

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

Task No.	Page No.	Paragraph No.	Line No.	Bullet No.	Text	Comment	Commenter	Response
Pre.	i	3	4		Thus, the FAA proposes to directly involve BOS/TAC and CAC,...	Change to: Thus, the FAA will continue to directly involve...	Ralph Dormitzer	Comment not accepted. The original language is intended to distinguish Phase 2 from Phase 1 by involving the public at large in the three listed tasks. The suggested edit changes the context of the sentence to read as if the general public had been involved throughout Phase 1, which is incorrect.
Intro.	1	1	2		The Boston Logan Airport Noise Study is in fulfillment of the requirements of the FAA's Record of Decision dated August 2, 2002.	Added "...and the Final Judgment, Commonwealth of Massachusetts Superior Court, Massachusetts Port Authority Plaintiff date May 26, 2004." to end of sentence.	Ralph Dormitzer; Jerry Falbo	Comment not accepted.
Intro.	2			1	Measure 17 - Runways 27 and 33L Departures: develop departure procedures for fanning. The intent of this measure is to provide respite to close-in communities in departure areas of these runways.	Which communities do you consider "close-in" under this proposal for the purpose of noise relief?	Dovi Abbey	For aircraft overflight noise, communities that are affected by the DNL 65 dB noise contours from BOS, are considered "close-in" communities. For ground noise, communities immediately adjacent to BOS are considered "close-in" communities. Phase 2 does include a task that provides BOS/TAC and CAC the opportunity to review the measures and provide further detail as necessary. Detail includes refining intent, and communities that may benefit in noise reduction from the proposed measure.
Intro.	2			1	Measure 17 - Runways 27 and 33L Departures: develop departure procedures for fanning. The intent of this measure is to provide respite to close-in communities in departure areas of these runways.	There currently exists a standard FAA departure procedure for Runway 27 which was arrived at with a Federal ROD after 12-13 years of effort and study between the CAC and FAA and Massport. Fanning the departures would appear to void that ROD.	Bernice Mader	The measures, developed by BOS/TAC, listed on page 2 are those previously identified in Phase 1 as needing further analysis in Phase 2 by BOS/TAC. Further inclusion of these measures, definitions of these measures and/or how they would be implemented have not been determined. Task 6.3.1, Refine Measures, will determine how these measures could be implemented, which will be collaborated with the IC, BOS/TAC, and the CAC. Any measure analyzed in Phase 2 will require an environmental review which would record an environmental determination by FAA as to the degree of impacts before implementation. A comparison between existing and proposed conditions will be conducted. FAA will not approve any measures that produce adverse impacts (as stated in the Airside EIS ROD) to the surrounding communities; any measures that are approved will be documented in a new Record of Decision (ROD) or Finding of No Significant Impact (FONSI).

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

Task No.	Page No.	Paragraph No.	Line No.	Bullet No.	Text	Comment	Commenter	Response
Intro.	2			3	Measure 19 - Runway 27 Departures: establish balanced use of Runways 27 and 33L for departures. The intent of this measure is to minimize noise to close-in communities	Measure 19 - Runway 27 Departures: This was the focus of a class action suit and an EIS. It is inappropriate to take it up in this manner.	Mona Thaler	The measures, developed by BOS/TAC, listed on page 2 are those previously identified in Phase 1 as needing further analysis in Phase 2 by BOS/TAC. Further inclusion of these measures, definitions of these measures and/or how they would be implemented have not been determined. Task 6.3.1, Refine Measures, will determine how these measures could be implemented, which will be collaborated with the IC, BOS/TAC, and the CAC.
Intro.	2			3	Measure 19 - Runway 27 Departures: establish balanced use of Runways 27 and 33L for departures. The intent of this measure is to minimize noise to close-in communities	Does the balanced use of Runways 27 and 33L lead to an increase in departures from Runway 27? Which communities are considered "close-in"?	Dovi Abbey	The measures, developed by BOS/TAC, listed on page 2 are those previously identified in Phase 1 as needing further analysis in Phase 2 by BOS/TAC. Further inclusion of these measures, definitions of these measures and/or how they would be implemented have not been determined. Task 6.3.1, Refine Measures, will determine how these measures could be implemented, which will be collaborated with the IC, BOS/TAC, and the CAC. For aircraft overflight noise, communities that are affected by the DNL 65 dB noise contours from BOS, are considered "close-in" communities. As each measure is further refined, intent may include specific communities.
Intro.	2			4	Measure 20 - Runway 4L Departures and 22R Arrivals: remove noise emission restriction to achieve more utilization of this runway. The intent of this measure is to develop a more equitable distribution of noise impacts.	Would removal of noise restrictions be done through fanning and if so, which new areas will these flights impact?	Dovi Abbey	The measures, developed by BOS/TAC, listed on page 2 are those previously identified in Phase 1 as needing further analysis in Phase 2 by BOS/TAC. Further inclusion of these measures, definitions of these measures and/or how they would be implemented have not been determined. Task 6.3.1, Refine Measures, will determine how these measures could be implemented, which will be collaborated with the IC, BOS/TAC, and the CAC.
Intro.	2			5	Measure 21 - All Departure Runways: develop fanning procedures based on route of flight. The intent of this measure is to disperse noise impacts in departure areas of runways	Measure 21 calls for fanning of departures on all routes. Having personally led the effort, for 6 hard-fought years, to ensure that RW 22 Right procedures called for only an over the water procedure, this would negate the Runway 22 ROD. There is a disagreement between the FAA and me as to whether that right turn happens at 140 degrees or not but the decision never included fanning of aircraft.	Bernice Mader	The measures, developed by BOS/TAC, listed on page 2 are those previously identified in Phase 1 as needing further analysis in Phase 2 by BOS/TAC. Further inclusion of these measures, definitions of these measures and/or how they would be implemented have not been determined. Task 6.3.1, Refine Measures, will determine how these measures could be implemented, which will be collaborated with the IC, BOS/TAC, and the CAC.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

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Intro.	2			5	Measure 21 - All Departure Runways: develop fanning procedures based on route of flight. The intent of this measure is to disperse noise impacts in departure areas of runways	Measure 21 - All Departure Runways: Fanning would be giving a "carte blanche" to all airplanes. There is a reason that there are relatively narrow paths for flight tracks-without these planes would be all over the place, even more than they are even with them in place.	Mona Thaler	The measures, developed by BOS/TAC, listed on page 2 are those previously identified in Phase 1 as needing further analysis in Phase 2 by BOS/TAC. Further inclusion of these measures, definitions of these measures and/or how they would be implemented have not been determined. Task 6.3.1, Refine Measures, will determine how these measures could be implemented, which will be collaborated with the IC, BOS/TAC, and the CAC.
Intro.	2			10	Measure 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 measure is to reduce the aircraft noise exposure for the communities in the departure area of Runway 27.	Given the initial skepticism towards this idea, is there an alternative being considered to provide noise relief to communities in the departure area of Runway 27? Is it too late to suggest one?	Dovi Abbey	Task 6.1.3, Other Measures, is included in the Phase 2 Scope of Services to specifically identify and consider other measures that may be raised by BOS/TAC, CAC, other groups, and/or the general public.
Intro.	2			10	Measure 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 measure is to reduce the aircraft noise exposure for the communities in the departure area of Runway 27.	Measure 28 calls for aircraft departing on RW 27 to now take a right turn over the Charles River. That is not what it says in the ROD for RW 27. In fact, the original problems created by RW 27 air traffic stemmed from the fact that it used to go over parts of Boston and the South End but certain Massport board members who lived in Boston and who were discomfited by the noise personally arranged to have the flight track changed.	Bernice Mader	The measures, developed by BOS/TAC, listed on page 2 are those previously identified in Phase 1 as needing further analysis in Phase 2 by BOS/TAC. Further inclusion of these measures, definitions of these measures and/or how they would be implemented have not been determined. Task 6.3.1, Refine Measures, will determine how these measures could be implemented, which will be collaborated with the IC, BOS/TAC, and the CAC.
Intro.	2			10	Measure 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 measure is to reduce the aircraft noise exposure for the communities in the departure area of Runway 27.	Why focus on communities under only one flight path that are not close-in communities? This stands out like a preferential sore thumb among these proposed measures. If we consider this, we must then consider EVERY flight path with the intent to reduce aircraft noise for EVERY community under EVERY flight path. This one measure would require an EIS which was done relatively recently for R27 departures as a result of a lawsuit. It would be a shame to have to go that route again and delay everything that is positive in the larger project. Additionally, the history of how this measure came to be suggested must be revealed in detail.	Mona Thaler	The measures, developed by BOS/TAC, listed on page 2 are those previously identified in Phase 1 as needing further analysis in Phase 2 by BOS/TAC. Further inclusion of these measures, definitions of these measures and/or how they would be implemented have not been determined. Task 6.3.1, Refine Measures, will determine how these measures could be implemented, which will be collaborated with the IC, BOS/TAC, and the CAC. These measures were identified through a brainstorming session among BOS/TAC members. During this process, all ideas were not rejected. Each measure went through a screening process to determine if there were issues associated with safety and environmental concerns. This measure was moved to Phase 2 based on potential concerns associated with significant noise increases due to heading changes. Further discussion associated with all the measures is planned under Phase 2 prior to further screening analysis.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

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Intro.	2			After 10		Added new bullet - "Measure 29 - Other measures resulting from Public Input - Section 2.4."	Ralph Dormitzer	The measures listed on page 2 are those previously identified in Phase 1 as needing further analysis in Phase 2, as stated in the statement preceeding the list. Adding "other" to the list does not accurately reflect those measures that were identified in Phase 1. Phase 2 does provide efforts to evaluate "other" measures suggested by BOS/TAC, CAC, FAA, Massport and/or other members of the general public as discussed in Task 6.1.3.
Intro.	2					Phase 1 measures may increase the noise burden on some new communities. Would this increased burden be taken into account in Phase 2? More generally concerned that we have been in a noise-spreading mode and would like us to shift to a noise-reduction mode at some point.	Dovi Abbey	Unclear as to which measures the commenter is referring. If the commenter is referring to the Early Implementation Alternatives, they are being implemented only if they would not have any significant environmental impact. Noise results are not completed at this time, therefore no conclusions have been made associated with increasing noise burden. BOS/TAC and CAC will evaluate the information and assess such potential. If the commenter is referring to the measures listed on page 2 of the Scope of Services, these measures are being further examined in Phase 2 to determine if they would or would not have an environmental impact.
Intro.	2					Does not believe that Phase 2 should begin until all of the 12 measures have had considerable time for study and discussion by all CAC members. While some measures may be beneficial to some communities they may be injurious to others.	Bernice Mader	The purpose of Phase 2 is to determine what, if any, potential environmental impact the 12 measures would have on surrounding communities and if they would have a beneficial impact or not. None of the 12 measures will be implemented until the analysis to be conducted in Phase 2 (as outlined in the proposed Scope of Services) has been completed and an appropriate environmental document has been prepared by FAA in Phase 3. Phase 2 includes an opportunity for BOS/TAC and CAC members to discuss the measures and conduct further screening.
Intro.	3	1	1		In addition to these 12 measures, ground noise sources, such as taxiway use patterns...	How will taxiway use patterns be analyzed?	Jerry Falbo	Taxiway use patterns will be analyzed through the use of an airfield and airspace simulation model, described in Task 5.2 and Task 6.4.2. Data utilized from the recent FAA center taxiway evaluation will be used and expanded where necessary. Further information will be gathered via FAA ATC input. All input and assumptions will be subject to IC review.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

Task No.	Page No.	Paragraph No.	Line No.	Bullet No.	Text	Comment	Commenter	Response
Intro.	3	2		1	A collective assessment of all Phase 2 measures recommended for implementation will be required to determine if...	How will the cumulative impact assessment be determined?	Jerry Falbo	The wording in this section has been changed to "collective assessment". The methodology to be used in the "collective assessment" is described in Task 6.4.4. BOS/TAC and CAC will recommend a series of measures for implementation at the end of the Level 3 screening process. These measures will be subjected to an assessment that analyzes their potential environmental impact as a "collective" whole; in other words grouped together as one alternative. The SOW assumes up to two alternatives may be developed. The "collective assessment" will provide a full assessment of the noise exposure with all selected measures implemented.
Intro.	3	3		5	Different combinations of Phase 2 measures may need to be analyzed to determine the set of measures that best minimizes noise impacts.	Added, "... and complement and not conflict with Phase 1 measures." to end of sentence.	Ralph Dormitzer	FAA comment not accepted. Phase One alternatives need to be considered coupled with the phase 2 alternatives as an existing condition with consideration of future conditions with and without phase 2 alternatives.
Intro.	3			1	Continue coordination between CAC, Massport, and FAA.	Changed "coordination" to "the decision process".	Ralph Dormitzer	FAA agrees to change coordination to collaboration. Agreement also to enhance CAC access to the PC to address information exchange and continue valuable CAC dialogue and information exchange with the PC.
Intro.	3			3	Update the GIS database, develop baseline (existing conditions) air traffic simulation (as required to determine taxiway and runway use measures for noise modeling), and aircraft noise exposure baseline to use in the analysis of potential flight track, runway usage, and ground noise measures.	How will baseline modeling be conducted?	Jerry Falbo	Task 5, Develop Baseline Conditions, explains the methodology for developing both the baseline airfield and airspace model and the noise model. Further details will be developed during the noise protocol task, which will have a deliverable documenting methodology.
Intro.	3					What is task seven?	Jerry Falbo	Task 7 has been moved to Phase 3; it was the environmental process for assessing and approving the recommended Phase 2 measures for implementation.
Intro.	4					Exhibit is not inserted in document.	Leo White; Jerry Falbo	Exhibit 1 was submitted as a separate file and can be found on the www.bostac.com web site, under the BOS/TAC Documents/Phase 2 Final Draft Scope of Work Folder. It shows the proposed workflow process for Phase 2.
Intro.	5				Organization Chart	General Comment - should be more direct interplay between CAC and PC.	Stephen Lathrop	The SOW provides several CAC meetings for PC attendance. The specific intention was to ensure adequate funds were allotted for PC/CAC interaction.
1	6	1		2-5	The FAA will have overall responsibility for management of the project and the PC. The CAC will have overall responsibility for management of the IC. CAC and BOS/TAC will continue to be involved in the development of the measures through Phase 2.	Changed to read, "The FAA will have overall responsibility for management of the project and the FAA, Massport, and BOS/TAC/CAC will have overall management of the PC. The CAC will have overall responsibility for management of the IC.	Ralph Dormitzer	Changed to read, "The FAA will have overall responsibility for management of the project. The FAA, Massport, and BOS/TAC/CAC will continue to collaborate and develop the project alternatives. The CAC will have overall responsibility for management of the IC."

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

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1	6	1	4		The FAA, Massport, and BOS/TAC/CAC will continue to collaborate and develop the project alternatives.	Changed to read, "The FAA, Massport, and BOS/TAC/CAC will continue to collaborate on project direction and alternatives development."	Ralph Dormitzer	FAA accepts comment.
1.1	6			2		"...notes are not intended to be minutes of meeting." My question is who decides what is covered in the "draft meeting notes".	Jerry Falbo	This language has been changed in the text. It now reads, "prepare meeting notes as needed."
1.2	6	1			The PC will hold regular coordination meetings with FAA during Phase 2 to review material, discuss work progress, and respond to FAA comments. It is anticipated that these coordination meetings will be held bi-weekly. To the extent actions proposed require Massport involvement coordination with Massport will also be involved.	Changed to read, "The PC will hold regular project management meetings with FAA, Massport, BOS/TAC/CAC during Phase 2 to review material, discuss work progress, and respond to comments. It is anticipated that these project management meetings will be held bi-weekly.	Ralph Dormitzer; Sandra Kunz	FAA accepts comment. CAC invited to join and participate in biweekly calls. FAA ultimately responsible for direction to the PC.
1.2	7			3	IC Activities: • As appropriate, the IC will participate in up to 20 conference calls held (up to two hours each) with FAA and PC for coordination of CAC interests in the preparation of the measures to be considered in Phase 2. Participate in net meetings at the direction of the CAC; for budgetary purposes, three (3) separate trips to FAA offices are assumed.	Changed to: The IC will participate in the bi-weekly conference calls held (up to two hours each) and coordinate CAC interests in the preparation of the measures to be considered in Phase 2. For budgetary purposes, three (3) separate trips to FAA offices are assumed.	Ralph Dormitzer; Sandra Kunz	FAA accepts comment. Net meetings will remain to add value to the general public involvement. Need consultants to better educate all participants on how to use the meetings and accessing them.
1&2						It is unacceptable to CAC members to not receive actual minutes of the meetings. I mean specifically not SUMMARIES of the meetings but actual MINUTES of the meetings. Massport and FAA have already outspent community resources in their quest for RW 14/32 by a ration of 500,000 to 1. They should be required to provide those minutes at their own expense.	Bernice Mader	Per BOS/TAC (FAA, Massport and CAC representatives), meeting notes were requested and taken. These notes are available on the www.bostac.com site along with the presentations provided at each meeting. All CAC members were provided a user/password account to access the site. Phase 2 includes the provision of such notes and presentation material on the public website as well.
1&2						All meetings should be teleconferenced ones to provide representatives the opportunity to join in by phone.	Bernice Mader	Comment accepted. Representatives who cannot attend will be provided a conference call number in order to dial in and participate. All efforts will be made to ensure meeting facilities include conference phone capability.
1&2						All meetings in Phase 2 and Phase 3 must be held at handicapped accessible venues with dedicated, handicapped accessible parking.	Bernice Mader	All meetings where members of the CAC or public are invited will be held in handicapped accessible locations.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

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1.3	8					Request that the Document Record Database be available on the Info-Hub web site.	Ralph Dormitzer	FAA will require an updated library as part of the public website to be regularly maintained by the consultants.
1.3	8					The CAC must receive their own copies of all Documents of Record, whether in hard copy or on computer disk. One set should be maintained by the CAC secretary and other copies ought to be made available to CAC members for a nominal fee.	Bernice Mader	FAA agrees with providing public access to documents and will make documents available on the public website.
1.4	8				Work Scope Re-Assessment	What is meant by re-assessment?	Jerry Falbo	Several tasks in Phase 2, as listed in Task 1.4, will entail the development and refinement of the methodology and work practices to be followed in Phase 2. Once these details have been agreed upon by FAA, Massport, BOS/TAC, and CAC, the PC will examine the Scope of Services and budget to determine if any changes in how the work will be performed would result in an increase to the work effort and cost. If it does, then a scope re-assessment will be required.
1.4	9			1	PC Activities:• The PC will prepare and provide input/suggestions on possible work scope and budget revisions in coordination with FAA.	Changed to: •The PC will prepare and provide input/suggestions on possible work scope and budget revisions in coordination with FAA, Massport and BOS/TAC/CAC.	Ralph Dormitzer	Comment accepted.
2	10	1				Added to end of paragraph: The PC will be responsible for outreach to communities represented by the CAC and for other communities within a 25 mile radius of Logan Airport.	Ralph Dormitzer	FAA is responsible for outreach to the communities. Suggested addition has been made with change, as indicated.
2.1	10	1			Develop Communications/Engagement Protocol. A communications/engagement protocol will be developed at the start of Phase 2 in conjunction with the CAC. It will outline the overall outreach strategy for Phase 2 and will address specific concerns raised by CAC and BOS/TAC members, including the decision making process, and when material will be shared with CAC and BOS/TAC depending on specific tasks. A scope re-assessment for this task may be necessary after the protocol is developed.	Changed to: Develop Decision Process/Communications Protocol. A decision process/communications protocol will be developed at the start of Phase 2 with the CAC. It will outline the overall outreach strategy for Phase 2 and will address specific concerns raised by CAC members, including the decision making process, and when material will require decision making by the CAC and when dissemination to the wider community will be necessary. The goal is to make significant and widely supported changes to the noise impacts surrounding the Airport. A scope re-assessment for this task may be necessary after the protocol is developed.	Ralph Dormitzer	Agree with renaming the task to Develop Decision Process/Communications Protocol. The decision process also includes BOS/TAC, FAA, and Massport since they have to determine if measures are feasible. In addition, the purpose of the protocol is not to make significant and widely supported changes to the noise impacts surrounding the Airport. The purpose of the protocol is to jointly develop a collaborative decisionmaking process with CAC, and outline how the technical information and work products will be shared with the general public, as well as how to involve them in the Phase 2 process.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

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2.1	10				Decision Process	Our 29 CAC communities have not yet discussed in person or voted upon what Early Implementation Measures will be supported, if any. What I want to know is this - what if votes on certain routes are 15-14? What will the FAA and Massport do if that is the case for many of the votes? This is not addressed anywhere in Phase 1 procedures. If there is significant opposition, though a vote wins by a majority of one, will the FAA and Massport test that option or not? I want to know what the rules are.	Bernice Mader	One of the elements of developing a Communications/Engagement protocol is assist in identifying the general means in which CAC will use to decide on measures. The FAA can serve as a facilitator in the form of recommendations, but how decisions are made within the CAC is solely the responsibility of CAC membership. Phase 1 decision making has been made based on informed consent of the members attending the meetings. This or perhaps other means will be discussed and a protocol drafted to address decision making.
2.1	10	2			This process will be designed to accomplish several interconnected goals all of which will be necessary if the decisions of the CAC are to lead to real change in the noise impacts of Boston Logan Airport.	Changed to: This process will be designed to foster informed consent within the CAC and the wider community to reduce noise impacts of Boston Logan Airport.	Ralph Dormitzer	Comment accepted.
2.1	10			1	A clearly defined set of objectives: what does the CAC hope to accomplish at the end of Phase 2? What will success consist of?	Changed to: Identify milestones that require decisions by the full CAC.	Ralph Dormitzer	Suggest keeping part of the original bullet, "A clearly defined set of objectives." and adding the suggested bullet.
2.1	10			2	A schedule of particular tasks, desired outcomes and the specific meetings and other efforts needed to accomplish those outcomes.	Deleted	Ralph Dormitzer	Agree with replacing this bullet with "Identify milestones that require decisions."
2.1	10			3	A means to get information prepared and distributed in a clear and comprehensible manner, accessible to CAC members at all levels of technical sophistication. The materials they receive must make clear the technical, political, and community benefits and tradeoffs associated with the options presented.	Changed to: Determine the kind of materials necessary to make informed decisions including the technical, political, and community benefits and tradeoffs associated with the options presented and how far in advance of a meeting these must be made available.	Ralph Dormitzer	Concur with suggested change.
2.1	10			4	An on-line structure for communicating with each other and with technical consultants between scheduled meetings.	Deleted	Ralph Dormitzer	Comment not accepted. FAA wants to use technology to enhance communication.
2.1	10			5	A process and meeting design that allows the CAC to work through the measures and their pros and cons and make decisions about which course of action to pursue	Deleted	Ralph Dormitzer	Comment not accepted. FAA will rely on facilitation as a best management practice and a tool for success in the study.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

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2.1	10			5	A process and meeting design that allows the CAC to work through the measures and their pros and cons and make decisions about which course of action to pursue	The process for Phase 1 was rushed, incomplete, and did not take the needs of the CAC into consideration. Requests for minutes were ignored, time extensions denied (except when needed by consultants themselves), and, in general, a cavalier, token approach to keeping the membership informed in a timely manner with sufficient time for review and comments. Even this comment period was rushed given the summer season. Phase 2 must be handled differently or the process will surely be mired in legal problems down the line, which would be a shame.	Mona Thaler	Agreed that the Phase 1 process, in terms of submitting information to CAC for consideration and decisions, did not work as it was originally intended. That is why Task 2.1 has been included in the Phase 2 Scope of Services, so that a process can be developed for Phase 2 that better serves all study participants.
2.1	10			6	An integration of the CAC decision making in conjunction with the BOS/TAC.	Deleted	Ralph Dormitzer	Comment not accepted. No matter how the BOS/TAC and CAC interact in Phase 2, a mechanism for CAC decision making needs to be established and integrated with other study participants. Massport's submittal of proposed measures requires concurrence from the full CAC, as indicated in several BOS/TAC meetings during Phase 1. An integration may provide a more efficient decision making process, and ensures all CAC members have an opportunity to stay informed.
2.1	10			7	A process and materials with which to engage community stakeholders and members of the public, ranging from one-on-one meetings with stakeholders to on line dialogue for hundreds of participants. These materials will be designed to help CAC members present measures and the associated pros and cons to non-technical people from the affected communities, and will provide a means for CAC members to gather useful feedback.	Changed to: Provide guidance to the PC when it is necessary to reach out beyond CAC to the wider community.	Ralph Dormitzer	Comment not accepted. To ensure the general public is adequately informed, the FAA will determine, in consultation with CAC and BOS/TAC, mechanisms for public involvement. Due to NEPA requirements, the FAA must ensure that the general public is given the opportunity to comment. The suggested change assumes that responsibility resides with CAC. In addition, some members of CAC must report to their elected representatives. Such information and the format will assist these members in describing the key elements to said representatives, and garner a decision that can be provided in a CAC decision-making meeting.
2.1	10					Added new bullet - "Identify the hot button issues, and create a credible process which will result in closure."	Ralph Dormitzer	Comment not accepted. The purpose of the protocol is to develop a decisionmaking process and outline how the technical information and work products will be communicated to CAC and the general public, as well as how to involve them in the Phase 2 process.
2.1	10	4			These elements together will allow the CAC, the FAA, and Massport to engage in a purposeful, well-informed, and highly structured process that will allow for and incorporate a wide range of perspectives, and ultimately will have the potential to make significant and widely supported changes to the noise impacts surrounding the Airport.	Deleted	Ralph Dormitzer	Comment noted, but not accepted.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

Task No.	Page No.	Paragraph No.	Line No.	Bullet No.	Text	Comment	Commenter	Response
2.2	11				CAC Coordination	Deleted role of independent facilitator (PC Activities) and under IC Activities reduced number of CAC meetings (in Boston) from 18 to 8 and number of teleconferences from 12 to 6.	Ralph Dormitzer; Sandra Kunz	FAA notes comment, but will rely on facilitation as a best management practice and a tool for success in the study.
2.2	11			5	IC Activities	Added: The CAC coordination will include discussion and review of the current PRAS (Preferential Runway Advisory System). This review will seek to develop a strategy for addressing the PRAS including but not limited to support for developing a new PRAS and broad understanding of goals and metrics (e.g. relevancy of annual runway use goals, short term persistence use of runways). The IC will develop a short, summary memorandum reviewing the discussion and suggested CAC approach.	Flavio Leo	Comment accepted.
2.3	12				BOS/TAC Meetings	Re-named to BOS/TAC/CAC Meetings. Reduced number of meetings to 8 and deleted role of independent facilitator.	Ralph Dormitzer; Sandra Kunz	PC and IC recommend to maintain quarterly scheduled BOS/TAC and CAC meetings. As information/results become available, PC will present it at the forthcoming quarterly meeting. Second, an update will be provided to members along with what is expected for the next quarterly meeting. This provides meeting predictability for all members, and prevents "milestone" meetings that are subject to change if technical results are not available or provided to members with enough time to review the material. The number of meetings is based on the number of quarters (8) plus two additional meeting when deemed necessary (perhaps during certain decision making milestones). See above response associated with independent facilitator.
2.4	13			2	IC Activities:• Provide appropriate staff (up to two) to participate in workshops on behalf of the CAC. Assume attendance by the Project Manager and one technical lead. It is not anticipated that IC staff will provide manpower for workshop stations, but rather will circulate to understand public comment and provide peer review to PC material.	Why won't IC staff provide manpower for workshop stations?	Jerry Falbo	The PC's role, serving to assist the FAA, is to produce and disseminate the technical information to the BOS/TAC, CAC, and general public. IC's role is to review the PC's work and report on the technical merits of the PC's work to the CAC. Part of the IC's role is to attend the workshops to ensure that the information being distributed by the PC is correct.
2.5	13					Insofar as the web site is concerned, this site should be designed in a simple fashion that will make it easily accessible to everyone. The website set up for Phase I was not updated on a regular basis and was not easily accessible. Information should be provided in a timely fashion and a deadline for response from all parties should be set otherwise the process gets bogged down.	Sandra Kunz	It is recognized that increased use of the project web site and frequent updates to the site will be required in Phase 2. The Communications protocol to be developed in Task 2.1 will further detail and specify accessibility and information to be included on the web site.
2.6	14				Web Dialogues	Deleted this Task.	Ralph Dormitzer	The FAA believes that this element will provide access by the general public to the project, and have potential to provide all participants valuable input from the general public on key issues associated with noise reduction. The FAA also wants to use technology to enhance communication.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

Task No.	Page No.	Paragraph No.	Line No.	Bullet No.	Text	Comment	Commenter	Response
2.7	14	1			In addition to the outreach described above, the PC will prepare and disseminate material to the media and through other outreach mechanisms to maximize the overall public outreach for this program. Press releases will be prepared and sent to the various major and local media (print, radio, and television) within the study area at the beginning of this study, and at up to three key milestones during Phase 2. These press releases will be concise and written in plain English, so that people can understand them. Similar material will be sent to state and federal elected officials in the study area. This task will be further defined as part of Task 2.1, Develop Communications/Outreach Protocol	The CAC should see what these Press Releases look like and be able to add to the media list.	Mona Thaler	The protocol for the development and distribution of press releases will be specified in the Communications protocol to be developed as part of Task 2.1.
2.7						Strongly urge that no press release be issued by any one of the parties to the joint committee without prior notice to the other parties. If a decision is made which a particular officially appointed community representative believes is harmful to his/her community, that person ought to have the opportunity to inform their local officials of that decision and how it may play out with local constituents before the information is given to the press.	Bernice Mader	We concur with the comment. The protocol for the development and distribution of press releases will be specified in the Communications protocol to be developed as part of Task 2.1. Elements such as review and notification are possible components identified as part of the protocol.
2.7	14			1	PC Activity: • Prepare mailing list of media and elected officials for distribution of project material.	Again, should be done in consult with CAC.	Mona Thaler	The protocol for the development and distribution of project material will be specified in the Communications protocol to be developed as part of Task 2.1.
2.7	15			1	IC Activity: • Coordinate review with CAC membership familiar with specific issues covered in the press releases for public sensitivities	Not just for sensitivities, but for facts, past history updates, local impacts etc.	Mona Thaler	The protocol for the development and distribution of press releases will be specified in the Communications protocol to be developed as part of Task 2.1.
3	16	1				Added to end of paragraph: It is assumed that conventional procedures that overly the RNAV procedures will be implemented in advance of the FAA's approval of the RNAV procedures.	Ralph Dormitzer	Concur with suggested change. The conventional departure procedures, if supported by BOS/TAC and CAC, involve changes in standard operating procedures, and will not take as long to implement compared to RNAV procedures.
3						What does it mean "rejected by the communities"?	Jerry Falbo	This language has been deleted from the text.
3						How will the PC assist BOS/TAC in determining the alternative is not substantially altered?	Jerry Falbo	This language has been deleted from the text.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

Task No.	Page No.	Paragraph No.	Line No.	Bullet No.	Text	Comment	Commenter	Response
3						<p>The majority of the amount of effort in Phase 2 must be spent on monitoring how the proposed measures for change (presuming that some will be voted upon and attempted to be implemented) are working in actual fact and in practice not how they are proposed to work on paper or according to the formal computer-generated Integrated Noise Model (INM) or the NDAD (Noise Data and Display System).</p> <p>We've had multiple experiences over the years where proposed changes were attempted and the INM said that certain things would happen but reality proved to be the opposite of the assertion. Early implementation measures, if enactment is tried, must rely on REAL, ACTUAL NOISE TRACKS, not bundled, computer-generated predictions. The conclusions as to whether a measure is helpful to communities or not must be based upon hard data not predictions.</p>	Bernice Mader	Phase 2 does include a post-implementation evaluation task designed to evaluate how the procedures are operating compared to the designs. PC and IC are assigned activities that utilize actual radar data and Massports noise monitoring system to assess measures in operation. Recommendations to the FAA and Massport will be provided as necessary if procedures substantially diverge from the designs. Unforeseen elements may also come up as the FAA receives design submittals, and further technical evaluations require modifications. PC, along with IC review, will provide feedback as necessary if such changes substantially alter the intent of the procedure. Updates will be provided for each BOS/TAC meeting.
All						Changed "BOS/TAC" to "BOS/TAC/CAC"	Ralph Dormitzer	Comment accepted.
4	18				Study Area Definition	Will Winthrop be included in the "Study Area"?	Jerry Falbo	Yes.
5	19					How is the baseline noise going to be determined?	Jerry Falbo	The baseline noise is going to be determined as specified in Tasks 5.3.1 through 5.3.6. It will be a labor intensive process that will involve collecting a years worth of radar data, analyzing the data, analyzing flight tracks and aircraft operations, developing a database, agreeing upon flight tracks and flight profiles, and developing an INM input file. Prior to starting these efforts, a noise modeling protocol will be developed in collaboration with BOS/TAC and CAC. All work efforts will be closely reviewed by the IC as the baseline model is developed.
5.1	19	1			All GIS data will be obtained from the Massachusetts Geographic Information System (MassGIS).	What is Mass GIS?	Jerry Falbo	Mass GIS is a computer mapping database assembled and maintained by the State of Massachusetts, that contains detailed information on land use, population, and other environmental factors.
5.2	20	1			The Total Airspace and Airport Modeler (TAAM) will be used to simulate air traffic at Boston Logan International Airport.	What is "total airspace and airport modeler?"	Jerry Falbo	Total Airspace and Airport Modeler (TAAM) is a simulation model that models all aircraft movement on an airfield and in the airspace. The model is used to access factors such as delay and capacity.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

Task No.	Page No.	Paragraph No.	Line No.	Bullet No.	Text	Comment	Commenter	Response
5.2.1	20	1		6	Results of the model calibration would be reviewed and approved by FAA before utilizing the model to analyze potential future measures.	What is "model calibration".	Jerry Falbo	Model calibration refers to building the TAAM model for a specific date for which the modeler has actual radar data, running the model, and comparing model results with actual radar data for that date to determine if the model successfully simulates actual operating conditions. If the model varies from the actual radar data, the model is adjusted until it successfully simulates the actual operating conditions for that date. This process is referred to as "model calibration." This process is conducted for TAAM simulation only.
5.2.3	21	1				Exhibit is not inserted in document.	Leo White; Jerry Falbo	Exhibit 5.1 was submitted as a separate file and can be found on the www.bostac.com web site, under the BOS/TAC Documents/Phase 2 Final Draft Scope of Work Folder. It shows the six operating configurations proposed to be analyzed.
5.3	23	2	1-3		The intent of this task is to develop a baseline noise study that describes the existing noise environment within the constraints of the latest-available industry research, data, and accepted noise and aircraft performance modeling tools available.	General Comment - Resort to industry standard methods must not excuse obviously defective or inappropriate results. If standard analytical methods produce results which obviously exclude significant cases, or which produce measurements which can not be supported by measured data, then the use of the standard methods must be modified until reasonable results can be obtained.	Stephen Lathrop	Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task. Elements that are deemed non-standard will be clearly identified, but will require AEE approval because this information will be used to assist the FAA in making environmental impact determinations.
5.3.1	24	2			The IC will develop a protocol for noise measurements, including metrics, site selection, durations of measurement and intended operational conditions to be measured. In addition, IC will conduct comparative measurements with a selection of Massport's permanent noise monitors in order to establish an acceptable error factor that will be factored in when comparing modeled levels.	Creating an acceptable error tolerance for noise modeling should be a defined task in the scope, calling for consensus among FAA, Massport, CAC, IC, and PC to arrive at an agreed-upon figure (or figures). The scope should specify that the agreed-upon figure (or figures) become a defining standard for the noise modeling effort, and that it will be the responsibility of the party building the noise model to produce a model which does not exceed the defined tolerance for error. In addition to quantifying a plus-or-minus tolerance, the standard for accuracy should also specify that noise modeling figures should be free of measurable bias when plotted against distance from the runway ends or other independent variables.	Stephen Lathrop	Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task.
5.3.1	24	5			Upon completion of the draft protocol working paper, the results will be presented to the CAC for review and comment.	Does this mean that issues raised by CAC concerning baseline noise input development and models to be used will be addressed in the protocol?	Stephen Lathrop	Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task. The protocol submitted to the full CAC and BOS/TAC will include prior input provided by the group and a core-group of individuals selected from the CAC and/or BOS/TAC. The goal is to gain general consensus from BOS/TAC and CAC regarding the methodology used to model baseline noise exposure via readily available technology and industry-accepted standards (e.g., ANSI).

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

Task No.	Page No.	Paragraph No.	Line No.	Bullet No.	Text	Comment	Commenter	Response
5.3.1	25				IC Activities under Noise Modeling and Measurement Protocol	<p>If it is not possible to develop a list of supplementary sites for sound measurement in advance, then the number in the scope should be far larger. This number should not be chosen arbitrarily or because of a presumed limitation of budget. It should be related to the need to provide a uniform standard of noise accountancy, which can be applied uniformly to the major operational permutations which occur. For instance, if the issue is Rwy 4R arrivals, there should be separate measurements for the right downwind leg; for at least one presumed transition point from downwind to final; for the outer part of the final approach leg in the vicinity of Milton; and for the inner part of the final approach leg over South Boston. A similarly detailed measurement inventory should be established for each arrival and departure procedure which will come under consideration.</p> <p>The aim should be to create a database sufficiently detailed to provide at least some localized guidance for highlighting possible INM inaccuracies at any point on the map.</p>	Stephen Lathrop	<p>PC submitted IC' plan in the scope of work. Based on professional experience, PC and IC concur that 6 remote and 12 side-by-side monitors measuring noise for five consecutive 24-hour periods, in addition to the remaining Massport permanent monitors, provides adequate and effective sample data to achieve the task objectives. Specific site locations will be determined with BOS/TAC and CAC participation during the noise measurement protocol task.</p> <p>Overall, no matter how many sites are measured, the data collected does not reflect a full year, therefore involves a large potential of error when comparing to annual conditions. The intention of the program is to provide a reasonable indication that input developed reasonably represents existing conditions in 2005.</p>
5.3.2.1	25	1			Radar Data Collection/Verification; Analysis of Radar Flight Trajectories; INM Flight Track Calculation	<p>It is not possible using this scope to understand in detail the role of the proprietary NDADS software, which is proposed for the critical function of creating INM flight tracks. Therefore, use of NDADS should be conditioned on CAC approval following a demonstration in which CAC members may participate. A backup method should be scoped in case NDADS is rejected by the CAC.</p> <p>a. How common must a particular operational type be to warrant becoming the basis of a bundle? b. How different must one operational type be from another to warrant inclusion as a unique bundle? On what basis are such judgments made? c. How infrequent must use of an operational track be to escape representation as a unique bundle? d. What mechanism in the track development model assures that infrequent operations that do not become the basis of unique bundles are nevertheless incorporated appropriately in the final track model? e. How does the radar track bundle paradigm deal with asymmetry among operations, such as may occur during turns, or when airspace boundaries force variations into asymmetrical patterns? f. What would change if the one standard deviation specification used in creating flight tracks were changed to two standard deviations, or three? g. Are there variables involved in the use of the ground track dispersion feature of the INM, or is it an unmodifiable software function? In either case, what procedures will be used to assure that non-normal distributions of operations, if they occur, will be captured and properly modeled.</p>	Stephen Lathrop	<p>Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task. A demonstration of NDADS can be provided if needed during the protocol discussions.</p> <p>Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task. (Task 5.3.1).</p> <p>Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task. (Task 5.3.1).</p>

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

Task No.	Page No.	Paragraph No.	Line No.	Bullet No.	Text	Comment	Commenter	Response
5.3.2.3	26-27			2	Analysis of Radar Flight Trajectories - A bundle refers to a grouping of radar flight trajectories that have the following common characteristics (listed in order of importance: 1. Arrival or departure 2. Runway use 3. Aircraft type 4. Flow direction 5. Similar aircraft climb and acceleration characteristics and descent profiles.	The list under 5.3.2.2 ought to include whether operations are under visual or instrument conditions as the second parameter, after arrival and departure.	Stephen Lathrop	Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task. (Task 5.3.1).
5.3.2.3	27	1			Analysis of Radar Flight Trajectories - Baseline noise will be calculated for each of the six operating configurations, as well as for the annual average day configuration, as described in the following sections.	<p>The use of average annual day methodology must not be allowed to statistically confound the modeling of data for specific runway configurations, which by definition do not operate under average conditions. For instance, if an average annual day includes a representative mix of visual and instrument conditions, the relative frequency of these should not be used to model Rwy 33 arrival operations, which occur under visual conditions much more often than an average annual day would suggest. The converse is true for Runway 4 arrivals, which are used under instrument conditions more often than an average annual day would suggest. In either case, both the flight tracks and the altitudes used differ according to whether visual or instrument conditions are in effect. The scope needs to set forward a task and methods which will be used to assure statistically accurate allocation of visual or instrument flight conditions to the various runway configurations being modeled.</p> <p>It is not clear why the scope calls for INM ground tracks for the average annual day condition when using this condition obviously will distort the particulars of real-world operations in some, if not all, cases. It is also not clear whether the proposed use of the INM will include any conditions except the annual average day. It is important for the scope to make this clear so that the CAC can provide appropriate and timely input.</p>	Stephen Lathrop	<p>Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task. (Task 5.3.1). Use of the average annual day methodology will ultimately be applied to meet FAA requirements identified in FAR Part 150 and FAA Order 1050.1E. This information is required to support environmental impact decisions made by the FAA.</p> <p>Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task. (Task 5.3.1). Use of the average annual day methodology will ultimately be applied to meet FAA requirements identified in FAR Part 150 and FAA Order 1050.1E. This information is required to support environmental impact decisions made by the FAA. Each unique radar track will not be modeled in INM. Details worked on in the noise protocol will describe methods used to use the radar data to develop generalized routes for INM that represent patterns and utilizations that are statistically significant based on a 12-month dataset (annual condition). Because DNL is a 24-hour metric, the annual conditions are normalized to an annual average day. The SOW also includes configuration-based analysis.</p>

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

<u>Task No.</u>	<u>Page No.</u>	<u>Paragraph No.</u>	<u>Line No.</u>	<u>Bullet No.</u>	<u>Text</u>	<u>Comment</u>	<u>Commenter</u>	<u>Response</u>
						The six configurations still have not been properly discussed with the CAC. For instance, the head-to-head night time configuration using Rwy 33L for arrivals, and Rwy 15R for departures is not among them. If it is the intention to eliminate this previously-important configuration from the Logan inventory, then that should be stated explicitly. Otherwise it should be included. There may be others which should be included as well, and the scope should include an allocation of time for that discussion.		There is no intention to eliminate the preferred nighttime configuration. The configurations presented in the SOW reflect the six configurations used for the majority of the time. Specific nighttime configurations (12 am to 6 am) will be accounted for when assessing the radar data and developing INM routes. The six configurations were discussed in detail with BOS/TAC when the Air Traffic Baseline Conditions paper was provided to members. Further review of the configurations was discussed during the June 8th BOS/TAC meeting.
5.3.2.3	28			2	IC Activities: • Coordinate results with PC and CAC.	There must be some specific information interchange designed into the scope, so that the results of flight track analysis can be presented to the CAC for comment before being finalized for use in modeling. There needs to be step where CAC can present PASSUR-based observations, subject to radar database verification, to assure that impacts which occur regularly do not escape modeling. This might appropriately be done after the results of the first round of flight track development have been presented to the CAC. Thus, if CAC members are content with the flight tracks proposed by the IC, this step could be eliminated.	Stephen Lathrop	Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task. (Task 5.3.1).
5.3.2.4	28			3	PC Activities: • Perform statistical analyses for quality assurance (QA)/quality control (QC).	All proposed tests of statistical accuracy should be detailed in the scope, together with the values proposed to represent an acceptable standard of accuracy.	Stephen Lathrop	Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task. (Task 5.3.1).
5.3.2.4	28			1	IC Activities: • Review PC's backbone and dispersed flight track definitions for INM with NDADS by application of a comparable methodology for flight track definition used to prepare data for use in the FAA NIRS model. A random sampling of PC-developed tracks will be evaluated to determine the statistical validity of the proposed backbone and dispersed flight tracks.	There needs to be step where CAC can present PASSUR-based observations, subject to radar database verification, to assure that impacts which occur regularly do not escape modeling. This might appropriately be done after the results of the first round of flight track development have been presented to the CAC. Thus, if CAC members are content with the flight tracks proposed by the IC, this step could be eliminated.	Stephen Lathrop	Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task. (Task 5.3.1). For clarification, flight tracks will be developed by PC and reviewed by IC.
5.3.2.7	31					Will Winthrop be the site for "field" testing aircraft noise levels? Who will conduct these tests?	Jerry Falbo	Supplemental noise measurement sites will be identified and agreed upon as part of the noise protocol developed in Task 5.3.1.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

Task No.	Page No.	Paragraph No.	Line No.	Bullet No.	Text	Comment	Commenter	Response
5.3.2.7	31					<p>The "permanent" microphones installed in the 1980s are at present mostly non-functional. They must be restored to correctly calibrated operation. One is the "permanent" microphone located in the Squantum section of Quincy which has been out of service most of its "operating" life.</p> <p>You propose that six new microphone locations be added to gather data for Phase 2. Since most of the Early Implementation Measures that are proposed involve coast-line locations, most of those microphones should be located along the South Shore including the Quincy Point/Weymouth Fore River area coastline, the Hingham/Hull coastline and further down the South Shore. I would assume that the North Shore coastal communities would request the same. I believe that you will need more than six microphones to achieve a true and correct accounting of flight track truth.</p> <p>Because RW 4 Right and Left landings at Logan constitute 52% of all landings at Logan, and because those arrivals land mostly over Braintree, West Quincy, and Dorchester neighborhoods, it is imperative that one of the permanent microphones be installed under that pathway.</p> <p>Also, because you are proposing changes in the type and amount of traffic on RW 27 in the Jamaica Plain, Brookline, West Roxbury areas, you must also locate a microphone there to gauge the effects of the changes.</p>	Bernice Mader	<p>Supplemental noise measurement sites will be identified and agreed upon as part of the noise protocol developed in Task 5.3.1. The purpose of conducting side-by-side measurements at 12 permanent sites is to provide an indication of the site's precision and accuracy. A better understanding of these sites will assist during INM modeling evaluations and comparisons. The intent of the task is to capture remote measurement samples (not new permanent sites) during conditions that are reflective of the studies existing condition. The SOW proposes to use 2005 radar data, assuming Phase 2 begins in 2006. 2005 will be the most recent year where an annual 12-month database is available. In this case, measurements should not include conditions during which Early Implementation Alternatives are implemented. Future year analysis will include those alternatives. If required in the post-implementation task, measurements intended to capture Early Implementation Alternative levels may be conducted, but are not currently scoped at this time.</p> <p>Permanent measurement site installation is not a component of this project. Supplemental noise measurement sites (short-term) will be identified and agreed upon as part of the noise protocol developed in Task 5.3.1.</p>
5.3.2.7	31					<p>In addition to permanent microphones, either FAA or Massport, or both, ought to pay and arrange for acoustic technicians to periodically go out and test how experimental procedures are working on a given day in which weather dictates their use and the tower chooses to use them. These persons would be available and on call to set up the equipment as each of the voted upon early experimental measures is tried. This would provide a "live data base" to compare and contrast with the INM and the data from the fixed microphones. FAA and Massport ought to agree to do this as it is good science. The control group and the actual, real data.</p>	Bernice Mader	<p>Comment noted. Methodology for the noise measurement task will be identified and agreed upon as part of the noise protocol developed in Task 5.3.1.</p>

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

<u>Task No.</u>	<u>Page No.</u>	<u>Paragraph No.</u>	<u>Line No.</u>	<u>Bullet No.</u>	<u>Text</u>	<u>Comment</u>	<u>Commenter</u>	<u>Response</u>
5.3.2.7	31					Data from the implementation of the Early Experimental Measures must include the rules under which the pilots flew the new procedures. If a pilot is flying VFR (Visual Flight Rules) versus IFR (Instrumental Flight Rules) the differing effects between the two pilot approaches can be devastating. If the pilot must follow instrument rules to the letter, which are outlined in a specific set of directions, s/he is far less likely to wreak havoc on the noise situation than a pilot following visual rules who is allowed to approach the airport "at will" as soon as s/he gets a visual fix on the airport. This is a crucial point as several days of beautiful weather with few clouds and clear horizons and ceilings could possibly generate hundreds of flights which come in under VFR which are then impossible to calculate into a uniform data base.	Bernice Mader	Comment accepted and will be considered as methods/data are determined to assess implementation.
5.3.2.7	31	4	1-3		Also, in order to assess differences between permanent monitor and INM values, side-by-side measurements will be conducted at no more than 12 existing permanent monitoring sites for periods of four hours each.	A rationale for the limitation of permanent noise monitor measurement checks to 12 sites should be presented, or the number should be increased to assure representation of sites in all communities which desire inclusion, probably all of them. If the sample is limited, then the question of which sites will be chosen should be resolved by consensus, including CAC input.	Stephen Lathrop	PC submitted IC' plan in the scope of work. Based on professional experience, PC and IC concur that 6 remote and 12 side-by-side monitors measuring noise for five consecutive 24-hour periods, in addition to the remaining Massport permanent monitors, provides adequate and effective sample data to achieve the task objectives. Specific site locations will be determined with BOS/TAC and CAC participation during the noise measurement protocol in Task 5.3.1.
5.3.3	32	1			The contour grid will be 50 nautical miles wide and 50 nautical miles high, centered on the airfield. This will ensure a large enough area to cover the entire radar coverage area and all surrounding communities. The grid spacing will be 500 feet.	Grid point spacing at 500-foot intervals seems excessive. Increasing the interval to 200 meters, or even to 1000 feet would dramatically lower the computational effort without sacrificing meaningful information. (The exception could occur close to the airport, where 500-foot grid spacing might be maintained). Savings in computational effort should be used to establish up to 400 supplemental grid points, designated by the CAC in collaboration with the IC. At these supplemental points detailed grid analysis should be performed. The IC should be tasked with the responsibility to minimally process the results of this analysis, with the aim of providing a reference database only.	Stephen Lathrop	Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task. (Task 5.3.1). The PC and IC, with direct BOS/TAC and CAC collaboration, will apply professional experience to draft a protocol that identifies the appropriate number of grids, their locations, and the appropriate metrics/data calculated for each grid. Overall, the goal is to provide the most effective use of the available data to assist BOS/TAC and CAC to make decisions on noise abatement measures.
5.3.4	33					Suggests computing alternate noise metrics to DNL 50 dB	Ralph Dormitzer	Serving as supplemental noise information, color gradient maps depicting DNL levels to 45 DNL are proposed, similar to those shown during the June 7th meeting for Phase 1. (Task 5.3.4)

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

Task No.	Page No.	Paragraph No.	Line No.	Bullet No.	Text	Comment	Commenter	Response
5.3.4	34	2			Sound Exposure, E - E (in linear units of Pa ² -s) is simply a measure of the total acoustic energy of the entire noise event. Use of this measure will require FAA AEE approval.	The measurement sought by the CAC is sound pressure units according to the DB DNL formula for day-night adjustment. In this form the measure is mathematically equivalent to DB DNL. Its advantage is that it strips out the logarithmic scaling used by DB DNL, which makes it a useful complement to DB DNL. DB DNL does a better job presenting sound changes related to loudness, which is perceived logarithmically. The desired alternative does a better job presenting sound changes related to numbers of operations, which are not perceived logarithmically. Because this measure is a mathematical equivalent of the FAA's preferred noise metric, it seems absurd to suppose that the FAA would withhold permission for its use.	Stephen Lathrop	Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task. (Task 5.3.1). Sound energy levels, in tabular format for specified grids, has been identified in the SOW (Task 5.3.4)
5.3.4	35	1			Slant Range distance/altitude may also be calculated for expected areas of interest that are consistent with what was evaluated in Phase 1. For budgetary purposes, it is assumed that Slant Range/altitude values will be calculated at no more than 5 grid points.	The arbitrary limitation of slant range distance to no more than 5 grid points is unacceptable to the CAC. This metric is by far the most intuitively comprehensible for laymen, and will also be the most useful for debugging flight track problems in the noise model. It is a component of a detailed grid analysis, which is a standard INM product. If budgetary constraints limit the availability of this metric, those should be set forth and discussed before any decision is made. The CAC may prefer to shift effort from other proposed alternative metrics to be sure that slant range distance is analyzed for each of the several hundred designated supplemental grid points mentioned in note 9 above.	Stephen Lathrop	Further details associated with noise modeling methodology and analysis will be discussed during the noise modeling protocol development task (Task 5.3.1). The number of grid points for slant range distance calculations was based on the number agreed upon for the Phase 1 work. The PC and IC, with direct BOS/TAC and CAC collaboration, will apply professional experience to draft a protocol that identifies the appropriate number of grids, their locations, and the appropriate metrics/data calculated for each grid. Overall, the goal is to provide the most effective use of the available data to assist BOS/TAC and CAC to make decisions on noise abatement measures.
5.3.6	36	1			Results from previously completed studies will be incorporated into the review. This task will incorporate and will utilize the same methodology and modeling to analyze any additional ground noise measures identified.	What was the method that FAA used to analyze ground/taxiway noise? Are there other methods?	Jerry Falbo	The FAA utilized SoundPlan to model taxiway noise. Please refer to the FAA's center taxiway analysis for further details regarding input assumptions and SoundPlan.
5.3.6	36	1			However, alternatives previously examined by the FAA in the centerfield taxiway study, will not be re-examined in this study. Any required engine run-up noise calculations will be modeled using INM.	Why will the PC not study what FAA has completed relative to the noise projected from the Centerfield Taxiway and November Taxiway?	Jerry Falbo	The FAA has already funded a study to analyze potential noise impacts from the Centerfield Taxiway and November Taxiway. If FAA issues a decision on this study, then they will not re-examine the same alternative in this study because they will have determined that those alternatives did not benefit the noise environment at the Airport.
6.1.1	37					What is the difference from these twelve alternatives from the twelve alternatives on page 2?	Jerry Falbo	The text has been changed to refer the reader to the list of 12 measures contained in the Introduction, since they were the same.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

Task No.	Page No.	Paragraph No.	Line No.	Bullet No.	Text	Comment	Commenter	Response
6.2	39				Level 1 Screening Analysis	Text includes statement that the ability to use new measures must not negatively impact the FAA organization or goals of increased safety, the creation of greater airport capacity to meet demand, and its mission to be accountable for environmental, social, economic or technological factors. As always, I have never understood how the FAA can internally resolve its mission. After air safety issues, always comes the creation of increased airport capacity. How does the FAA realistically balance those first two against the interests of the communities in the third?	Bernice Mader	As stated in the last sentence of footnote 11, the FAA's mission is to provide the safest, most efficient aerospace system in the world. It is preceded by stating "FAA has defined organizational goals, which include increased safety and providing greater capacity in the airspace system to meet projected demand in an environmentally sound manner." In providing a safe and efficient system, the FAA is continually conscious of the potential environmental impacts associated with any changes proposed to enhance their ability to accomplish their mission, and must consider environmental impacts when evaluating potential measures or alternatives. FAA Order 1050.1E outlines all the environmental considerations the FAA needs to evaluate prior to implementing measures that enhance safety and efficiency of the airspace system.
6.3	40	1			The purpose of the Level 2 screening analysis is to better define the Level 1 measures, determine which measures will meet operational criteria, and identify the measures that should be modeled for their noise reduction potential.	How are the alternatives to be "modeled"?	Jerry Falbo	The measures will be modeled in accordance with the Scope of Services, specifically Tasks 6.4.2 and 6.4.3. This includes airfield and airspace simulation and noise modeling. Further details related to noise modeling will be discussed and documented as part of the noise protocol development task.
6.3	40				Level 2 Screening Analysis	No criteria are established to judge whether an Experimental Measure creates or does not create "noise reduction". Who makes that decision? How is it made? Who has input? Who is the final arbiter?	Bernice Mader	Noise reduction will be measured in the Level 3 screening analysis. The Level 2 screening analysis will be used to determine if a measure is operationally feasible. If it is, it will be subjected to the Level 3 screening analysis to determine it's potential noise impact. The decision or recommendation to proceed with a measure comes from BOS/TAC, which involves representation from the FAA, Massport, the CAC and users.
6.3.2	41	1			PC will modify the targeted baseline route to look like the expected corridors and utilize Dicerno to estimate the potential reductions and increases.	What is DICERNO?	Jerry Falbo	DICERNO is software developed by Wyle that utilizes INM (Integrated Noise Model) input and results, and allows a user to conduct quick "what if" scenarios, and modifies the output to show the user what the noise exposure may be. This is used only as a screening tool. The FAA will require further review of the tool prior to approving its use for this project. The tool also assists in quantify number above events using INM results and counting the number of events that exceed a specified level. The FAA approved the use of DICERNO for this use, and is being used for Phase 1.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

Task No.	Page No.	Paragraph No.	Line No.	Bullet No.	Text	Comment	Commenter	Response
6.4	42				Measures retained for consideration from the Level 2 screening analysis will be evaluated in a Level 3 screening analysis that will quantitatively examine the ability of the measures to meet the objectives of the study, namely reduce noise impacts on noise sensitive facilities and residential areas within communities surrounding the Airport.	<p>The Level 3 Screening Process mentions that it will examine noise amounts on environmentally sensitive facilities as well as neighborhoods. I am very interested in that process. How will it be studied? Who will have input?</p> <p>I mention this specifically because the last time any survey of environmentally sensitive facilities in the City of Quincy was conducted, Quincy had far fewer assisted living and nursing facilities than it currently has and has also permitted for. There are approximately 1200 new nursing and assisted living beds for the elderly in this City than there were the last time you surveyed. There are more in the process. The City of Quincy also has a higher percentage of elderly persons than average, 18%, who are also considered "environmentally sensitive" receptors. I want to know how these changes will affect them and how their facilities will be affected.</p>	Bernice Mader	Phase 2 does include an update of the Geographic Information System (GIS) mapping databases. The data provided by MassGIS is the sole source of data used for this project. MassGIS is a computer mapping database assembled and maintained by the State of Massachusetts, that contains detailed information on land use, population, and other environmental factors. If located within the 65 DNL, facilities like nursing homes are considered noise-sensitive. The SOW does not call for land surveys. As part of the inventory update, PC can provide you a list of those nursing homes listed in the MassGIS for the City of Quincy and confirm the accuracy of the data.
6.4.2	43	1	2		The future baseline (No Action) alternatives will include the following assumptions:	What is the "no action" alternative?	Jerry Falbo	The No Action alternative means that no action would be taken. It will be used as a comparison with proposed measures to determine if any noticeable impact (either positive or negative) would result if a proposed measure was implemented. For this project, the future year (2010) No Action condition would include elements such as any Early Implementation Alternatives from Phase 1, Runway 14-32, taxiway improvements proposed in the Airside Master Plan, and the center taxiway (if approved by the FAA). Along with these elements (expected to be in operation by 2010), operations and fleet mix predicted to occur at BOS in 2010 will be modeled.
						How are air quality impacts going to be tested?	Jerry Falbo	Air quality impacts will not be tested as part of Phase 2; they will be examined as part of Phase 3 once measures for implementation have been agreed upon by BOS/TAC and CAC and submitted to FAA for implementation.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

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6.4.6	50					How will the PC conduct the analysis of each aspect listed?	Jerry Falbo	<p>The analysis of alternatives will be conducted as stated in Tasks 6.2, 6.3, and 6.4, the Level 1, 2, and 3 Screening analyses. These screening analyses will determine which measures would have a beneficial impact if implemented separately. The purpose of this task, Task 6.4.4, is for the BOS/TAC and CAC to select which specific measures they want implemented, and then a cumulative assessment of the measures selected will be conducted.</p> <p>The simulation and noise modeling will be conducted using the models developed in Tasks 5, 6.4.2, and 6.4.3. The environmental justice, DOT Section 4(f)/303(c), and historic properties impact analysis will be conducted utilizing MassGIS data (see Task 5.1) and overlaying the noise contours developed in this task to determine if any significant noise impact would occur when compared to the No Action Alternative. The determination of impacts will rely on the methodology and thresholds specified in FAA Order 1050.1E.</p>
7	51				Under Task 7	Added new Task 7.1, The PC working with the IC will facilitate and support when necessary a strategy discussion involving the FAA, Massport, and the CAC on the Preferential Runway Advisory System (PRAS). If necessary, this will include a development of a scope of technical work on developing a new PRAS for further study in Phase 3. If the FAA, Massport, and CAC decide not to proceed with PRAS, then the PC will produce a short summary memorandum reviewing the discussion and decision points.	Flavio Leo	Comment accepted.
7	51				Under Task 7	Suggested language for Task 7.1 appears to be adequate as it includes the option of eliminating PRAS altogether.	Sandra Kunz	Comment noted.
						Good work. I just hope we can pay a little more attention to the 4R Departure problem.	Bob D'Amico	Comment noted.
						What role will the IC play in the EIS/EIR process?	Jerry Falbo	The EIS/EIR process has been moved to Phase 3. The role of the IC in the environmental process will be determined when the Scope of Services for Phase 3 is formulated.
						How does the PC plan on evaluating the socioeconomic impacts, environmental justice?	Jerry Falbo	The impact analysis in this phase will focus on identifying from MassGIS data the population, households, minority populations, low-income populations, Section 4(f)/303(c) resources, and historic properties that are contained within the DNL 75, 70, 65, and 60 dB noise contours. A comparison between the contours generated for the proposed measures to be implemented and the No Action Alternative will be made to determine the positive or negative impact of the proposed measures.

Summary of CAC Comments on July 6, 2006 Final Draft Scope of Services

Task No.	Page No.	Paragraph No.	Line No.	Bullet No.	Text	Comment	Commenter	Response
						How will the PC determine what future projects on or off the airport will effect the proposed alternatives, noise, air pollution, in terms of their cumulative impact?	Jerry Falbo	The cumulative impact analysis of future on- or off-airport projects will not occur during this phase, but will occur as part of the environmental documentation to be prepared in Phase 3. Phase 2 will focus on identifying the positive and negative impacts of the measures that successfully survive the Level 1, 2, and 3 screening analyses.
						What role will the IC be allowed to play in determining mitigation?	Jerry Falbo	Mitigation is not included in this phase.
						I am happy to note that you moved the study of the PRAS to Phase 3. Again I will restate my objections to even beginning a study of another PRAS	Bernice Mader	Comment noted.
						Will the IC also be in a position to monitor the metrics to insure the intended results are being achieved? (Phase 2 Implementation)	Jerry Falbo	Phase 2 implementation has been deleted from the Phase 2 scope, and moved to Phase 3.