monitored at Nobadeer Beach where erosion is an issue. Noise: Five days of noise measurements were done in August at six residential locations. The average dBA was between 51dBA and 58 dBA and the maximum noise level was between 73 dBA and 84 dBA. Ground operations measured in 2013 were similar to 2011 and 2012. On sustainability, the airport already has a number of practices in place (geothermal cooling and heating, auto recharging stations, etc.). Sustainability practices will be carried into the master plan for consideration in design and operations.

*Discussion:* Quigley requested noise data for the full period for which it was collected. Yes if available. Noah Karberg, Airport Environmental Coordinator, said the airport will be acquiring a portable Leq sound level meter. Quigley asked if the fence at Nobadeer Beach would be moved. Rafter said they are looking at alternatives.

Berardo reviewed **AVIATION FINANCES** (slides 37-51) providing a framework that identified the numerous federal, state and local requirements that impact the airports finances. He identified airport operating and maintenance expenses, revenue sources (78% of revenues are aeronautical and 22% are non-aeronautical) and that users pay to run the airport. Eligible capital costs are paid 90% by FAA; 5%; MassDOT; 3%, airport; and 2% private (tenants). ACK is pursuing a \$4.50 Passenger Facility Charge for each ticket. Most airports impose



this PFC; Hyannis is looking at raising its PFC from \$2.00 to \$4.50. PFCs can be used for certain airport capital improvements and can also be used to leverage various bonds.

*Discussion:* Re: proposed PFC. Drake said the new GA building is not eligible for PFC funds but the new terminal building is. It costs the airport about \$340,000 per year and most of the proposed PFC would pay that expense. Drake said the airport is not swimming in cash and borrowing all of its share of GA building costs was not considered wise. Gasbarro asked if peak-period aircraft parking pricing is allowed; July and August peak-period pricing for GA should be studied. Berardo said Massport tried it at Logan Airport over 20 years ago and both the FAA and federal court ruled against its peak pricing program; peak-period pricing is not allowed by FAA and the airport cannot discriminate by charging different aircraft different amounts. Drake cautioned that peak-period pricing could drive business away on a day with no congestion, losing fuel sales and more to Hyannis. Berardo said ease of fee collection should also be considered.

Berardo reviewed **AVIATION ACTIVITY** (slides 54-77). Measurements of activity are done using “aircraft operation” (one takeoff or landing) and “passenger enplanement” (one passenger boarding flight). A focus on passenger data allow focus on terminal crowding and space issues. Five separate travel markets to/from Nantucket were identified, and each market has different degrees of price sensitivity and schedule flexibility.

#### **Nantucket Airport - Activity Trends 2000-2013**

	% change
Total aircraft operations	-29% <sup>1</sup>
Air taxi operations	-26% <sup>1</sup>
Local GA	-94% <sup>1</sup>
Itinerant GA	-31% <sup>1</sup>
Total passenger enplanements	-42% <sup>2</sup>
Year-round passenger enplanements	-21% <sup>3</sup>
Summer passenger enplanements	27.8% <sup>3</sup>

<sup>1</sup> 2000-2013      <sup>2</sup> 2000-2012      <sup>3</sup> 2009-2012  
Sources: FAA and Nantucket Airport

High-speed ferry service is growing. Ferries carry approx. 78% of all passengers to the island.

Year-round air service (Cape Air, Nantucket Airlines, Island Air) compete with ferries. Cape Air has been expanding to serve subsidized Essential Air Service (EAS) airports [50% of its business] around the country.

Seasonal air service Issues and trends affecting major airlines include mergers, 50-seat regional jets and turbo-props are being retired and replaced with larger aircraft 70-100 seat aircraft, airlines growing use of ancillary fees as a revenue source, and they are limiting capacity growth. These issues may impact future service at ACK. Berardo noted the New York metropolitan area is the biggest air service market for ACK—58% of the summer seasonal origin-destination passengers. The top three regions (NY, DC and Boston) account for 85.2% of ACK passengers.

*Discussion:* Farrell noted an issue that may impact the airlines: new FAA rule requiring six times more hours of training to fly commercially than previously (1,500 hours, up from 250 hours). Farrell and Cardenas said the rule could cause a pilot shortage if the airlines need to hire a lot of pilots in the future. Drake disagreed that all year-round residents are have very flexible schedules; some do, some don't. The new air taxi reservation requirement can be a problem. Berardo said he would modify the table. Farrell said the airline business is very different now from 15 years ago (the building boom ended, 9/11, etc.). Cardenas said Island Air will be Caravan-only eventually and it's a business, so it won't fly empty airplanes. Berardo said that the Caravan is more expensive to buy and operate than the C-402 currently used by Cape Air, etc. If Island and Cape Air were to switch to all Caravans in their fleet, ticket prices would have to rise to cover the higher costs, which would make ferry service even more price competitive. Rafter said the traveling public is largely unaware of the paradigm changes



in the airline industry (such as Cape Air and Island shifting from being a shuttle service), and larger issues driving service changes. Communicating this to the public is critical.

Berardo reviewed **FORECASTS OF AVIATION DEMAND** (slides 82-98), beginning with a caveat that there are a lot of unknowns and a number of assumptions. These variables were captured by developing three forecast scenarios. Risks and opportunities for each aviation market were considered.

Forecast scenarios:

- Status Quo: Assumes current factors affecting each type of aviation activity will continue through 2030.
- Downward Pressure: Assumes certain factors adversely impact aviation activity, such as future scarcity of 100LL aviation fuel that could impact air taxi service by Cape Air and Island Airlines, as well as smaller GA airplanes; another economic recession; rising aircraft operating costs, etc.
- Upward Trends: Assumes a variety of factors stimulate aviation activity, such as the economy expanding and Mass. and Cape and Islands tourism increasing.

Conclusions:

- For year-round air service and passenger enplanements for Cape Air, Island and Nantucket Airlines, the Status Quo forecast scenario is considered likeliest, i.e. the carriers will continue to operate the C-402 and they will be able to maintain competitive pricing with the ferry service.
- For summer seasonal passenger enplanements, the Status Quo scenario is anticipated. It is anticipated that ACK will continue to receive service to four hub airports, that the New York metro region will continue to be the primary market for ACK, and that the airlines will replace their current 50-seat regional aircraft with 70 - 100 seat aircraft. Under this scenario it is not anticipated that significant new service will be added, nor that hub service will change from being summer-only.
- For GA, the Status Quo scenario is anticipated. This scenario assumes the cost of aircraft operations will rise at or below the inflation rate and no major new security regulations or procedures are added.
- For corporate aircraft activity, it is anticipated that it will continue to grow throughout the forecast period, although not as quickly as it did between 2004 and 2007. Also, the average size of corporate aircraft will continue to grow.

Berardo reviewed the FAA Terminal Area Forecasts (TAF), which were prepared for a slightly different forecast period (2012-2040). FAA predicted a 55% increase in total aircraft operations at ACK. Disaggregated, FAA estimated a 73% increase in air taxi and air carrier operations and a 8% increase in GA. FAA projected a 142% increase in commuter passenger enplanements, however no increase in air carrier enplanements. The FAA did not explain the basis of their forecasts nor the underlying factors driving their future estimates. The Jacobs team's forecasts are considerably more conservative.

### Next Steps/Milestones/Schedule

Richardson said the next effort will be analyzing facility needs, alternative concepts and potential impacts. The Working Group will meet again in the spring.

### Q & A/Discussion

Rafter asked if the air forecasts would be tied to certain facility triggers related to time periods or actual passenger numbers? The lag time between planning, design and construction of new facilities can be significant, and major airlines can change their business plans frequently—airports must plan for expansion and not wait for the absolute numbers. Berardo said that various triggers in the upward and downward forecast scenarios were clearly identified, and if one or more of those triggers occurred then the airport should re-evaluate the forecasts and the facility requirements. For example, if avgas were to disappear, then Cape Air, Island, Nantucket Airlines would likely be reduced to a fraction of their current size (their C-402s could no longer operate), and year-round air service would change drastically. Also, piston GA activity would dry up – the FBO would sell no more





avgas, small aircraft activity would decline sharply, as well as airport revenues. Berardo noted that compared to other peer airports, ACK is less volatile and less subject to competition. It's unique but not immune.

Drake asked what other resort airports have only a one-season base—most have two seasons—and ACK's infrastructure is geared to the summer season. Berardo said an exact comparable is hard to identify but Jackson Hole and Vail in Colorado have some similar attributes. However, tourist destinations throughout New England are primarily a driving market; for example, a large percentage of tourists fly to Colorado and California, but the majority of visitors to New England, including Massachusetts, the Cape and Islands, drive. In terms of strong peak summer season activity, as well as visits by VIPs, obviously Martha's Vineyard is a comparable airport. P.J. Martin Smith, Chamber, said the shoulder season can be expanded.

Gasbarro noted the forecasts show that 2027 enplanements could be similar to the volume in 2007, and if we were OK with the 2007 situation, maybe we would be fine. Rafter said the master plan looks at multiple variables, including the growing average fleet size that would mean 2027 conditions would differ from those in 2007. Richardson said these are issues we'll get into in the upcoming alternatives phase of the master plan.

The group answered six survey questions using the Keypoint touchpads dealing with travel behavior, preferences toward a few environmental issues, and attitudes about the aviation forecasts. The meeting adjourned at 4:29 p.m. If your recollection of the meeting is different, please let Janine Torres know as soon as possible ([jtorres@nantucketairport.com](mailto:jtorres@nantucketairport.com)).

### **Follow-up conference call/WebEx on March 11: Key points and questions/answers:**

Eight members of the Working Group participated in a conference call with presentation slides to continue the discussion (Leslie Johnson, Ernest Steinauer, Carol Dunton, Diane Archer, Tom Rafter, Andrew Vorce, Arthur Gasbarro, Armando Cardenas).

Issues discussed:

#### ***A. What is a "penalty box" and why is it proposed for ACK?***

A waiting area for departing planes located near the departure areas created to aid operations. Penalty box gives controllers more flexibility because they are able to allow a plane to depart quickly if issues at destination airports are resolved. Taxi out time is high at ACK due to NY airport issues. APUs run less when planes have access to penalty boxes. Creating penalty box requires more impervious surface and more space and could mean more queuing and congestion. Question: is there a point at which we say we've reached saturation regardless of whether there is a penalty box?

#### ***B. Is the airport allowed to cap the number of planes flying in and out at any given time for safety and environmental reasons? Could it limit not only takeoffs and landings during the day but impose a different standard at night, again for safety reasons?***

FAA constrains the airport sponsors ability to impose any form of access restriction. To accept FAA grants, the FAA requires airport sponsors to formally agree to the "FAA Grant Assurances – Airport Sponsors." The assurances become legally binding on the sponsor. Grant Assurance #22 states in part: "It [the airport sponsor] will make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport."

In addition, FAA Order 5190.6B, Airport Compliance Manual, states: "Airport sponsors have limited proprietary authority to restrict access as a means of reducing aircraft noise impacts in order to improve compatibility with the local community." [Source: Chapter 13, para. 13.2, b., (6)]

FAA has a mechanism for airports to analyze the cost-benefits of restricting access by Stage 2 and 3 aircraft for noise purposes. Sponsors must prepare and FAA must approve a FAR Part 150 and a FAR Part 161 study. The sponsor must document that there are incompatible land uses as defined by FAA in the vicinity of the airport,





and that the airport sponsor has fully examined noise mitigation and noise abatement options such as voluntary arrival and departure routes, takeoff procedures, changes to land use and zoning requirements, property acquisition, and soundproofing of structures. Only if it can be documented that those alternatives have not adequately addressed the issue of incompatible land use can an airport sponsor consider potential access restrictions. FAA funded a Part 150 Noise Study for ACK in the late 1980s. The Airport initiated its voluntary VFR flight track noise mitigation program, but the Town did not adopt any compatible land use mitigation measures. Assuming the Town were to adopt land use controls, and that aircraft access restrictions were to be considered, FAA would analyze the potential restrictions in relation to the following factors:

- They do not impose an undue burden on interstate and foreign commerce;
- They do not derogate safety or adversely affect the safe and efficient use of airspace;
- To the extent practicable, the restrictions would meet both local interests and federal interests of the national air transportation system; and
- The restrictions could be implemented in a manner consistent with all of the powers and duties of the FAA Administrator.

Any access restrictions at ACK (by time of day or by type of aircraft) would impact activity at other airports and the ATC system by requiring airlines and pilots to adjust their intended schedules. If access restrictions were imposed at Nantucket Airport by limiting night operations for example, some operators arriving from New York airports would be forced to depart earlier than intended – possibly during peak periods in NY. That would increase delays by adding additional aircraft to peak periods, as well as increased fuel burn, emissions and costs.

Airlines do not like access restrictions for a number of reasons: restrictions increase their operating costs; forces carriers to adjust their schedules to what they perceive as less than optimum, which is particularly challenging for carriers serving the New York metro area and Washington, DC. As a result, airlines either avoid or reduce service at airports with access restrictions. It can be reasonably anticipated that any access restrictions imposed at ACK would result in reduced service by air carrier and air taxi operators.

***C. Can we find out whether we could impose fees for landing and take-off, much like the airlines do with passengers--book early and pay less, but pay upfront? Book last minute and pay more? That would allow air tower control people to have better sense of who's landing when and plan better, again improving safety.***

Imposing landing or access fees based on the amount of advanced planning would infringe on FAA's jurisdiction over airspace and air traffic control. It would also be extremely difficult for ACK to monitor and assess such fees, and they would impact other airports by impacting pilots decisions about departure times. Massport has had a longtime noise surcharge program at Hanscom Field (see below). The FAA requires that pricing programs must be non-discriminatory (i.e. apply to everyone). Imposing such fees increase airport administrative costs to monitor activity and collect the fees; and fees also decrease traffic levels and reduce airport revenues.

In addition to the nighttime fee schedule at Hanscom Field, Massport also prohibits touch and go operations between 11:00 p.m. and 7:00 a.m.; prohibits touch and go activity by aircraft over 12,500 pounds; and prohibits activity by Stage I Aircraft over 12,500 pounds.

It is possible that ACK could consider similar measures – and based on the theory that if Massport could enforce these at Hanscom, then ACK could do something similar. However – the big caveat – such programs have to be justified, and FAA has to formally approve them. Plus, with traffic levels declining at ACK for well over 12 years, and jet aircraft getting quieter, it would be difficult to convince FAA that these types of restrictions are needed or justified at ACK. Finally, there's little nighttime and very little daytime training (touch & go) activity at ACK (compared to Hanscom which has large flight schools), and there are very few (if any) Stage 1 airplanes operating at ACK. So even if similar restrictions were put in place at ACK as are in place at Hanscom Field, they would make virtually no difference to existing noise levels.



### **Hanscom Field - NOISE SURCHARGE**

- In 1980, a field use fee was instituted to help reduce noise exposure by encouraging the use of the field before 11 pm or after 7am.
- Between 11:00 pm to 7:00 am local time, there is a fee for each operation (take-off or landing). This fee is adjusted on an annual basis and is in effect for a period of one year July 1 - June 30. Effective July 2010 the nighttime field use charge is:
  - Aircraft 12,500 lbs or less - \$53
  - Aircraft over 12,500 lbs - \$391
- In addition, an aircraft shall pay double the applicable charge for each nighttime operation in excess of five nighttime operations in a calendar year.

#### ***D. How have fees at ACK been set? What are rates and fees based on?***

The user fee structure in place at Nantucket Airport was set some years ago, and has been modified over time. The FAA grant assurances state that fees must be fair and reasonable, and they must also be non-discriminatory. User fees in place at other airports will be studied and compared against Nantucket (a benchmarking study), and presented in the Master Plan. “Peer airports” being studied in terms of their rates and charges include:

#### **Commercial Service Airports**

Aspen, CO  
Vail, CO  
Traverse City, MI  
Palm Springs, CA  
Savannah, GA  
Myrtle Beach, SC  
Punta Gorda, FL  
Glacier Park (Kalispell, MT)  
Great Falls, MT  
Key West, FL

#### **General Aviation/Corporate Service Airports**

Martha's Vineyard, MA  
Hyannis, MA  
White Plains, NY  
Provincetown, MA  
Block Island, RI  
Newport, RI  
New Haven, CT

#### ***D. Environmental resources have been inventoried for the Master Plan. We can't just spend, spend, and spend—we need to know if the need is there.***

The next step is the alternatives phase in which the airport's needs will be identified and prioritized and the environmental constraints identified. Documenting why an alternative or proposal was dropped is as important as documenting why a proposal is advanced. The process requires thorough analysis of alternatives before any are dismissed.

#### ***E. What is the impact of expanding ferry service on the airport? The table of fares for air service and ferries should include the discounts for same-day round-trip ferry travel.***

Ferries transport about 78% of all travelers between the mainland and Nantucket. More high-speed ferry service has and will continue to impact passenger levels on Cape Air and Island Airlines. It was agreed the “Status Quo” demand scenario is most likely, and although the volumes seen pre-recession are not expected to be seen again until 2030, strong summertime peaks present a challenge from a facilities point of view. Balancing summer peaks with volumes in the rest of the year is a challenge.

#### ***F. Can we find out whether FAA would be amenable to different takeoff and landing paths, particularly those paths that require over-island travel? When the landing and takeoff paths were set, it was a different island, with many fewer residences in those takeoff and landing paths.***

The current VFR Noise Abatement Flight Tracks were established based upon community input on affecting the least-developed areas on the Island. Any changes to the existing noise abatement procedures, including the flight



tracks, would have to be analyzed based on actual noise reduction benefits to be achieved, as well as the measurement of the number of people that would benefit or be impacted. When the VFR Noise Abatement Flight Tracks were changed in the 1990s and again after 2000, some people experienced reduced noise levels, while others had an increase. Plus, any proposed changes in flight tracks would have to be evaluated in relation to their impact on flight safety from an air traffic control (ATC) and aircraft operational perspective, as well as from an aircraft operating cost and energy use/fuel burn perspective.

**G. We didn't have a chance to discuss freight and airmail traffic. I wondered about their incremental impact.**

Air cargo and mail data are in Chapter 4, Aviation Activity. Air freight and mail data tables are in Appendix G (shown below). The large majority of freight from the mainland is transported by ferry. Also, Cape & Island mail service is essentially 'belly cargo' – i.e. carried on passenger airplanes. FedEx flies Cessna Caravans dedicated to freight – the majority of their activity is in the summer – and it has been relatively steady/slowly declining over a period of years. No significant changes are anticipated to these air freight and mail activity levels in the future. If something were to happen to Cape/Island/ Nantucket Air, then a lot of their mail traffic would likely transfer to ferries, and some would be carried by another air service provider. There's not enough volume by itself to justify dedicated air service – only is practical as belly cargo.

**Federal Express Courier Traffic Providence-ACK**

	Pounds		
	Summer	Winter	Total
2002	170,280	-	170,280
2003	534,340	135,520	669,860
2004	594,840	138,960	733,800
2005	543,280	181,040	724,320
2006	555,520	145,640	701,160
2007	559,920	136,880	696,800
2008	462,271	123,133	585,404
2009	387,896	92,560	480,456
2010	439,362	117,931	557,293
2011	421,509	94,837	516,346
2012	451,883	103,268	555,151

**Cape Air - Mail - Hyannis-ACK**

	Winter	Summer	Total
2002	276,374		276,374
2003	800,223	303,145	1,103,368
2004	717,135	326,237	1,043,372
2005	688,798	338,418	1,027,216
2006	850,967	316,477	1,167,444
2007	789,103	329,976	1,119,079
2008	692,496	286,580	979,076
2009	714,160	234,830	948,990
2010	596,088	265,649	861,737
2011	557,246	269,345	826,591
2012	613,359	134,845	748,204

**Island Airlines Air Freight – Nantucket to and from Hyannis**

	Pounds	
	Summer	Winter
2010	91,270	-
2011	733,422	182,503
2012	870,070	233,598



Nantucket Airport Master Plan Working Group meeting 2/25/14  
Attendees

<u>Name</u>	<u>Organization</u>
<b>Sam Bailey</b>	Airport business*
Steven Berardo	Jacobs Engineering
Mike Burns	Nantucket Planning & Economic Development Commission
Tony Buscaren	resident
<b>Armando Cardenas</b>	Island Airlines, LLC
Meredith deCarbonnel	Jacobs Engineering
Dan Drake	Chair, Nantucket Airport Commission
<b>Bob Egan</b>	Nantucket Flying Association *
<b>Peter Farrell</b>	Cape Air
<b>Arthur Gasbarro</b>	Vice chair, Nantucket Airport Commission
<b>Leslie Johnson</b>	resident
Noah Karberg	Airport Environmental Coordinator
Anne McKinnon	Jacobs Engineering
Drew Mihaley	MassDOT Aeronautics
<b>Tom Quigley</b>	Surfside Association*
<b>Tom Rafter</b>	Manager, Nantucket Airport
Steven Rawding	MassDOT Aeronautics
<b>Allen Reinhard</b>	Nantucket Civic League
Bill Richardson	Jacobs Engineering
Katie Servis	MassDOT Aeronautics
<b>P.J. Martin Smith</b>	Director, Nantucket Chamber of Commerce
<b>Ernest Steinauer</b>	Mass. Audubon Society
<b>David Sylvia</b>	Compliance Officer, Nantucket Airport
<b>Andrew Vorce</b>	Director of Planning, Town of Nantucket

Absent:  
Carol Dunton and Diane Archer

Working Group members shown in **bold**  
\* participated by telephone or video call

# ACK Working Group

## Multiple Choice Survey Exercise

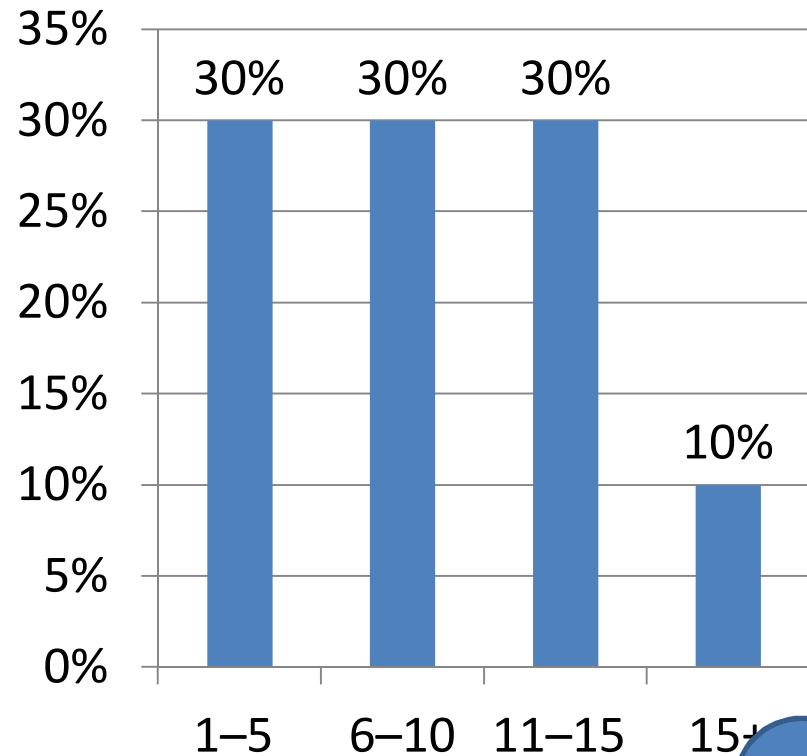
Meeting #2 • February 25, 2014

Discussion Questions

# Easy Warm-up Question 1

How many times do you go off-island each year?

1. 1–5
2. 6–10
3. 11–15
4. 15+

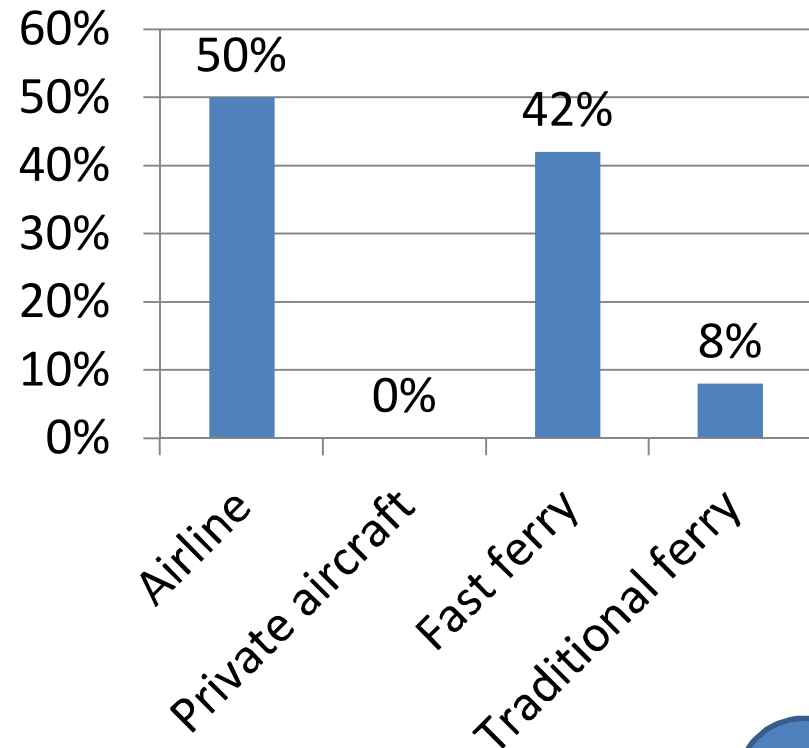




# Easy Warm-up Question 2

When traveling off-island, what means of transportation do you use?

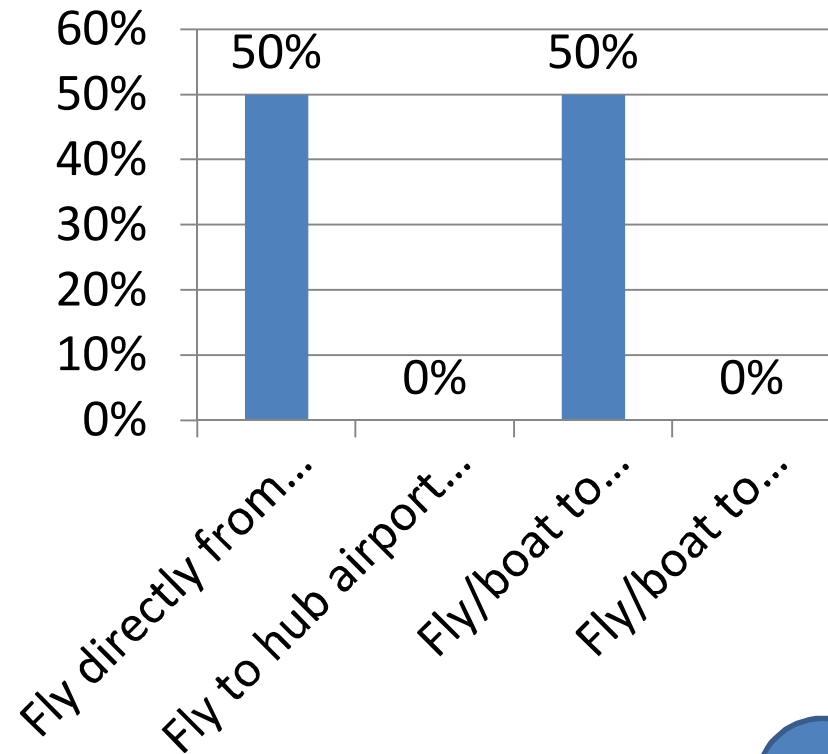
1. Airline
2. Private aircraft
3. Fast ferry
4. Traditional ferry



# Final Warm-up Question

If destination includes a flight , do you:

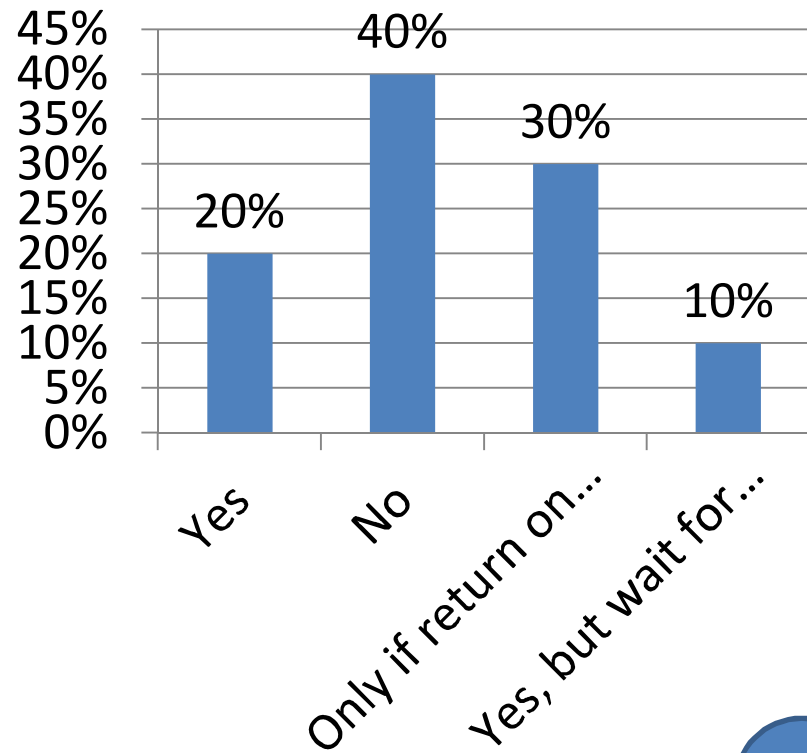
1. Fly directly from ACK thru Boston
2. Fly to hub airport on seasonal carrier
3. Fly/boat to Hyannis, ground to Boston
4. Fly/boat to Hyannis, ground to Providence



# Trade-offs

Should ACK's fleet be exclusively Electric Vehicles?

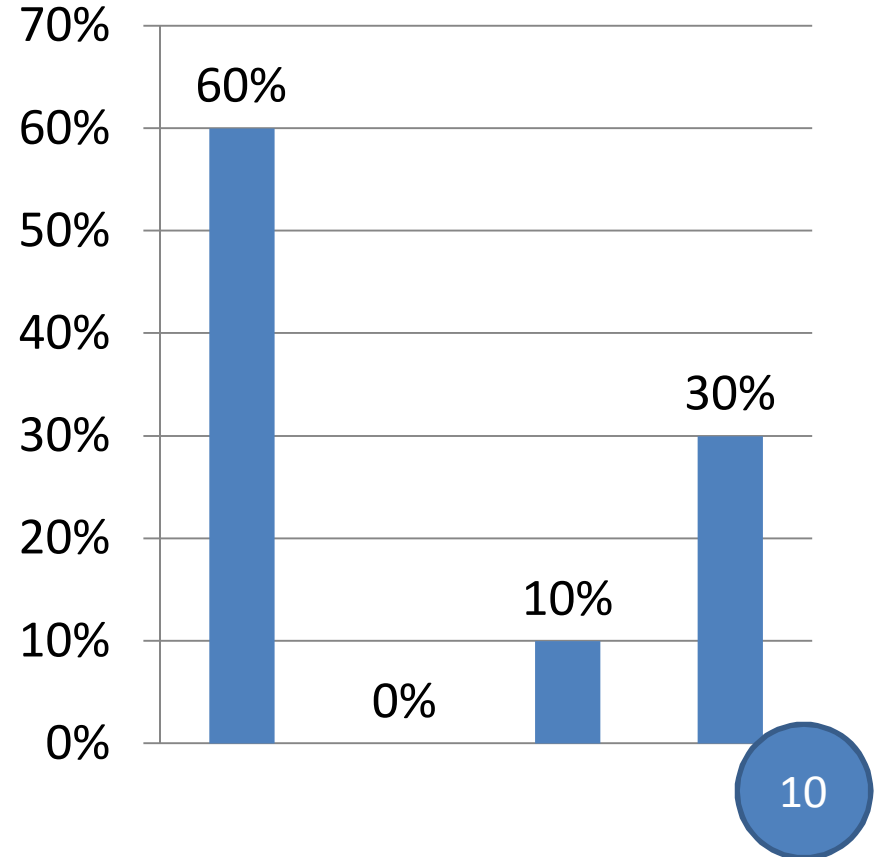
1. Yes
2. No
3. Only if return on investment is high
4. Yes, but wait for better technology



# Collaboration on Coastal Erosion

Should ACK participate in Island-wide coastal erosion efforts?

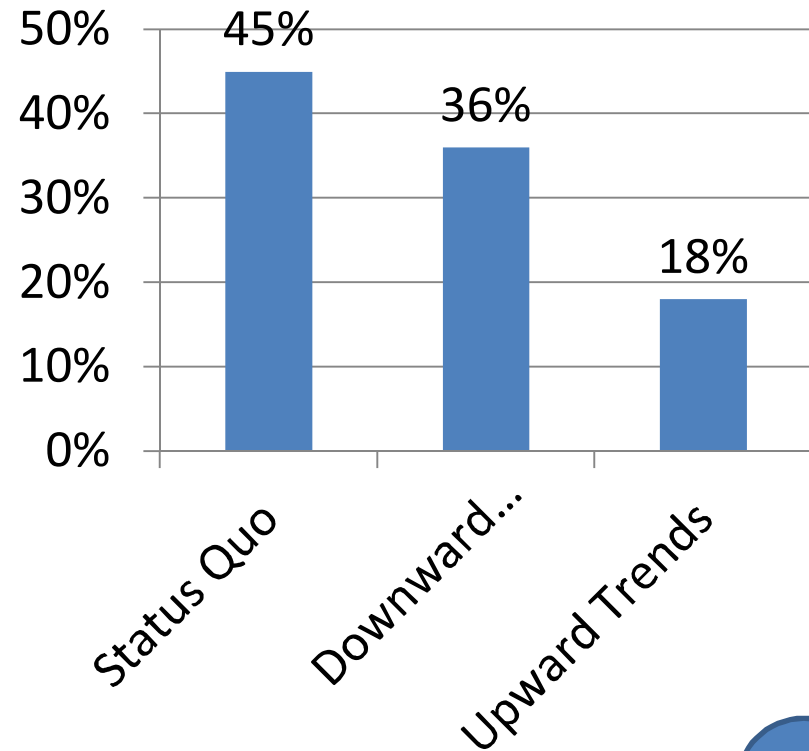
1. Yes, if focused on stabilizing Airport's beach & dune areas.
2. Not if funding diverted to off-Airport efforts.
3. Yes, if beach access is allowed with controls.
4. Not if doing so will limit beach access.



# Aviation Forecasts of Demand

Which forecast scenario is most likely?

1. Status Quo
2. Downward Pressure
3. Upward Trends



# Top Responses Suggested

- 5 Status Quo
- 4 Downward Pressure
- 2 Upward Trends





# Meeting Summary

## **Nantucket Memorial Airport Master Plan**

Working Group meeting, May 29, 2014, 1:00 p.m. • ARFF Building, Nantucket Airport  
Attendees: See page 6.

### **Welcome**

Arthur Gasbarro, Airport Commission chair, opened the meeting. Working Group meetings are open to the public and anyone is welcome to attend.

### **Welcome and Updates**

Anne McKinnon, Jacobs Engineering Group, reported that Tom Rafter, Airport manager and Working Group member, was unable to attend due to a family matter. Airport updates would be provided by Noah Karberg, ACK environmental coordinator.

- FUDS: Environmental restoration of the FUDS (Formerly Used Defense Site) at the Bunker Road area will be advanced from the original 2035 start date to fall 2014.
- The proposed \$4.50 Passenger Facility Charge for each ticket was approved by FAA. The charge could be implemented as early as 30 days.

McKinnon reviewed Master Plan progress to date: existing conditions analysis, forecasts of future aviation demand, and identification and discussion of key issues and concerns by the Working Group (WG). The February 25 WG meeting ran long and cut off discussion, so a follow-up conference call was held March 11 to continue the discussion. Eight WG members participated and asked many detailed questions. The questions and responses are in the Feb. 25 meeting summary. She added that the team keeps a log of all comments and questions. Some have been addressed and are reflected in revised Master Plan documents; some comments have been internalized in the current work, and some will be addressed in upcoming Master Plan work.

McKinnon previewed upcoming activities:

- Using feedback from today, the team will work with the Airport Commission and FAA to identify priority projects;
- Financial Plan, currently underway, will be completed;
- Final WG meeting will cover proposed priority projects, the draft ALP and environmental impacts.

### **Review of Master Plan Enplanement Trends and Forecasts**

Bill Richardson, Jacobs, reviewed enplanement trends and forecasts discussed at the February WG meeting (slides 5-8). High-speed ferry service is growing. Ferries carry about 90% of all HYA-ACK passengers to the island. Year-round air service (Cape Air, Nantucket Airlines, Island Air) competes with ferries. Seasonal air service operated by major airlines operates 50-seat regional jets and turboprops that are being retired and replaced with larger aircraft. Jet Blue flies 100-seat E-190s that could be up-sized over the next 5-10 years to the 150-seat A-320. Richardson reviewed trends in passenger enplanements (down about 42% between 2000 and 2012) and the big increase in fast-ferry boardings since 2007. Reviewing the forecast scenarios that had been discussed at length in February, Richardson said the Status Quo scenario (slight growth over 20 years) for both the year-round and summer seasonal passengers is what is being used in the Master Plan. The Downward



Pressures scenario was considered given recent trends, but a number of significant things would have to happen to cause continued decline in enplanements, such as loss of avgas, the 402s disappear, TSA security regulations, etc. Mary Walsh, FAA Airports Division Manager, said enplanements are down all over.

Richardson said the implications of the Status Quo scenario range of enplanements are twofold: certain improvements to existing facilities are still needed, and if enplanements decrease, the plan needs to determine how to phase-in the necessary improvements to be in sync with available revenues.

Richardson described four categories of improvement concepts to start the conversation with the group. The brainstorming part of the workshop is intended to generate new ideas without comment or evaluation so the team hears different things and to help the team set priorities.

1. Safety and Security;
2. Efficiency and Revenue;
3. Capacity; and
4. Environmental/Sustainability.

#### **Safety and Security:**

1. Runway 6 Safety Area deficiencies
2. South Apron design deficiencies
3. Runway 24 high-speed exit taxiway
4. Runway 33 exit and parallel taxiway

Walsh said ACK's Runway 6 Safety Area is not unusual and would not be cost effective to address. On a scale of 1-10 [10 being best], ACK's Runway 6 Safety Area is about 8. Coastal erosion could prompt action, but a few feet eroded a year probably doesn't warrant action. Tom Quigley, Surfside N.A., suggested letting nature take its course or build EMAS (engineered materials arrestor system).

The South Apron was designed for aircraft with 50-foot wingspans. The larger, new corporate jets at ACK have 100-foot wingspans. To safely handle these larger jets, the South Apron needs to be redesigned and expanded to meet FAA design criteria for larger aircraft.

Larger aircraft are forced to taxi all the way from the end of Runway 24 which impedes others from landing. Richardson noted that Quigley's suggested "high-speed" exit taxiway to allow aircraft to get off Runway 24 would address this issue. It would also reduce fuel use and noise from back-taxiing aircraft. Similarly, an exit off Runway 33 and a shortened parallel taxiway would provide similar improvements for the Runway 33 over-water approaches. *Note:* Exit taxiways reduce the runway occupancy time and facilitate traffic flow during peak periods. Although taxiways do not in and of themselves generate new traffic, they do reduce taxi times for arriving traffic. Reduced taxi times not only reduce noise and emissions, but also reduce the time it takes to reach the parking aprons, potentially causing them to fill more quickly. For that reason it may be advantageous to plan future apron expansion prior to taxiway improvements.

#### ***Ideas Generated in Brainstorming Discussion/[Comments]:***

- Parking in triangle area between Runway 30 and Runway 33 [*Major environmental impacts.*]
- Parallel taxiway north side of Runway 33 [*Previously dismissed by Airport Commission.*]
- Can the mitigation area be changed? [*No. This was stipulated in Mass. Endangered Species Act permit.*]
- Is the parallel taxiway worth the cost? [*Depends on size, costs and benefits as prioritized by Commission.*]
- Put aircraft parking in the Bunker area [*Requires stub taxiway from Runway 15/33.*]
- Perimeter fencing [*Ongoing item in CIP.*]
- What if TSA imposes requirements on GA? [*Corporate and large GA likely affected less than small private GA.*]



- Partner with HYA for aircraft parking [*Flight crews use own initiative. Creates revenue loss for ACK.*]

Leslie Johnson asked about changing the habitat mitigation area—can it be done? Meredith deCarbonnel, Jacobs, and Ernest Steinauer, Mass. Audubon, said the current high-quality location would be very hard to reproduce. Gasbarro said mitigation is expensive and with flat forecasts, moving the mitigation area for a new taxiway is not warranted. Sam Bailey noted the existing taxiing situation may work for the 402s now, but if the fleet changes it could be different. There was discussion about a taxiway on the north side of Runway 33 that could provide access to the Bunker Area for parking. A full-length parallel taxiway to Runway 33 had been discussed there several years ago to provide access and that a shorter stub taxiway could be considered. *Note:* Alternatives for a full-length taxiway were the focus of a joint FAA-MassDOT Aeronautics-ACK Safety Risk Management Panel (SRMP) meeting at Logan Airport on February 28, 2012. The objective was to identify a more efficient layout for an arrival taxiway from Runway 33 to the terminal area. A key Safety Management Systems finding was that the airport’s existing operating environment, which included the historically safe use of Taxiway C for mid-field crossings of Runway 6-24, would not be adversely affected by mid-field crossings at Taxiways A or B. A full-length recommended layout concept was proposed at the SRMP and subsequently sent to FAA on March 15, 2012 for consideration on the ALP. Since then, further discussion of costs, environmental constraints and observations by ATC on the use of Taxiway C to reach the runway end have focused consideration of a shorter, angled-exit stub taxiway to provide direct access from Runway 33 to a crossing of Runway 6-24 opposite Taxiway A.

Quigley asked about perimeter fencing considering the teen in San Diego County who scaled a fence and climbed in an aircraft’s wheel well. Walsh said TSA is funding fence projects and the MassDOT Airport Safety and Maintenance Program is providing cameras.

Dan Drake, Airport Commission chair, suggested alternatives for aircraft parking need to be developed. Gasbarro said South Apron is crowded six weeks of the year—not a big deal. David Sylvia, ACK, noted Runway 33 has been shut down and used for parking, diverting planes from ACK. Bob Egan, Nantucket Flying Assn., asked if the airport could restrict landing by aircraft with certain size wingspan. Walsh said yes. It was noted that Runway 12-30 is designed for aircraft with <49-foot wingspans; Runway 15-33, for <79 feet, and Runway 6-24, <118-foot wingspans. Nevertheless, larger airplanes up to and including Air Force 2 are able to land. Peter Farrell, Cape Air, suggested partnering with HYA for aircraft parking.

### **Efficiency and Revenue**

1. Existing aviation revenue sources
2. Potential GA Hangar/commercial combo space
3. Benchmarking comparable airports’ rates and charges
4. Equitable restructuring of rates and charges
5. Swap, sell or lease surplus parcels
6. Parking revenue

Noah Karberg, ACK, presented. New aviation revenue sources: ACK can learn from other airports about a possible restructuring of rates. For example, Nantucket’s landing fee is based on weight, so a Gulfstream pays \$786 and a 402 pays \$13.50.

GA needs hangars. One alternative would involve partnering with the private sector to build GA hangar-commercial combination space along Runway 24 adjacent to the Coffin pit.

New non-aviation revenue sources: ACK is the third biggest land owner on the island. Converting some land not needed for aeronautical purposes would generate long-term lease revenue and could meet some public needs. Surplus parcels are found in the Bunker Area, beachfront (two parcels) and the Delta parcel in the area of the



ballfields. Egan asked what percent of airport revenue is from commercial uses. Drake said 18%. Quigley asked if the Delta parcel was designated for aeronautical use and therefore would not be able to be surplus. Drake said restrictions will be researched and ACK counsel would be involved. Lesperance said the Master Plan will identify non-aeronautical parcels and FAA will ensure the redesignation of the land as “non-aeronautical” would not cripple the airport. Walsh said make sure no federal money was used to buy parcels to be surplus. Richardson said some parcels will be more complicated than others to surplus; the Master Plan will identify the parcels with the fewest restrictions for non-aeronautical use.

Gasbarro clarified that the Master Plan will state that the ballfields in the Delta parcels will not be touched. Yes. Drake added that the Master Plan may not commit to maintaining the ballfields forever.

Auto parking revenue is typically a major source of revenue for airports, but at ACK parking revenues are fairly low. Drake said about 2%. Benchmarking to other airports may provide guidance. Drake said the comparable airports should have both air and water access; San Juan Islands, perhaps. Also, MVY.

***Ideas Generated in Brainstorming Discussion/[Comments]:***

1. Can you rent the terminal baggage claim area in off-peak season?
2. Consider reuse of Airport Road “statue park”
3. More commercial development in Bunker area
4. Long-term commercial parking
5. Competitive parking pricing
6. Create multi-community airport authority (HYA, ACK, MVY, EWB, etc.)
7. Establish forum for airport managers to collaborate
8. Regional transportation plan
9. Maintenance/Repair/Overhaul *[May not be cost effective or financially viable on ACK]*
10. Create large-plane hangars
11. Add nighttime landing fees\* *[ACK currently invoices individual aircraft for night landings]*
12. Create website to sell empty seats on deadhead legs\* *[Air taxi operators such as NetJets strive to maximize round-trip occupancy to avoid deadhead flights for operational and revenue reasons. Recent attempt by AirPooler to start a flight-share operation was rejected by FAA.]*
13. Market the airport to other airlines/joint effort with businesses and town\*

\* Follow-up addition from Working Group member not present May 29

Gasbarro asked if there is demand for hangars. Sam Bailey said yes—he waited 40 years to get a hangar. Sylvia said cost would be key. Egan said he’ll run the concept by the GA community.

**Terminal and Airfield Capacity**

1. Address hold room deficiencies
3. Relocate and rebuild Hangars 5 and 6 and repave North Apron

The existing hold room is congested in the peak season. Alternatives for handling temporary seasonal demand by converting bag claim to hold room and moving bag claim to a tent structure. The North Ramp has existing high-priority pavement issues. The location of Hangars 5 and 6 impedes big planes. Relocate the hangars.

***Ideas Generated in Brainstorming Discussion/[Comments]:***

1. The baggage claim is underutilized from Labor Day to Memorial Day
2. Can the baggage claim area be rented in off-peak season?
3. Make the baggage claim area flexible space
4. Look at passenger flow and comfort at check-in particularly



5. Why not build a permanent structure for hold room issues because it will continue to be problem? [*Hold room congestion is seasonal issue that only warrants low-cost temporary response with flex-space options.*]

Farrell said the check-in space is small and problematic. Gasbarro asked if FAA would pay for the tent. Lesperance said FAA entitlement dollars may be used for other items after runway and safety improvements. TSA requirements could fund hold room improvements or the MassDOT Airport Safety and Maintenance Program.

### **Environmental and Sustainability**

2. Pursue NBAA/AOPA power management options
3. Coastal stabilization concepts
6. Ground transportation improvements
7. Alternative energy concepts, inc. GPU in North and South Aprons and solar
8. Botanical Master Plan

Slides 30 and 31: The Integrated Noise Model for ACK in 2013 shows the average year Day-Night average sound level (DNL) that reflects the noise impacts with flights using the noise tracks. We know that these are not flown 100% of the time. The graphic illustrates that areas experiencing greater than 65 DNL are primarily at the airport. Comparison over time of island locations greater than 65 DNL shows impacts to off-airport properties have been reduced since noise abatement measures and quieter aircraft were introduced in the late 1980s.

In addition to maintaining the existing noise abatement measures, the airport could consider promoting power management techniques to airlines and GA pilots. These techniques, promoted by the National Business Aviation Association and the Aircraft Owners and Pilots Association, are designed to reduce power settings used during departures to “quiet climb” settings. These techniques are proven effective even though 402s do not rise above 1,000’. There was a discussion among pilots in the room as to the benefits and negatives of power management. Opinions varied, with some concern about safety and some concern about the costs to airlines. Johnson asked if any of the existing noise mitigation measures will be eliminated. No.

De Carbonnel described options to stabilize the beach, with the goal of keeping existing dune grass from being removed and minimizing future damage. Gasbarro objected to posts in the beach. He suggested focusing on keeping people off the dunes by directing them to paths. There was a discussion about the need to educate people about dune protection and whether signs are appropriate.

Botanical Master Plan: The cost of a Botanical Master Plan would be borne by the airport. However, it would likely lower the burden of mitigation ratio (the Massachusetts Natural Heritage and Endangered Species Program has indicated that it would negotiate something lower than 3:1 if a master plan were prepared) meaning less land would be required for mitigation and would ultimately cost less to implement than piece-by-piece mitigation for each project. Westfield-Barnes Regional Airport is currently preparing a Botanical Master Plan. Sylvia asked if the airport can mitigate on Town land. Vorce said it depends.

There was a discussion of possible ground transportation improvements to the airport to both encourage airport use and cut emissions including metering cabs and getting more NRTA service.

### ***Ideas Generated in Brainstorming Discussion/[Comments]:***

1. Convene annual meeting with airlines on noise issues
2. Consolidate paths through the dunes
3. No snow fences
4. Warning signs on the beach are needed
5. Warning signs on the beach are intrusive





6. Get NRTA to serve the airport more
  7. ACK offer free cab rides to airport
  8. ACK run its own van or bus to supplement NTRA\* [*Airport currently not equipped, licensed or insured*]
  9. Cabs should have meters [*This is largely not an airport issue to resolve*]
  10. Promote the Airport NRTA route as a “Travel Connector” to all modes of transportation and allow those with plane tickets a free ride\*
  11. Provide energy from solar installation to low-income island residents\*
- \* Follow-up addition from Working Group member not present May 29

**Next Steps/Milestones/Schedule**

- Prioritize 5-year improvements plan
- Develop financial plan
- Prepare State Environmental Notification Form for 5-year improvements plan
- **Final Working Group meeting: to be determined**
- **Open House for general public: to be determined**

**Q & A/Discussion**

The group answered five preference questions using the Keypoint touchpads related to the four categories of improvement concepts presented and amended through the discussion. See attached for questions and results. The meeting adjourned at 4:13 p.m. If your recollection of the meeting is different, please let Janine Torres know as soon as possible ([jtorres@nantucketairport.com](mailto:jtorres@nantucketairport.com)).

**Nantucket Airport Master Plan Working Group meeting attendees**

<u>Name</u>	<u>Organization</u>
<b>Sam Bailey</b>	Airport business
<b>Armando Cardenas</b>	Island Airlines, LLC
Meredith deCarbonnel	Jacobs Engineering
Dan Drake	Chair, Nantucket Airport Commission
<b>Bob Egan</b>	Nantucket Flying Association
<b>Peter Farrell</b>	Cape Air
<b>Arthur Gasbarro</b>	Vice chair, Nantucket Airport Commission
<b>Leslie Johnson</b>	resident
Noah Karberg	Environmental Coordinator, Nantucket Airport
Kevin Lesperance	FAA
Lisa Lesperance	FAA Community Planner
Anne McKinnon	Jacobs Engineering
<b>Tom Quigley</b>	Surfside Association*
<b>Allen Reinhard</b>	Nantucket Civic League
Bill Richardson	Jacobs Engineering
<b>Ernest Steinauer</b>	Mass. Audubon Society
<b>David Sylvia</b>	Compliance Officer, Nantucket Airport
<b>Andrew Vorce</b>	Director of Planning, Town of Nantucket
Mary Walsh	FAA Airports Division Manager

Working Group Members Absent:  
Diane Archer, Carol Dunton, Tom Rafter, P. J. Martin Smith

Working Group members shown in **bold**



# **ACK Working Group Alternatives Preferences**

Meeting #3 • May 29, 2014

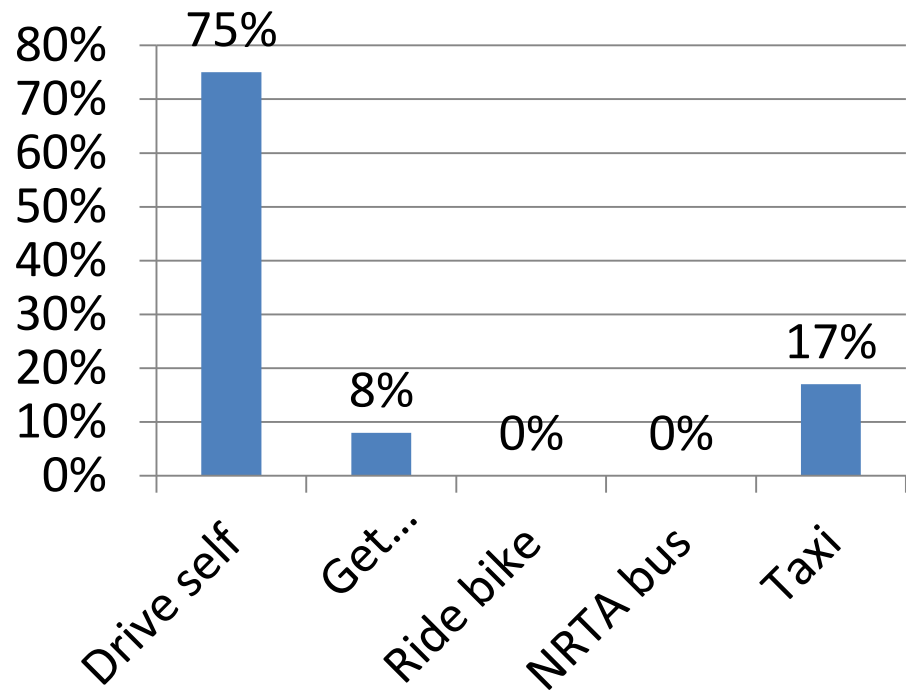
Discussion Questions



# Warm-up Question #1

How do you normally get to the Airport?

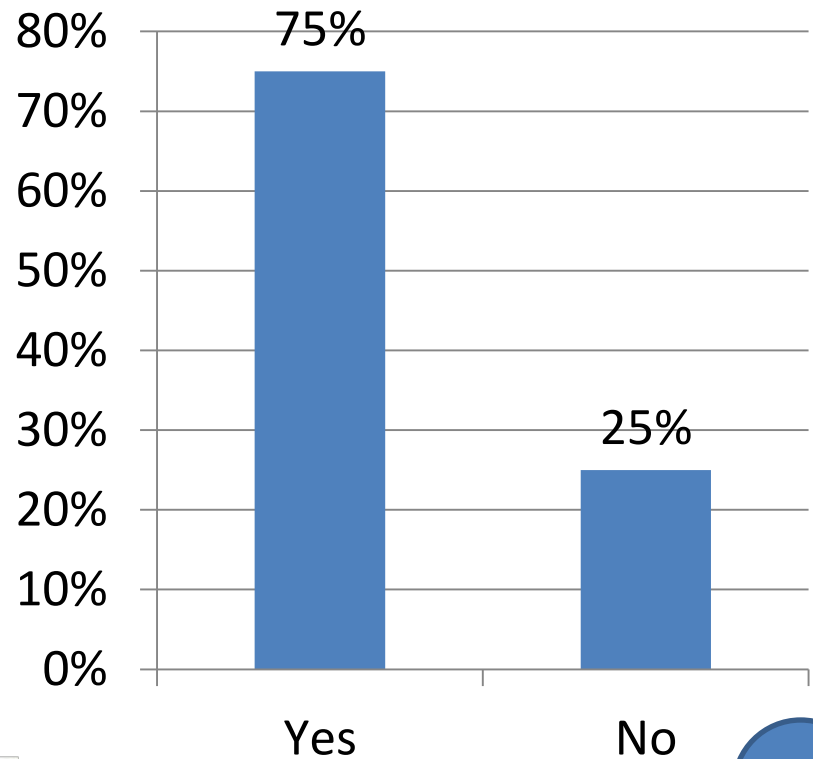
1. Drive self
2. Get dropped off
3. Ride bike
4. NRTA bus
5. Taxi



# Warm-up Question #2

Have you visited the ACK Master Plan website?  
[masterplan.nantucketairport.com](http://masterplan.nantucketairport.com)

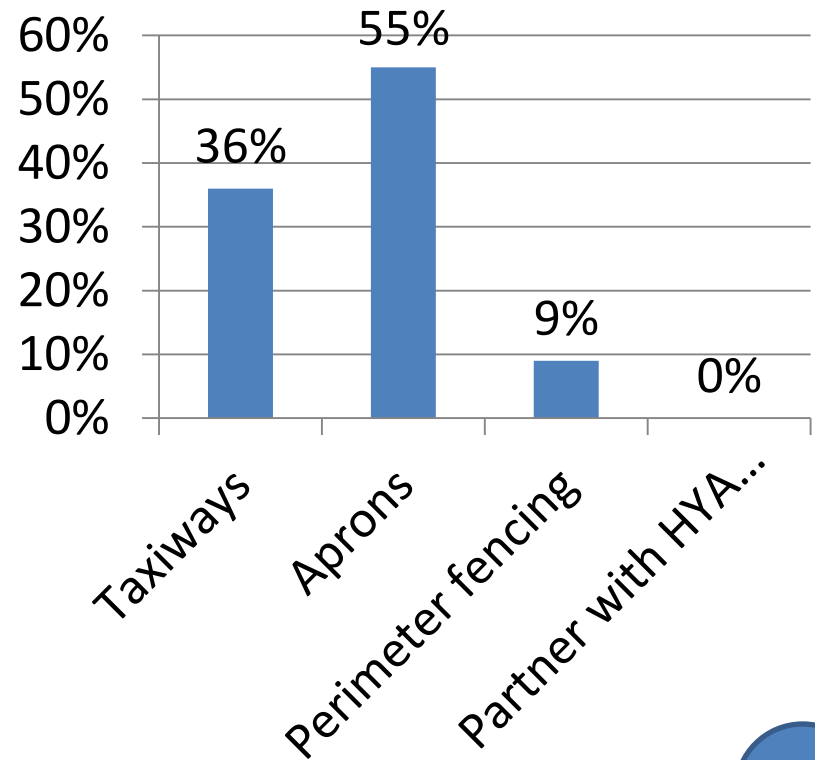
1. Yes
2. No



# Safety and Security

Select top priority

1. Taxiways
2. Aprons
3. Perimeter fencing
4. Partner with HYA  
on parking  
solutions



## **Efficiency and Revenue**

**Select the top 3 strategies--Press SEND**

1. Pursue equitable rates & charges restructuring
2. Pursue more Bunker Area development
3. Pursue swap, sale or lease of surplus parcels
4. Create airport authority
5. Maintenance/Repair/Overhaul facility
6. Long-term commercial parking
7. Cut expenses through sustainability efforts



# *Master Plan Improvement Concepts*

## **Efficiency and Revenue**

### **Top strategies**

Pursue swap, sale or lease of surplus parcels

Pursue equitable rates & charges restructuring

Pursue more Bunker Area development

Maintenance/Repair/Overhaul facility

Cut expenses through sustainability efforts

Long-term commercial parking

Create airport authority





*Master Plan Improvement Concepts*

# **Terminal & Airfield Capacity**

**Which is the most important capacity improvement needed at ACK?**

1. North Ramp repaving and hangar relocation
2. Terminal secure space improvements
3. Flexible space for baggage claim area
4. Passenger flow and security



# *Master Plan Improvement Concepts*

## **Terminal & Airfield Capacity**

### **Preferences**

- 4 Flexible space for baggage claim area
- 3 North Ramp repaving and hangar relocation
- 3 Terminal secure space improvements
- 3 Passenger flow and security



## **Sustainability**

**Choose in order of importance**

**Press SEND**

1. Coastal stabilization
2. Ground transportation improvements
3. Alternative energy
4. Botanical Master Plan
5. Taxi fare restructuring



# *Master Plan Improvement Concepts*

## **Sustainability**

Ground transportation improvements

Coastal stabilization

Alternative energy

Taxi fare restructuring

Botanical Master Plan



# Master Plan Improvement Concepts

**Choose in order of importance**

**Press SEND**

1. Safety and Security
2. Efficiency and Revenue
3. Capacity
4. Sustainability



*Master Plan Improvement Concepts*

# **Master Plan Improvement Concepts**

Safety and Security

Efficiency and Revenue

Capacity

Sustainability







# Meeting Summary

## **Nantucket Memorial Airport Master Plan**

Working Group meeting, December 18, 2014, 3:00 p.m. • ARFF Building, Nantucket Airport  
Attendees: See page 3.

### **Welcome and Introductions**

Anne McKinnon, Jacobs Engineering Group, led introductions. Working Group meetings are open to the public and anyone is welcome to attend.

### **Review of Master Plan Status**

Bill Richardson, Jacobs, gave an update on Master Plan progress since the May Working Group workshop. Two parallel efforts have been underway: identifying projects to include in the Capital Improvement Program (CIP) and the long-range policy issues that have emerged as important through the Master Plan process. The next steps in the planning effort are to finalize the five-year CIP improvements plan; develop the Financial Business Plan; prepare the Airport Layout Plan for FAA approval; and prepare the Environmental Notification Form for the five-year improvements plan. The Master Plan should be complete in spring 2015.

### **Master Plan Improvement Concepts**

Richardson described the five categories of improvement concepts that are key to the CIP:

1. Safety and Security;
2. Capacity;
3. Efficiency;
4. Revenue Enhancement; and
5. Environmental/Sustainability.

#### ***I. Recommended Safety and Security Concepts:***

1. Terminal apron repaving in seven phases
3. Create new jet airline parking position to avoid Runway 15 protected airspace
4. Redesign South Apron in five phases to enhance safety, reduce congestion and meet FAA wingspan standards
5. Separate taxiways E and G for compliance and to increase operational efficiency
6. Create Runway 24 high-speed exit taxiway for safety, noise reduction and operational efficiency
7. Runway 33 high-speed exit taxiway and stub taxiway to Runway 33 end.
8. Information Technology and security system upgrades
  - a. Integrate terminal P.A. system with Flight Information Display
  - b. Vehicular and pedestrian access controls
  - c. Consolidate communications systems in main terminal
  - d. New communications pathways

#### ***II. Terminal and Airfield Capacity Concepts***

1. Temporary tent/secure hold room to address seasonal congestion
3. Terminal 10-year plan to convert bag claim to second hold room and build new bag claim
4. Terminal 20-year plan for major terminal renovation/expansion to add TSA, concession, Airport Security office space and restrooms.



### ***III. Efficiency Concepts***

1. New FAA request for ACK to fund balance of Tower rehab (\$1 million)
2. New Airport Ground Support Equipment (GSE) storage building
3. New 10,000 s.f. addition to Snow Removal Equipment garage to consolidate GSE
4. Manager's House/Thompson House rehab

Tom Rafter, ACK Manager, gave an update on the Tower rehab. The Airport received a \$3.4 million earmark from FAA. At 75% design, the construction estimate was \$1 million more than the earmark. The Airport reduced the scope of the rehab to cut costs, but there is still \$1 million needed to complete the rehab. The additional \$1 million would be paid by the Airport to complete phase 2 of the basic improvements. Rafter said construction bids are due in February and there's a Sept. 30 deadline for the project. There was discussion about the manager's house recommendation. The issue of housing for the Airport manager has been around for 10 years. It was agreed that the recommendation to provide housing for the Airport manager should be independent of action involving the existing building or proposed structure.

### ***IV. Revenue Enhancement Concepts***

1. Swap or lease non-aviation surplus parcels
2. Expand Bunker Area Industrial Development to enhance Airport revenue and address island-wide demand (downtown bulk fuel farm will be relocated to Town-owned land east of the ACK Bunker Area)
3. Develop a remote commercial vehicle parking area on Bunker Road to address existing demand
4. Lease four Delta non-aviation parcels not including ballfields (parcels on Sun Island Road, Nobadeer Farm Road, and Nobadeer Farm Road/Milestone Road); rezoning needed to permit housing
5. Encourage private-sector development of large GA jet hangars
6. Encourage private-sector development of GA hangar-commercial combo space to address demand
7. Encourage private-sector development of GA on North Apron to address demand
8. Review rates and charges with the goal of establishing an equitable system (includes ground leases, parking, wing-span vs. weight-based fees, etc.) and benchmarking comparable airports' rates and charges.

Discussion expanded on and clarified the proposed concepts. Tom Quigley, Surfside Assn., suggested weight-based charges with a surcharge for over-sized wings. Peter Farrell, Cape Air, asked about demand for hangars. Rafter said there is demand for small, cheap hangar space, and the Airport may want to be able to respond to requests for big hangars. On the issue of housing, Rafter said if the Airport were to participate in a hotel development it would require a block of rooms for workers on the island. Review of parking lot operations and rates could include restructuring the overnight rate, new equipment, private operator, etc.

### ***V. Environmental and Sustainability Concepts***

1. Develop 17-acre solar array in Bunker Area
2. Develop 23-acre solar array adjacent to Runway 24
3. Promote increased use of bus, ride share and bike access to ACK
4. Reduce ramp lighting with Pilot-Controlled Lighting (PCL)
5. Coastal management
  - a. Control access to bank?
  - b. Protect bank from erosion to reduce risk to airfield?

Arthur Gasbarro, Airport Commission, suggested dropping the solar array concept at Runway 24 due to rare species environmental mitigation costs. There was general agreement that controlling access to the coastal bank is needed, but the concept of actively protecting the bank from erosion was seen by many to be unnecessary at this time. Ernie Steinauer, Mass. Audubon, said keep monitoring the rate of erosion and reevaluate later. Ramp



electrification to reduce APU use was discussed, but many felt this is a low priority since the Airport provides portable APUs.

### **Q & A/Discussion**

The group reviewed some of the concepts and answered priority preference questions using the Keypoint touchpads related to the five improvement concepts categories. See attached for questions and results. The results show the Working Group prioritized many of the proposed projects as “Year 1” activities. Airport staff will consider the Working Group input as it works to balance the Airport’s needs.

### **Next Steps**

- Finalize the 5-year CIP improvements plan
- Develop the Financial Business Plan
- Prepare the ALP for FAA approval
- Prepare Environmental Notification Form for the 5-year improvements plan

No additional Working Group meetings are planned. Updates and final master plan elements will be sent electronically to Working Group members and posted on the Nantucket Airport Master Plan webpage. Master Plan information will be disseminated to the public in spring 2015 using a variety of techniques.

The meeting adjourned at 5:04 p.m. If your recollection of the meeting is different, please let Mae Williams know as soon as possible ([mwilliams@nantucketairport.com](mailto:mwilliams@nantucketairport.com)).

## **Nantucket Airport Master Plan Working Group meeting attendees**

December 18, 2014

<b>Name</b>		<b>Organization</b>
Diane	<b>Archer</b>	resident*
Dan	Drake	Chair, Nantucket Airport Commission
Bob	<b>Egan</b>	Nantucket Flying Association
Peter	Farrell	Cape Air
Arthur	<b>Gasbarro</b>	Vice chair, Nantucket Airport Commission
Katie	Hogue	Jacobs Engineering
P. J.	<b>Martin Smith</b>	Nantucket Chamber of Commerce* (first half of meeting)
Anne	McKinnon	Jacobs Engineering
Pat	Newton	Surfside Association
Andrea	Planzer	Nantucket Airport Commission
Tom	<b>Quigley</b>	Surfside Association
Tom	<b>Rafter</b>	Manager, Nantucket Airport
Allen	<b>Reinhard</b>	Nantucket Civic League
Bill	Richardson	Jacobs Engineering
Ernie	<b>Steinauer</b>	Mass. Audubon Society
Jeanette	Topham	Nantucket Airport Commission
Mae	Williams	Nantucket Airport

Working Group Members Absent:

Sam Bailey, Armando Cardenas, Carol Dunton, Leslie Johnson, David Sylvia, Andrew Vorce

Working Group members shown in **bold**

\* Participated by telephone and WebEx

# **ACK Working Group Priorities**

Meeting #4 • December 18, 2014

Discussion Questions



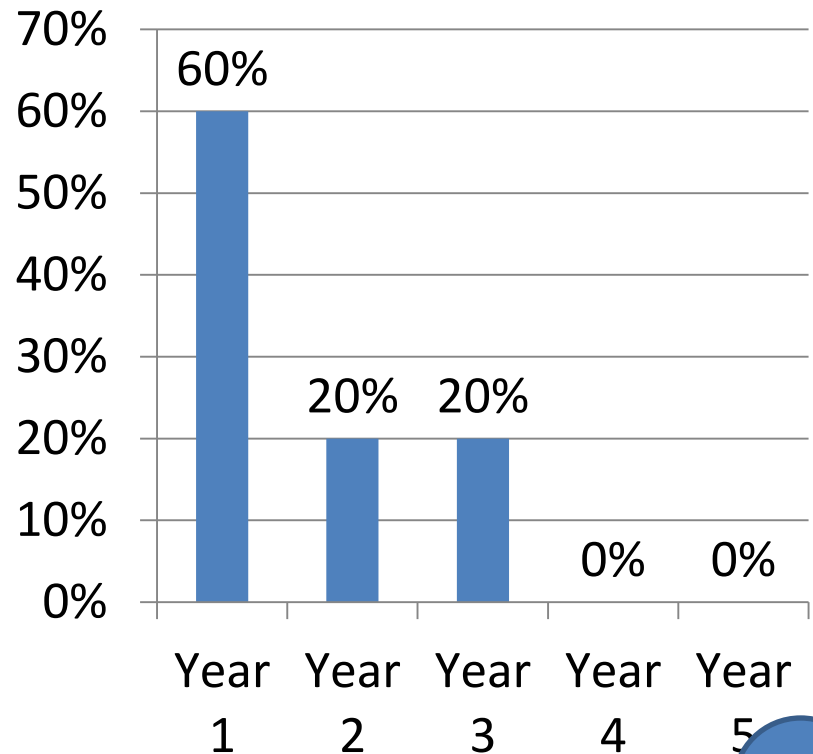
# Proposed Projects Priorities



# Terminal Secure Hold Room Options

## Select Timeframe Priority (year)

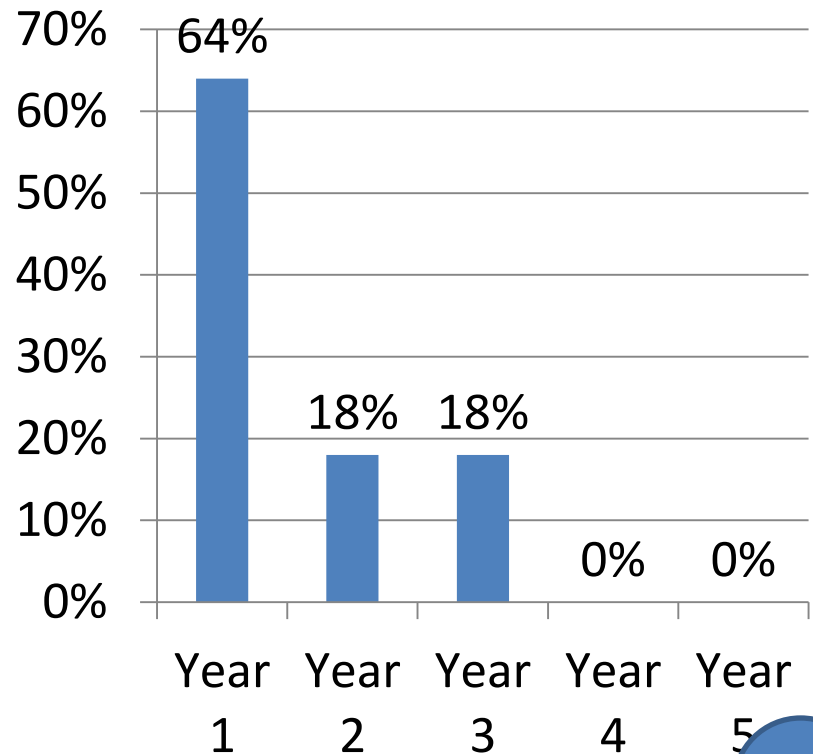
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# Airport Manager's/Thompson House

## Select Timeframe Priority (year)

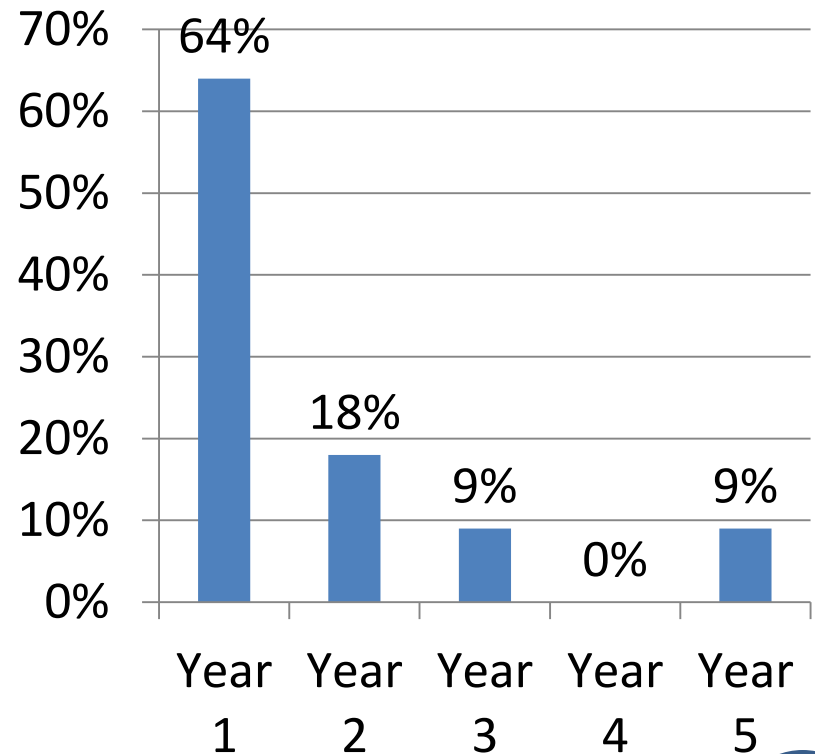
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# Air Traffic Control Tower Rehabilitation

## Select Timeframe Priority (year)

1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5

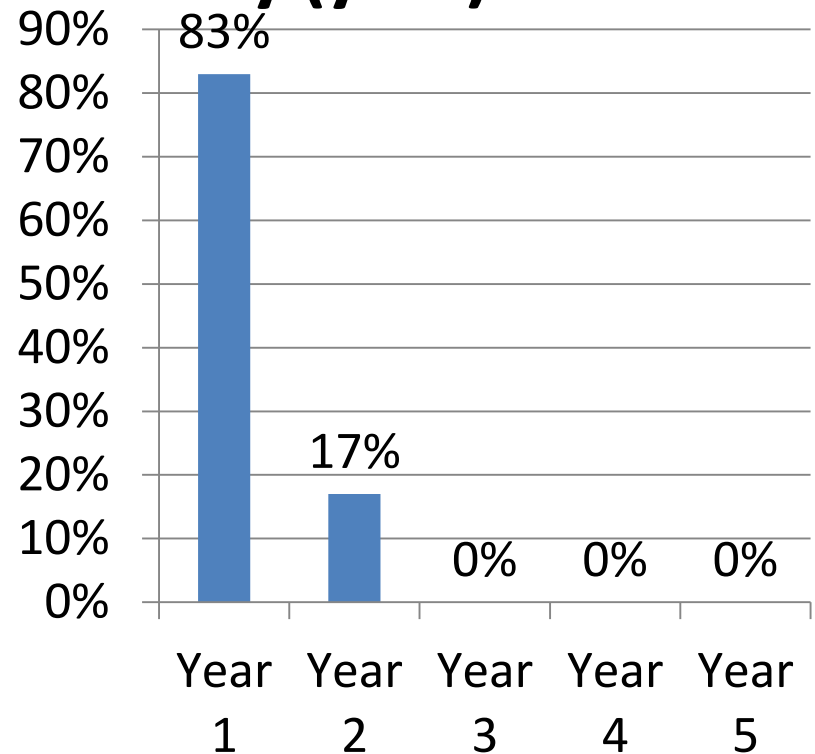




# Wing-Span vs. Weight-Based Fees/ Rates & Charges

## Select Timeframe Priority (year)

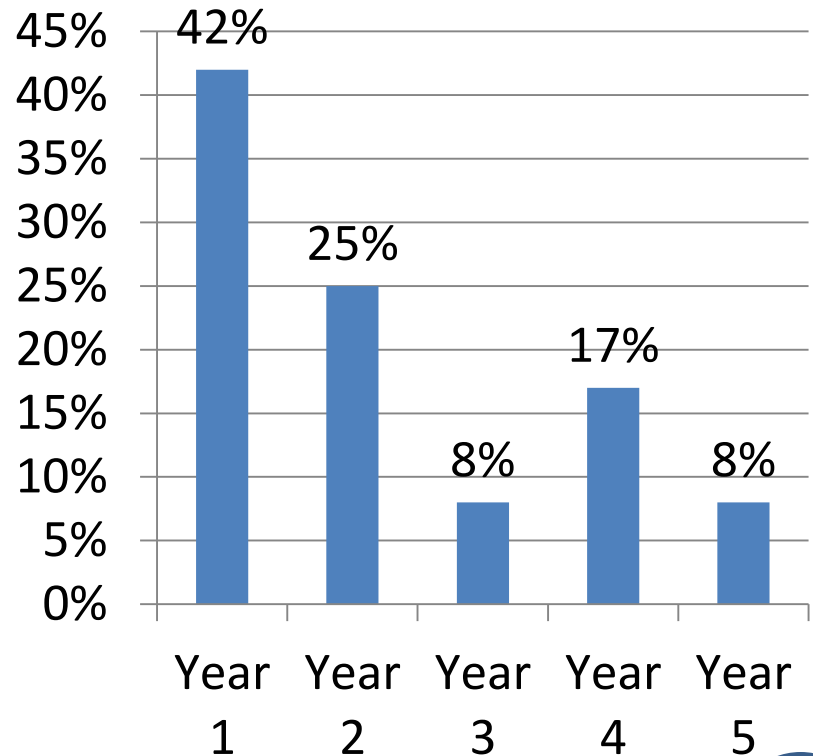
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# Combo GA Hangars/Commercial Space

## Select Timeframe Priority (year)

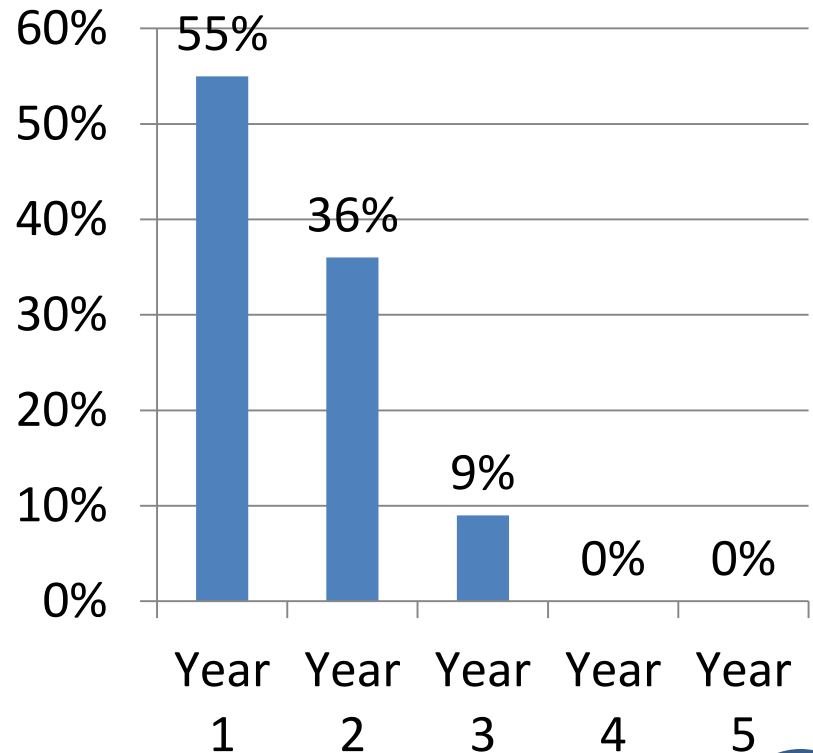
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# Expand Bunker Area Industrial Development

## Select Timeframe Priority (year)

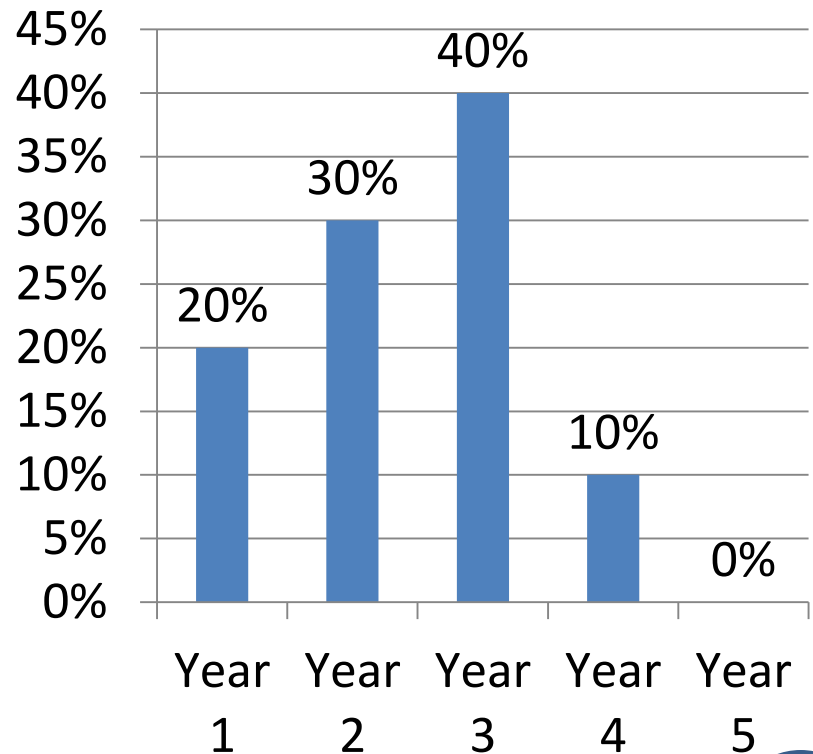
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# Delta Parcel Lease

## Select Timeframe Priority (year)

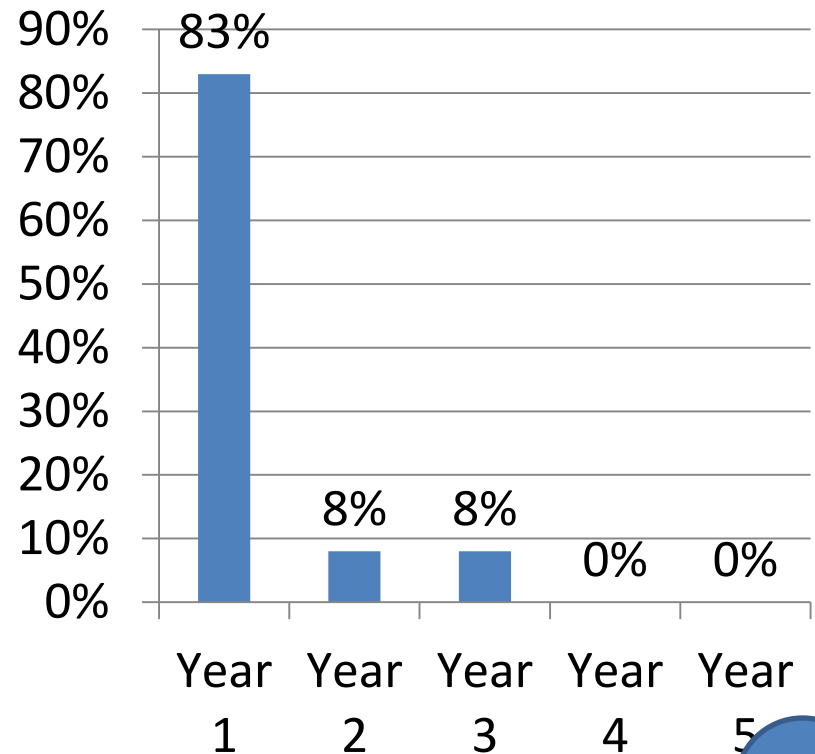
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# Parking Lot Operations & Rates

## Select Timeframe Priority (year)

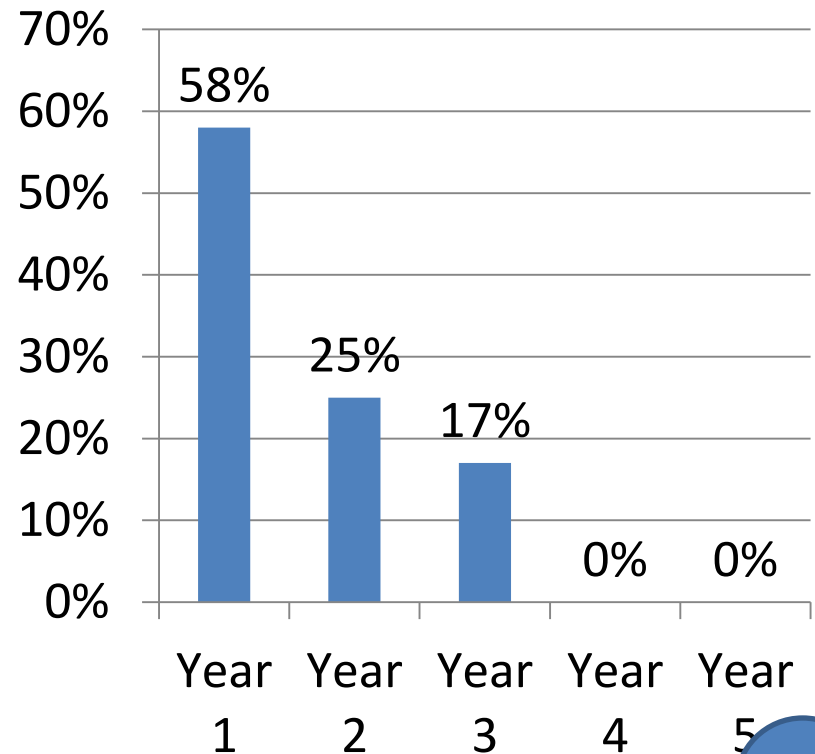
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# Bunker Road Commercial Vehicle Parking

## Select Timeframe Priority (year)

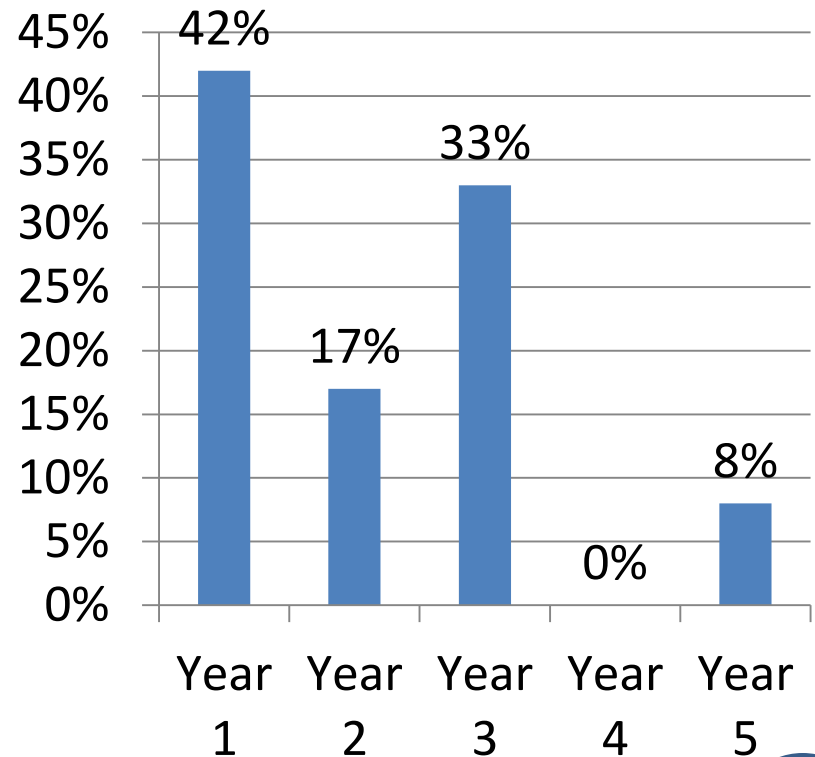
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# Flex Space Use: Terminal and GA Bldg.

## Select Timeframe Priority (year)

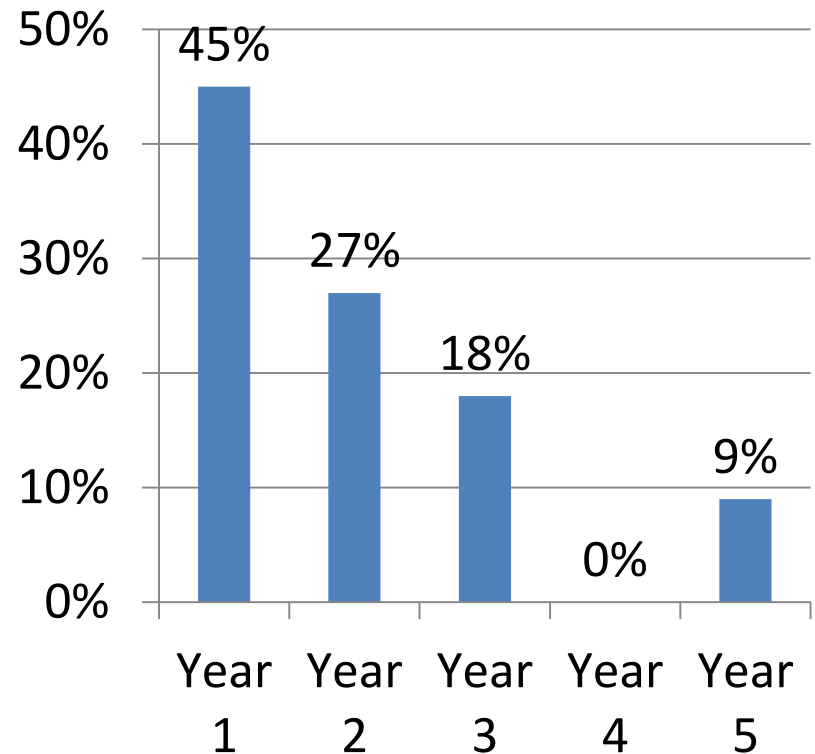
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# GA Revitalization & Special Events

## Select Timeframe Priority (year)

1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5

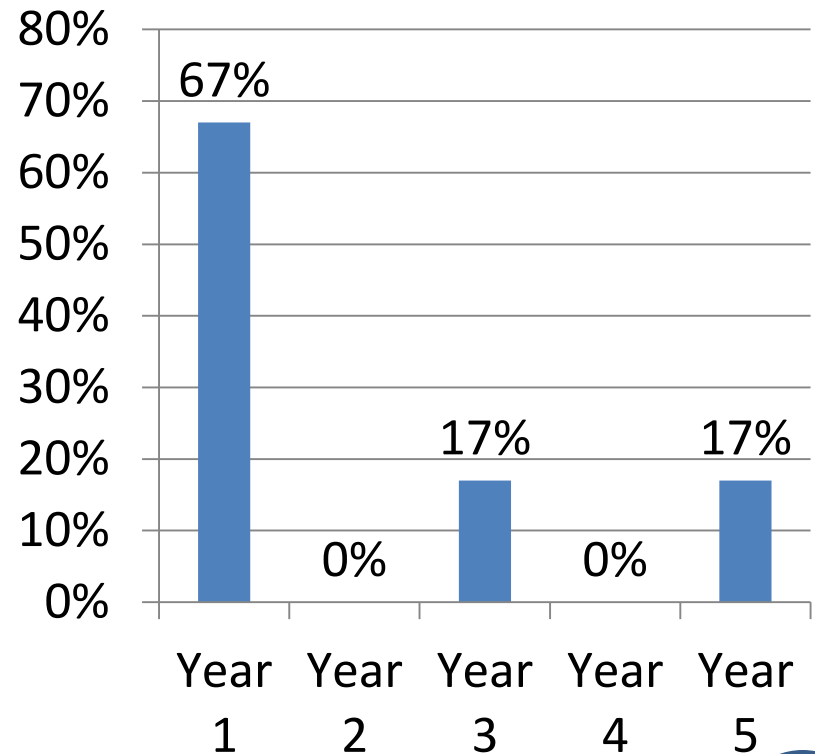




# Coastal Management Initiative

## Select Timeframe Priority (year)

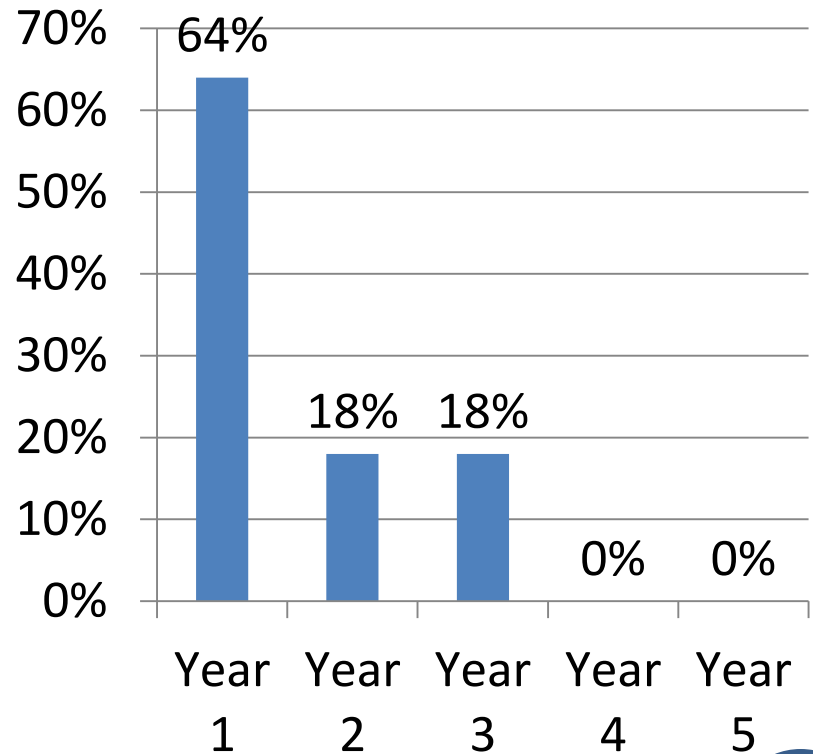
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# Apron Lighting Control

## Select Timeframe Priority (year)

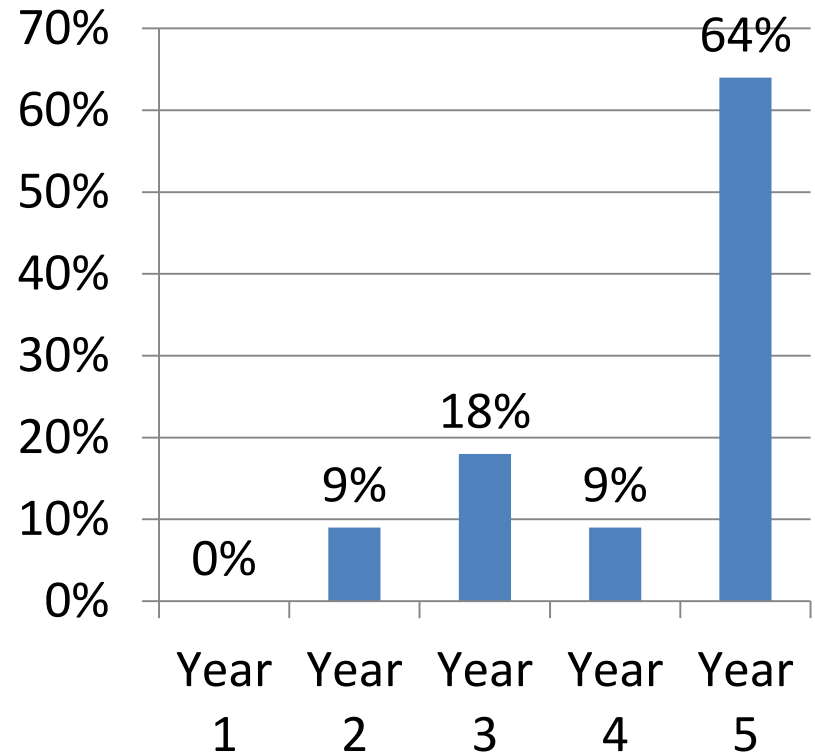
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# Ramp Electrification—VALE (Voluntary Airport Low Emissions Program)

## Select Timeframe Priority (year)

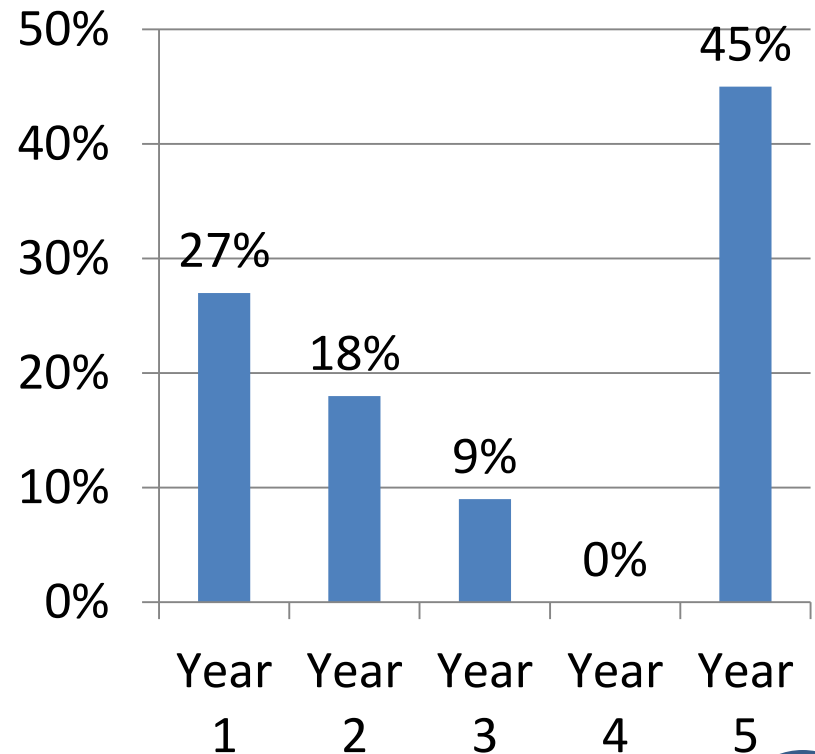
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# Bunker Area Solar Development

## Select Timeframe Priority (year)

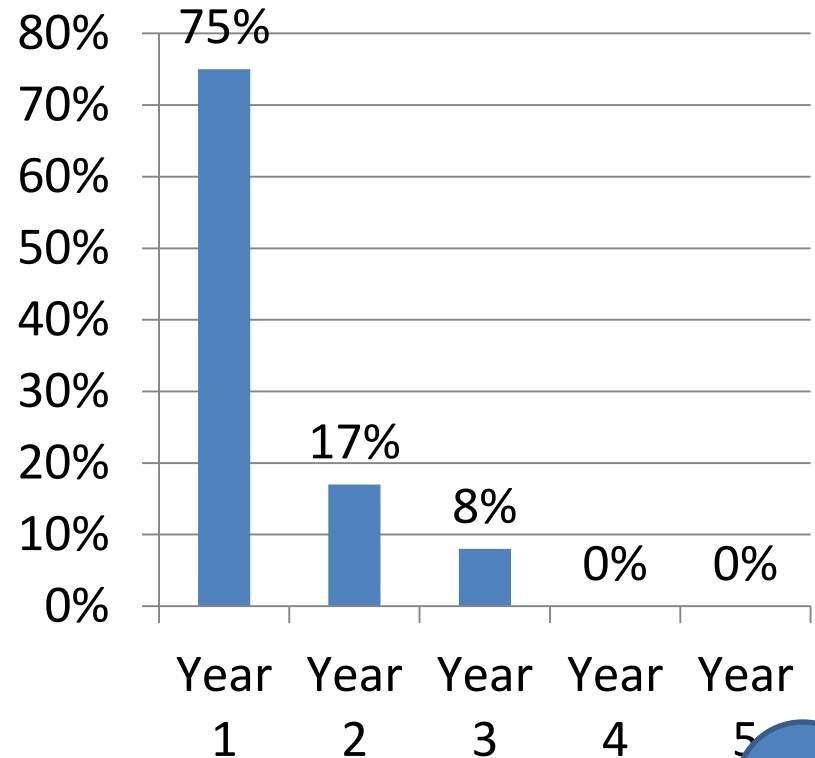
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# “Fly Friendly” Aircraft Noise Mitigation

## Select Timeframe Priority (year)

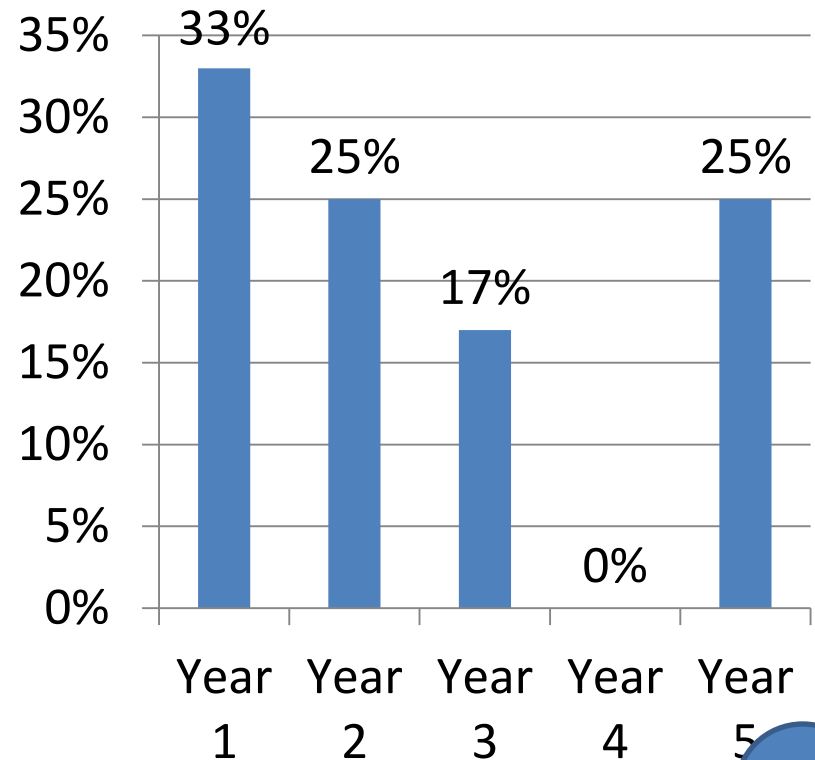
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# Promote Bike, Transit, Vans, etc,

## Select Timeframe Priority (year)

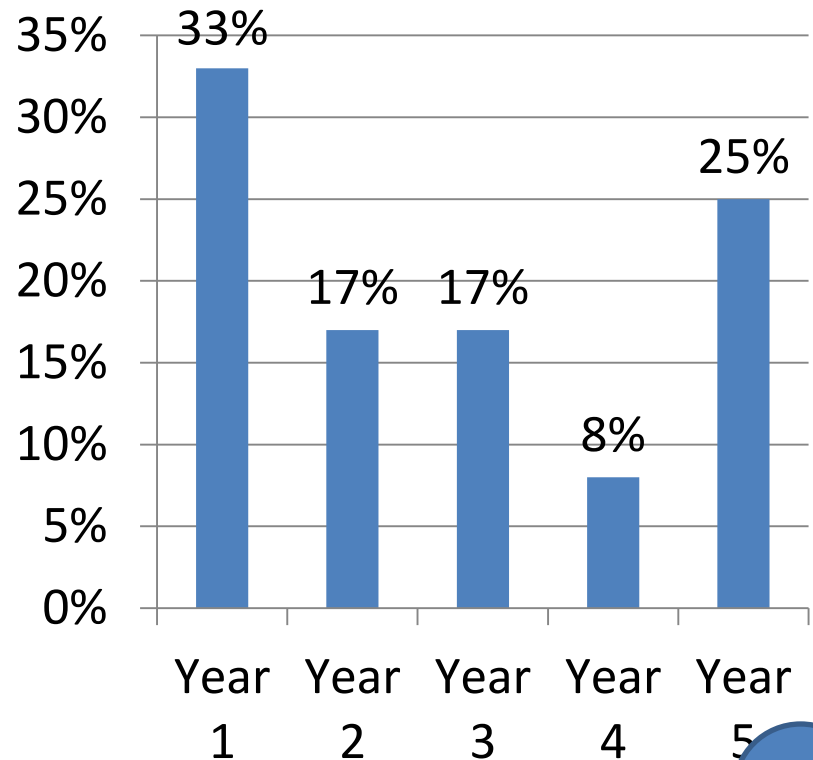
1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



# Bike Share/Rental Program

## Select Timeframe Priority (year)

1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5



Nantucket Airport Master Plan  
 MASTER PLAN ALTERNATIVE CONCEPTS - PRIORITY LIST

**Advisory Group Preference Ratings**

0 Years- 5 Years

Project Chapter	Project	Engineers Probable Cost	FAA Eligible		Recommended		Total Time Frame	Time Frame				
			Yes	No	Yes	No	0 Years - 5 Years	1	2	3	4	5
<b>CAPACITY/TERMINAL AIRFIELD CONCEPTS: 0-5 Years</b>												
7.2.1	Terminal Secure Hold Room Concepts											
	Seasonal Tent/Secure Hold Room	\$20K		✓			X	60%	20%	20%	0%	0%
<b>Sub Total=</b>		<b>\$20K</b>										
<b>EFFICIENCY-ACCESSORY CONCEPTS: 0-5 Years</b>												
7.3.4	Need for Providing Airport Manager's House	\$750K		✓			X	64%	18%	18%	0%	0%
	Air Traffic Control Tower Rehabilitation	\$1M		✓			X	64%	18%	9%	0%	9%
<b>Sub Total=</b>		<b>\$1.75M</b>										
<b>REVENUE-ENHANCEMENTS: 0-5 Years</b>												
7.4.10	Wingspan vs. Weight-based Fees/Rates and Charges	N/A		✓	✓		X	83%	17%	0%	0%	0%
7.4.2	Combo GA Hangars/Commercial Space (\$2.5M Private Costs)	N/A		✓	✓		X	42%	25%	8%	17%	8%
7.4.6	Expand Bunker Area Industrial Development	N/A		✓	✓		X	55%	36%	9%	0%	0%
7.4.7	DELTA Parcel/Public Employee Housing/Seasonal Employee	N/A		✓	✓		X	20%	30%	40%	10%	0%
7.4.4	Parking Lot Operations: Hourly vs. Overnight Rates / Access Gate	\$80K		✓	✓		X	83%	8%	8%	0%	0%
7.4.5	Bunker Road Commercial Vehicle Parking Areas	\$15K		✓	✓		X	58%	25%	17%	0%	0%
7.4.11	Revenue and Enhancement Concepts - Flex Space Terminal/GA	N/A		✓	✓		X	42%	17%	33%	0%	8%
7.4.12	GA Revitalization/Special Events/Owner Type Group Fly-ins	N/A		✓	✓		X	45%	27%	18%	0%	9%
<b>Sub Total=</b>		<b>\$2.6M</b>										
<b>ENVIRONMENTAL-SUSTAINABILITY: 0-5 Years</b>												
7.5.3	Coastal Management Initiative (On-Going)	\$250K (\$50K Per-Year for 5 Years)		✓	✓		X	67%	0%	17%	0%	17%
7.5.12	Apron Lighting Control/PCL Dimmer Concept	\$80K	✓		✓		X	64%	18%	18%	0%	0%
7.5.11	Ramp Electrification- VALE	\$4M		✓	✓		X	0%	9%	18%	9%	64%
7.5.1	Solar Array Development											
7.5.1.1	Bunker Area Solar Development	N/A		✓	✓		X	27%	18%	9%	0%	45%
7.5.10	"Fly Friendly" Aircraft Noise Mitigation Measures (On-Going)	\$50K (\$10K (Per-Year)		✓	✓		X	75%	17%	8%	0%	0%
7.5.6	Advertise Rental Cars/Taxis/Bike/Courtesy Vans/NRTA	\$25K (\$5K Per-Year)		✓	✓		X	33%	25%	17%	0%	25%
7.5.8	Bike Share/Rental Program	N/A		✓	✓		X	33%	17%	17%	8%	25%
<b>Sub Total=</b>		<b>\$4.4M</b>										

AIP ELIGIBLE