

**Boston Overflight Noise Study (BONS)  
BOS/TAC Meeting**

**MEETING SUMMARY**

May 15, 2006

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**Attendance:**

**BOS/TAC Members:**

John Silva (FAA Airports), Jon Harris (FAA AT ANE), Steve Kelley (FAA ETSU), Brian Brunelle (FAA TRACON), Gail Lattrell (FAA NE Region Airports), Gary Hufnagle (FAA Boston Tower), Ernestine Gatewood (FAA ATO), Flavio Leo (Massport), Steve Lathrop (Hull), Maura Zlody (Boston Environmental Department), Sandra Kunz (Braintree), John Stewart (South End), Bob Driscoll (Winthrop), Dick Morrison (Chelsea), Ralph Dormitzer (Cohasset), Dovi Abbey (South End), Jerry Falbo (Winthrop), John Donnelly

**Project Consultant (PC) Team:**

John Williams (Ricondo & Associates, Inc.), Stephen Smith (Ricondo & Associates, Inc.),

**Independent Consultant (IC) Team:**

Jon Woodward (Landrum & Brown)

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**1. Opening Remarks**

Ralph Dormitzer opened the meeting with the statement that members should maintain the CAC/IC document similar to the Phase 1 document and addressed concern that the review process should be open and that all CAC members take the time to review and provide input, but also should be given the opportunity to work face to face with the FAA in working out elements of the scope. John Stewart added his concerns related to a timely review and the ability for CAC members to respond under a tight schedule. He also added in concerns related to CAC coordination throughout the Phase 2 process, and hope that it is improved compared to Phase 1. John Stewart reported that there is not a thorough community outreach. Flavio Leo suggested that the Phase 1 report include summary information on the public outreach. Steve Lathrop mentioned that there needs to be more direct communication and participants suggested that following up press conferences with public workshops might be useful. Other ideas included advertisements, more current website updates, media/political representative outreach, further letter writing to invite other communities to the CAC and enhance CAC to consultant communication channel.

Ralph Dormitzer explained that there needs to be a more expeditious update of the project website. It was suggested to define “close-in” communities. Bob Driscoll mentioned that Phase 1 looked further out and suggested that Phase 2 needs to look closer in terms of ground noise. Steve Kelley stated that locations are too vague to allow flexibility.

PC and the FAA provided Mr. Stewart a brief synopsis of how they imagined CAC coordination would occur, and emphasized the importance of it but also establish a balance between coordination and technical analysis for budgetary purposes.

Massport emphasized the importance of IC's role during Phase 2 regarding CAC coordination. Steve Lathrop requested information related to the Phase 2 scope of work schedule and what the specific deadline is. Gail Lattrell emphasized the importance of submitting the grant application paper work by the end of June. The scope of work and budget are required elements of the paper work.

After opening remarks, Steve Smith reviewed the meeting agenda and the objective of the meeting.

## **2. Phase 2 Alternatives**

Mr. Smith reviewed the alternative categories that would be evaluated in Phase 2, including those alternatives that were deemed to have potential environmental impacts as well as PRAS and ground noise.

## **3. Statement of Work Discussion Topics**

Bob D'Amico addressed his concerns related to the center taxiway project and how it will be evaluated in Phase 2. His concern is primarily related to BOS/TAC's ability to evaluate the center taxiway as an element of Phase 2. He recommended that members of BOS/TAC or CAC meet with the center taxiway subcommittee to discuss their thoughts regarding the project. Several questions regarding the study being conducted by the FAA were asked and addressed by Gail Lattrell. The FAA and PC described how the center taxiway will be included in Phase 2. If the FAA decides to proceed with the project, the center taxiway will be a component of the future No Action scenario (or future baseline) under the Phase 2 EIS evaluation.

Jerry Falbo reiterated concern with the centerfield taxiway and discussed necessary language adjustments in the statement of work for reaching the consensus. Language was adjusted in the introduction to specifically identify the center taxiway, which would be included as the No Action scenario if the FAA decides to proceed with the project (decision and supporting material associated with center taxiway project is expected to be made available to the public by the end of May).

### **There is consensus to use the term "centerfield taxiway" in further language.**

Maura Zlody explained that they need to get the protocol for an environmental justice analysis and Tina Gatewood reported that they will work this out with the communities. Maura expressed concern that the previous methodology was not good enough and is considered an understated impact. Dovi Abbey also provided similar remarks during this discussion. In addition, Mr. Abbey expressed hopes that the FAA will conduct an evaluation in line with EPA recommendations. Tina Gatewood reported that there have been revisions to environmental justice identification methodologies since the Airside Final EIS was published. John Silva explained the process that occurred during the Airside EIS and the issues that were addressed as FAA coordinated with EPA during the environmental justice evaluation. The FAA

plans to be consistent with current FAA guidelines regarding environmental justice identification.

In terms of project management, John Stewart explained that the BOS/TAC process is not optimal and claimed that the CAC and different communities have different perspectives. John Stewart suggested that the consultants need to work more with CAC and CAC needs to be working on the process more frequently. John Stewart explained that there is not enough time to coordinate scope of work with CAC and mentioned that they need to help get consensus.

Ralph Dormitzer explained that facilitated meetings have not worked and suggested that members try to find another way to get people to come. Steve Lathrop suggested having agendas in advance with regular schedules. Betty Derosier suggested that BOS/TAC identify a different process via the IC that will improve CAC participation. Specific recommendations were requested by PC to BOS/TAC members during the comment and review phase of the SOW regarding CAC coordination.

Steve Lathrop suggested that the PC participate more often. Betty D. suggested that the PC send notices electronically and wide spread when updates are posted to the public website. Betty also suggested that members have meetings at night when BOS/TAC and CAC members do not have time to meet.

**There was consensus that establishment of an email mailing list is essential.**

John Stewart expressed concern with the display of flight tracks over the ground. PC reported that the flight tracks collected for Phase 2 come from Massport's noise monitoring system, which collects directly from the FAA's radar system. The data provided are composed of nodes that are defined via latitude and longitude. Mr. Stewart's concerns is that background GIS maps and tracks are geographically correct. PC reported that as long as the data comes from the FAA, PC will assume the radar track locations are reasonably accurate.

Steve Lathrop reported that he did not fully understand use of radar data to develop flight tracks and expressed concern with using the average performers rather than the poor performers. Mr. Lathrop used the example of the Runway 22 departures used in Phase 1. Mr. Lathrop explained that samples used for Phase 1 were during unusually cool days and didn't go through the worst case. Mr. Smith emphasized that the samples used for Phase 1 were not for noise modeling, but for general operations analysis and illustration development of typical conditions. The use of 12 consecutive months to develop a baseline for Phase 2 will include data that involve statistical outliers (hot humid days). Ralph Dormitzer suggested adding standard deviation information and correlating or calibrating INM with noise. Mr. Smith addressed concern related to the term "calibrate" and FAA's policy of not allowing for INM calibration. IC concurred. The measurements provided by IC during Phase 2 will serve as a "verification" that the modeled input is deemed reasonable. Because it is based on a short duration sample, measured data should not be considered the

primary measuring stick for model output accuracy and precision. The measurements are expected to provide an indication that the input is not substantially flawed.

Steve Lathrop suggested looking at changing inputs to match the outputs, and requested that slant range be added as a baseline metric. Mr. Smith generally explained the iterative process involved with verifying input via output. Mr. Smith reported that the slant distance for the already specified grid points used for Phase 1 slant range calculation(5 grid points) is not in the baseline tasks and will add, which is already shown in 6.4.3.2 (alternative analysis). Regarding input verification, PC plans to utilize IC similar to Phase 1 in reviewing input and output. Steve Lathrop commented that the input development process should be indicated better in the SOW.

Mr. Lathrop explained that respite is the key element for assessing PRAS. Some discussion was held regarding respite metric ideas. Further discussion is needed. Massport used a specific metric in the past, and will provide information to BOS/TAC regarding its use.

Flavio Leo pointed out that page 34 explains that no alternatives will affect efficiency. Language regarding “FAA mission” will be changed to similar languages stated in the Airside EIS Record of Decision. Ralph Dormitzer suggested that the members make sure they address level flight and thrust on turns.

Flavio Leo also addressed concerns related to the mention of the court decision in the introduction. A resolution to the discussion was not provided, and further discussion delayed for the next meeting.

Steve Lathrop explained that they need to look at what would likely come back into Phase 2 or dropped if it longer provides benefit after the 18-step process. PC will assume that at most, three Early Implementation Alternatives will fall into Phase 2 evaluation for budgetary estimation purposes.

Steve Kelley reported that the FAA is to post comments and may change some of the language.

### **3. Review and Comment Process/Schedule**

Mr. Smith reviewed the review and comment process with BOS/TAC and emphasized the importance of receiving comments from all attendees. Mr. Smith also reviewed the schedule, with the grant application submittal serving as the milestone deliverable.

### **4. Closing Remarks**

The BOS/TAC members were reminded that meetings will be held on both June 7 and June 8. June 7<sup>th</sup> meeting objective is to review the Phase 1 noise analysis results, and June 8<sup>th</sup> to discuss comments and changes made to the Phase 2 scope of work.



# Boston Overflight Noise Study

**BOS/TAC Meeting**  
**May 15, 2006**



# Phase 2 Scope of Work

# Agenda



- **Opening Remarks**
- **Phase 2 Alternative Categories**
- **Phase 2 SOW Outline and Topics**
- **SOW Topic Discussion**
- **SOW Comment and Review Process**
- **Schedule**

# Phase 2 Alternative Categories



- **Flight Procedures (Phase 1)**
  - **Alternative 4 – Runway 14 Departures:** develop departure procedures to increase altitudes of aircraft over land. The intent of this alternative is to avoid overflights of Hull and increase altitude of aircraft at the point where their flight path crosses from the ocean to land. FAA-designed routing from Runway 14 was not available during Phase 1. Therefore, analysis for this alternative is to be addressed in Phase 2.
  - **Alternative 16 – Runway 32 Arrivals:** develop approach procedure that maximizes flight over water. The intent of this alternative is to minimize noise impacts to South Shore communities. FAA-designed routing to Runway 32 is not complete and is currently under review by FAA National Flight Procedures Office. Therefore, analysis for this alternative is to be addressed in Phase 2.
  - **Alternative 17 – Runways 27 and 33L Departures:** develop departure procedures for fanning. The intent of this alternative is to provide respite to close-in communities in departure areas of these runways.
  - **Alternative 18 – All Departure Runways:** develop cockpit alternatives for close-in noise abatement departure procedures. The intent of this alternative is to minimize noise impacts to close-in communities.

# Phase 2 Alternative Categories



- **Flight Procedures (Phase 1)**
  - **Alternative 19 – Runway 27 Departures:** establish balanced use of Runways 27 and 33L for departures. The intent of this alternative is to minimize noise to close-in communities. This alternative will be evaluated as a component of the Preferred Runway Advisory System (PRAS) evaluation.
  - **Alternative 20 – Runway 4L Departures and 22R Arrivals:** remove noise emission restriction to achieve more utilization of this runway. The intent of this alternative is to develop a more equitable distribution of noise impacts. This alternative will be evaluated as a component of the Preferred Runway Advisory System (PRAS) evaluation.
  - **Alternative 21 – All Departure Runways:** develop fanning procedures based on route of flight. The intent of this alternative is to disperse noise impacts in departure areas of runways.
  - **Alternative 22 – Runways 4R/L and 22R:** develop runway use procedure to more reasonably distribute operations between these runways in meteorological conditions with small tailwind components. The intent of this alternative is to provide more equitable distribution of noise impacts from Runways 4L/R and 22R. This alternative will be evaluated as a component of the Preferred Runway Advisory System (PRAS) evaluation.

# Phase 2 Alternative Categories



- **Flight Procedures (Phase 1)**
  - **Alternative 23 – Runway 27 Arrivals and Runway 15 Departures:** arrive on Runway 27 and depart on Runway 15 during late night hours. The intent of this alternative is to minimize noise impacts on South Shore/Hull. This alternative will be evaluated as a component of the Preferred Runway Advisory System (PRAS) evaluation.
  - **Alternative 24 – Runway 15R Departures:** implement a preferential runway use procedure during nighttime hours that places all departures on Runway 15R, unless tailwinds exceed 11 knots or departures exceed 60 per hour. The intent of this alternative is to reduce aircraft noise exposure during nighttime hours for communities in the departure area of Runway 27. This alternative will be evaluated as a component of the Preferred Runway Advisory System (PRAS) evaluation.
  - **Alternative 27 – Runways 4R/4L LDA Approaches:** develop offset approaches from the east and west. The intent of this alternative is to minimize noise to communities under the existing approach to 4R/4L.
  - **Alternative 28 – Runway 27 Departures:** modify Runway 27 departure procedure to an initial right turn in order to direct aircraft over the Charles River basin and away from heavily populated areas. The intent of this alternative is to reduce the aircraft noise exposure for the communities in the departure area of Runway 27.

## Phase 2 Alternative Categories

- **PRAS**
- **Ground Noise**



# Work Plan General Outline



## **1 PROJECT MANAGEMENT**

- 1.1 Project Administration and Coordination**
- 1.2 CAC Coordination**
- 1.3 BOS/TAC Meetings**
- 1.4 FAA Coordination**
- 1.5 Work Scope Re-Assessment**

# Work Plan General Outline



## **2 PUBLIC COORDINATION/INVOLVEMENT**

**2.1 Public Workshops**

**2.2 Web-Based Periodic Community Updates**

# Work Plan General Outline



## **3 PHASE 1 IMPLEMENTATION SUPPORT**

**3.1 Implementation Monitoring Assistance**

**3.2 Post-Implementation Assessment**

# Work Plan General Outline



## **4 STUDY AREA DEFINITION**

# Work Plan General Outline



## **5 DEVELOP BASELINE CONDITIONS**

### **5.1 GIS Database**

**5.1.1 Update/Verify Land Use Base Map**

**5.1.2 Update/Verify Socioeconomic Data**

**5.1.3 Update/Verify Natural & Cultural Resources Data**

### **5.2 Fast-time Air Traffic Simulation**

**5.2.1 Model Calibration**

**5.2.2 Development of Baseline Schedule**

**5.2.3 Baseline Modeling**

### **5.3 Baseline Noise**

**5.3.1 Noise Modeling Input and Methodology**

**5.3.2 INM DNL 75, 70, 65, and 60 dB Contours**

**5.3.3 Alternative Noise Metrics**

**5.3.4 Identify Population and Noise Sensitive Area Impacts**

**5.3.5 Ground/Taxiway Noise**

# Work Plan General Outline



## **6 ALTERNATIVES IDENTIFICATION & EVALUATION**

### **6.1 Identify Alternatives**

**6.1.1 Alternatives Recommended for Evaluation from Phase 1**

**6.1.2 Ground Noise Alternatives**

**6.1.3 PRAS Alternatives**

**6.1.4 Other Alternatives**

### **6.2 Level 1 Screening Analysis**

### **6.3 Level 2 Screening Analysis**

**6.3.1 Refine Alternatives**

**6.3.2 Screening Analysis**

### **6.4 Level 3 Screening Analysis**

**6.4.1 Forecasting and Flight Schedule**

**6.4.2 Operational Modeling**

**6.4.3 Noise Modeling**

**6.4.4 Air Quality Modeling**

**6.4.5 Cumulative Effects Screening Analysis**

# Work Plan General Outline



## **7 ENVIRONMENTAL IMPACT STATEMENT**

**7.1 Review Existing Documentation**

**7.2 Assemble and Maintain Administrative Record and Index**

**7.3 EIS Scoping**

**7.4 Preparation of Draft Environmental Impact Statement (DEIS/DEIR)**

**7.5 Public Hearing**

**7.6 DEIS/DEIR Comments Review**

**7.7 Prepare Final Environmental Impact Statement (FEIS)/Final Environmental Impact Report (FEIR)**

**7.8 FEIS/FEIR Comments**

**7.9 Record of Decision**

**7.10 Freedom of Information Act (FOIA) Requests**

## Phase 2 Work Plan Topics



1. **Project Management & Coordination**
2. **Public Coordination/Involvement**
3. **Develop Baseline Conditions**
4. **Alternatives Identification & Evaluation**
5. **Environmental Impact Statement**

# 1. Project Management & Coordination



- **Continued Coordination with BOS/TAC, IC, and CAC**
- **Frequent teleconferences and project updates with BOS/TAC and IC**
- **Monthly project schedule updates**
- **Quarterly meetings with BOS/TAC, CAC**
- **BOS/TAC Info-hub Web Site Updates**
- **BONS Forum Web Site**

Topics

## 2. Public Coordination/Involvement



- **Three Public Meetings**
  - Present findings of Phase 1 and Scoping Meeting for Phase 2
  - Present preliminary findings of Phase 2
  - Public Hearing
- **Web-based Updates**
  - [www.bostonoverflightnoisestudy.com](http://www.bostonoverflightnoisestudy.com)
  - Quarterly review/updates

### 3. Develop Baseline Conditions



- **Update GIS Data from MassGIS**
- **Fast-time Air Traffic Simulation (TAAM)**
  - Provide input for noise modeling of aircraft ground movement, evaluation of PRAS, aircraft departure and arrival profiles
  - Provide output to support operational analysis.
- **Baseline Noise**
  - INM flight tracks, flight profiles, DNL contours
  - Alternative noise metrics
  - Ground/taxiway noise

## 4. Alternatives Identification & Evaluation



- **Alternatives recommended for additional evaluation from Phase 1**
- **Ground noise alternatives**
  - Taxi operations north of Runway 15R-33L
  - Taxiway N
  - Single-engine taxi procedures
  - Incorporate elements from existing center taxiway study
  - Identification of other potential alternatives.
- **PRAS alternatives**

## 4. Alternatives Identification & Evaluation



### **Three-tier Screening Analysis**

- **Level 1 – Safety and Operational Criteria**
- **Level 2 – Operational Issues and Noise Reduction Potential**
  - Determine potential AT procedures
  - Identify potential flight tracks
  - Determine viability (benefits and impacts)

## 4. Alternatives Identification & Evaluation



- **Level 3 – Quantitatively Examine Noise Reduction Potential**
  - Fast-time air traffic simulation (TAAM)
  - Noise modeling
  - Air quality modeling
  - Cumulative effects screening analysis

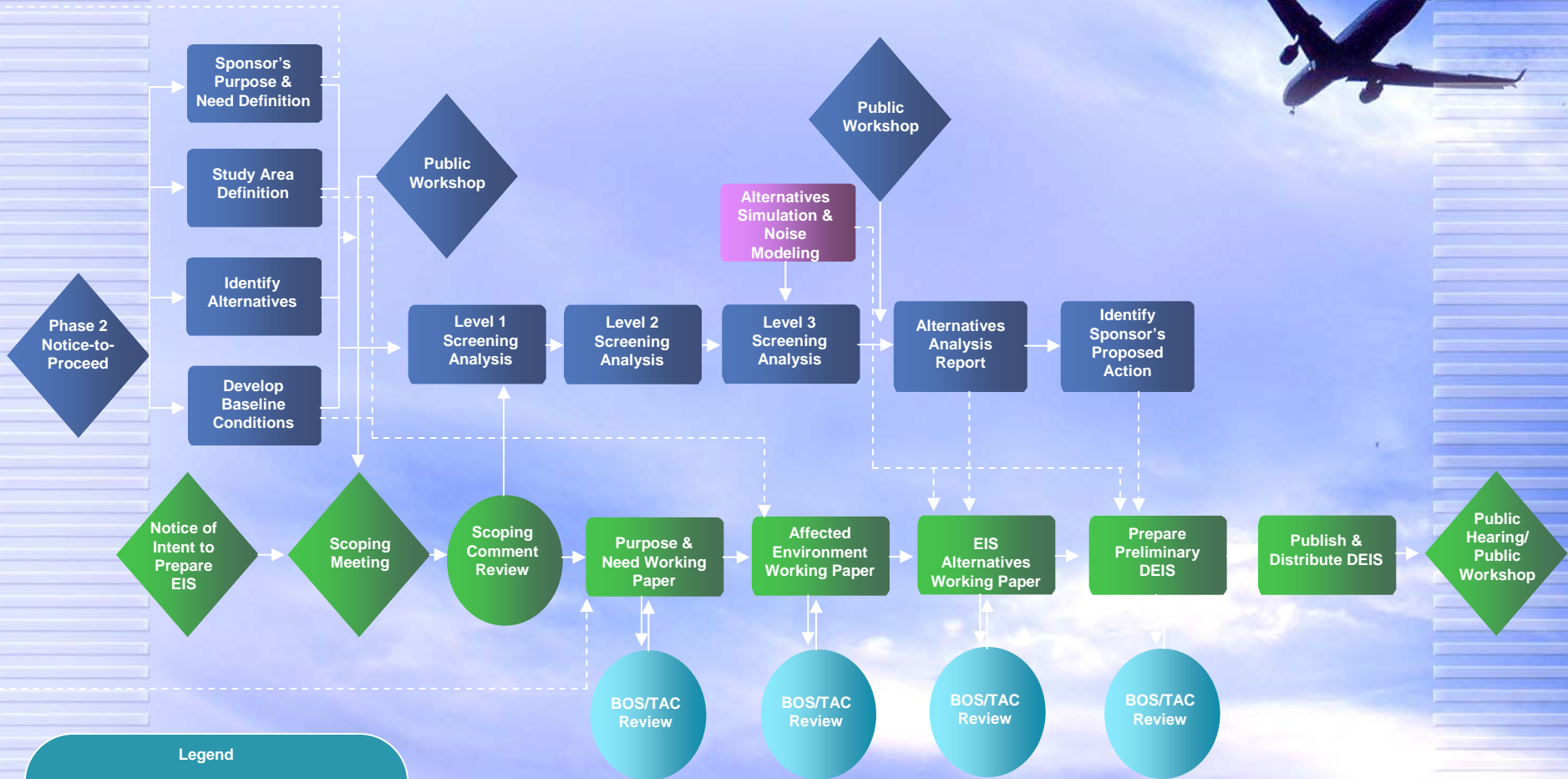
## 5. Environmental Impact Statement



- **FAA NEPA Process**
- **Environmental Notification Form (ENF) Submittal**
- **Scoping**
- **Draft EIS/EIR**
- **Public Hearing**
- **Final EIS/EIR**

Topics

# Phase 2 EIS Process (Parallel Process) (Through DEIS Public Hearing)



**Legend**

- BOS/TAC Activities, including PC & IC
- FAA Activities, including PC
- Massport, CAC, & IC Activities
- PC Activity with IC and BOS/TAC Review

Parallel Process

Topics

# Work Plan Development Process



- **Preliminary Draft (PC/IC) - completed**
- **BOS/TAC First Review and Comment – in process (April 19<sup>th</sup> to May 17<sup>th</sup>)**
- **Compile Comments and Draft Responses (May 18<sup>th</sup> to May 27<sup>nd</sup>)**
- **Prepare and Distribute 2<sup>nd</sup> Version for Review (May 30<sup>th</sup> to June 2<sup>nd</sup>)**
- **BOS/TAC Second Review (June 2<sup>nd</sup> to June 8<sup>th</sup>)**
- **Finalize Scope and Budget – June 8<sup>th</sup> to June 30<sup>th</sup>**
- **Submit Grant Application – June 30<sup>th</sup>**

# Program Schedule

## Boston Overflight Noise Study PROJECT ACTIVITY CALENDAR - PHASE 1 and 2 ACTIVITIES

Mon	Tue	Wed	Thu	Fri
5/8	5/9	5/10	5/11	5/12
			CAC Web Meeting regarding Phase 1 alternative descriptions (IC)	
5/16	5/18	5/17	5/18	5/19
BOS/TAC and CAC meeting to review Phase 2 SOW (IC/PC)		Phase 2 SOW comments submittal deadline	Phase 1 Summary Findings - PC submits first package to BOS/TAC	
5/22	5/23	5/24	5/25	5/26
			Phase 1 Summary Findings - PC submits first package to BOS/TAC	
5/29	5/30	5/31	6/1	6/2
			(1) Phase 1 Summary Findings - PC submits final package to BOS/TAC (2) CAC Meeting to review Phase 1 Findings with consultants (PC/IC)	2nd Draft Phase 2 SOW Distributed to BOS/TAC and CAC for review
6/5	6/6	6/7	6/8	6/9
		BOS/TAC Meeting - Phase 1 Findings	BOS/TAC Meeting - Phase 2 SOW (9am-4pm) CAC Meeting - Phase 1 Findings (5-10pm)	
6/12	6/13	6/14	6/15	6/16
				Consultants submit draft Phase 2 budget for FAA/Massport review
6/19	6/20	6/21	6/22	6/23
6/26	6/27	6/28	6/29	6/30
				Finalize Phase 2 SOW and budget FAA Grant Application submitted

### Meeting Locations and Time

Date	Time	Location	Subject
Monday, May 15th	9am to 4pm	Volpe Transportin Center	CAC Mtg. to review preliminary Phase 2 Scope of Work (SOW)
Thursday, June 1st	5:30pm to 10pm	Cambridge Marriott	CAC Mtg. to review Phase 1 Findings
Wednesday, June 7th	9am to 4pm	EPA Boston Hdqtrs, One Congress St	BOS/TAC Mtg. to review Phase 1 Findings
Thursday, June 8th	9am to 4pm	EPA Boston Hdqtrs, One Congress St	BOS/TAC Mtg. to review Phase 2 SOW
Thursday, June 8th	6pm to 9:30pm	Boston City Hall	CAC Mtg. To review Phase 1 Findings/Phase 2 SOW

- Phase 1 Activity
- Phase 2 Activity
- Combined Phase 1/2 Activity





# Closing Remarks