



## Master Plan Update

### MEMORANDUM

*December 2013*

**Subject: Preliminary Results of the Anchorage International Airport Master Plan Update Noise Analysis for Alternative 3 (e.g. Phase 2) *Optimization of Anchorage International Airport***

The purpose of this ANC Master Plan Update memo is to share the preliminary results of the noise analysis conducted for the Master Plan Update Phase 2 Development Plan. Phase 2 proposes to modify the existing Anchorage International Airport Preferential Runway Use Program. The proposed modification to the Airport's Preferential Runway Use Program would enable the use of Runway 7L for aircraft takeoffs during peak periods to alleviate congestion. Substantial peak period delays are anticipated to occur at higher forecast airplane operations (landings and takeoffs) levels without any changes to airport infrastructure or to the Airport's operation. The Master Plan Update demand/capacity analysis indicates that at demand levels 15% higher than today (242,275 annual landings and takeoffs), increased use of Runway 7L would reduce peak-period departure delays from nearly 13 minutes per takeoff to under 4 minutes per takeoff. This reflects a delay reduction of nearly 70 percent. The proposed modification to the Airport's Preferential Runway Use Program would only be permitted during daytime hours which are defined as the period between 7:00AM and 10:00 PM.

Notes about the preliminary analysis:

- The preliminary noise analysis results reflect anticipated noise levels at higher airplane operations levels than currently exist at Anchorage International Airport. The analysis was conducted using annual airplane operations levels of 242,275, which represents about half of the total forecast increase in operations. Today, Anchorage International Airport accommodates approximately 220,000 annual airplane takeoffs and landings.
- At these higher demand levels, the preliminary analysis anticipated approximately 55 additional jet takeoffs using Runway 7L between 7:00 AM and 10:00 PM on an average day.
- Results of the analysis compare Master Plan Update Phase 2, which would modify the preferential runway use program, to a condition with no change in the preferential runway use program.
- The increase in use of Runway 7L for jet takeoffs would likely occur gradually over many years.

Results of the preliminary analysis:

- Master Plan Update Phase 2 would increase the number of homes within the 65 DNL contour that have not been previously insulated. Approximately 55 additional homes were identified that have not been previously insulated through the Residential Sound Insulation Program. Eligibility of these homes for participation in a new Residential Sound Insulation Program would be determined at a future date after completion of both the Master Plan Update and Part 150 Noise Study.
- Figure 1 illustrates the location of the 65 DNL contour with Master Plan Update Phase 2 fully implemented (at 242,275 annual operations) in comparison to the location of the 65 DNL contour without Master Plan Update Phase 2.

**Figure 1 – Future Location of 65 DNL Noise Contour**  
 242,275 annual operations without (Base Case) and with Master Plan Update Phase 2

