

CAC  
Goals and Objectives  
Update

# Background

- CAC was asked to define what it hoped to gain from the planning process so that the goal and objectives for meeting that goal could be applied for:
  - Defining and evaluating noise abatement opportunities during Phase 2
  - Considering additional alternatives introduced in Phase 3 (EIS) by CAC and/or others

# Background

- Effort has been made time consuming and difficult by:
  - A relatively commonly held goal, complicated by many different visions of how to reach it. There are more than 30 CAC community-appointed representatives; each has a constituency to which they must be responsive.
  - What may be an acceptable approach to noise abatement for one community may be entirely unacceptable to another.

# Background

- There are widely varying degrees of understanding about the complexities of aircraft operational requirements, air traffic control constraints, and aircraft noise attenuation/dispersion among CAC members
- There has been an absence of current knowledge about population distributions and land use patterns throughout the area to guide decision making
- There is an overriding concern that technical evaluation criteria established now will “lock in” findings without the opportunity to judge a measure on its social or non-technical merits.

# CAC's Basic Project Goal

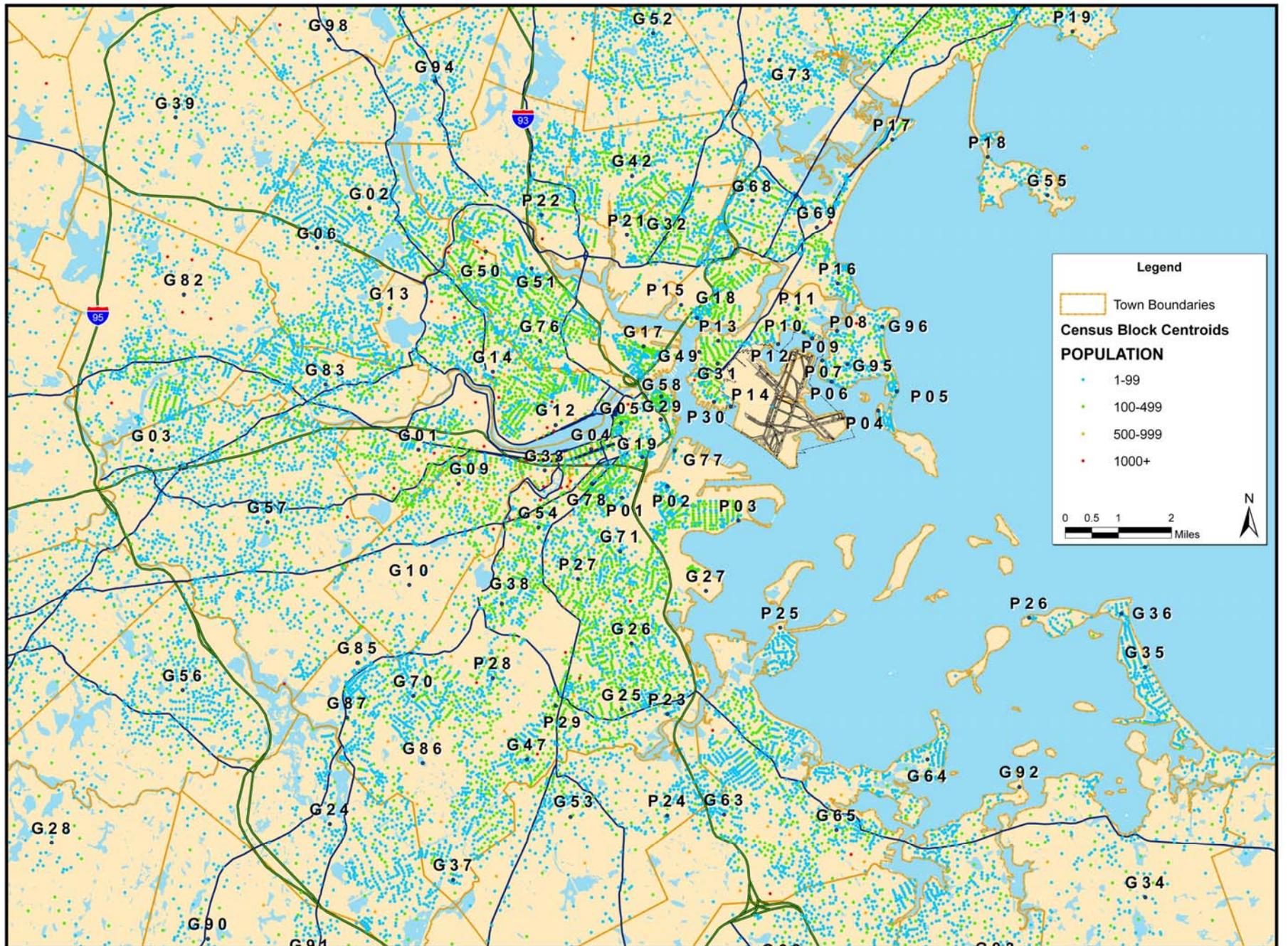
- Safely reduce the aircraft flight and ground noise exposure from BOS-related operations[1]/ on as many residents of communities in the Boston area as practicable.
- [1]/ BOS-related operations are those which takeoff, land at Boston Logan Airport, or are controlled by air traffic controllers located at the Boston Logan Air Traffic Control Tower.

# CAC's Approach to Defining Air Traffic Procedure Measures (as accepted by CAC vote 5/27/2009)

**All CAC criteria and objectives are preliminary and may be re-visited for their applicability throughout the planning process.**

# CAC Approach to Defining Air Traffic Measures

- There shall be only a single initial departure (IC assumes jet) corridor for each runway
- Departing aircraft shall be routed over low population areas in the following priority:
  - Bodies of water
  - Marshes, wetlands and open space
  - Industrial areas, parks and cemeteries
  - Business areas and transportation corridors



# CAC's Approach to Defining Measures

- Departure corridors shall be kept as narrow as possible to reduce the number of residences affected
- Aircraft shall be kept within the departure corridor until climbing out of 4 to 5000 feet
- Aircraft shall be kept within the departure corridor until reaching specific coordinates at least 7 miles from the departure fly over end of the runway
- Arrivals shall not descend below 3000 feet MSL until within 11 miles of the runway and established on final approach.

# General Noise Reduction Objectives

- Reduce the number of persons who are exposed to aircraft noise in excess of 60 decibels of DNL (**60 Ldn**).
- Enact air traffic measures that will reduce or minimize increasing the noise level on people currently exposed to aircraft noise above 55 decibels of DNL (**55 Ldn**). An increase of more than 1 ½ DNL on people within the 55 DNL will be considered to be of substantial concern to the CAC.

# General Noise Reduction Objectives

- Enact air traffic procedures that will minimize the introduction of aircraft noise above 55 decibels of DNL (**55 Ldn**) onto people not currently exposed to noise of that level, unless necessary to reduce noise on people exposed to 60 Ldn or more. Further, a change of 3 DNL or more within 50 Ldn will be considered to be of substantial concern to the CAC; a change of 5 DNL or more within 45 Ldn will be considered to be of substantial concern to the CAC.
- Reduce, to the greatest extent practicable, the existing total number of persons exposed to cumulative daily aircraft noise in excess of 55 decibels of DNL (**55 Ldn**), and to nighttime exposure of more than 55 decibels of  $Leq_{(n)}$ .

# General Noise Reduction Objectives

- Reduce, at each grid assessment point, to the greatest extent practicable, the number of single-event flight operations with maximum noise levels in excess of 60 decibels (60 dBA Lmax), using the **NEA60** metric,
- Reduce, at each grid assessment point, to the greatest extent practicable, from the existing total daily duration, the amount of time (**TA60** as modeled in minutes per average annual day) of aircraft in flight, and separately on taxiways, at the gate, at maintenance facilities, or elsewhere during a ground operation at BOS, above 60 decibels. Provide similar reductions for nighttime exposure.