

## CHANGE IN NOISE FROM VEHICLES, PLANES AND YARD EQUIPMENT

### Outcome: Decrease Noise Levels

#### Countywide Planning Policy Rationale

Although the Countywide Planning Policies do not contain specific policy direction for noise, the Benchmark Task Force added this Indicator because there were concerns about noise levels in King County. The Task Force also wanted to monitor how growth management issues affected noise levels.

**Data is not available annually to update this indicator.**

**Street Noise** The *American Housing Survey for the Seattle-Everett Metropolitan Area in 2004* asked respondents about their perception of neighborhood street noise or traffic. Although more than a third of the responding King County households acknowledged the presence of street noise or traffic in their neighborhood, less than half of them declared the condition to be bothersome. However, street noise and traffic is more troubling in Seattle, where over a fifth of the households perceived it as a bothersome condition.

**Aircraft Noise** In a survey conducted on behalf of Puget Sound Regional Council in April 2006, fewer than a third (31%) of residents around Sea-Tac International Airport stated that they notice aircraft noise and found it bothersome. However, over half (56%) stated that while they notice aircraft noise occasionally it doesn't bother them. The remaining respondents claimed not to notice aircraft noise.

Figure 19.1

Perception of Neighborhood Street Noise or Traffic for King County Households (2004)

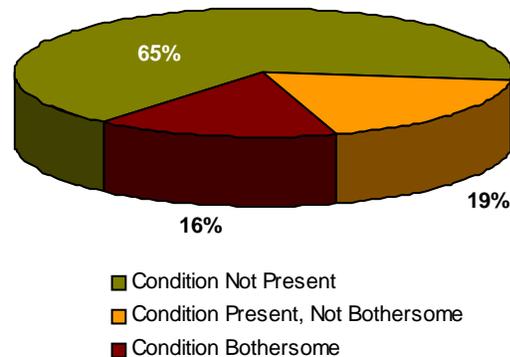
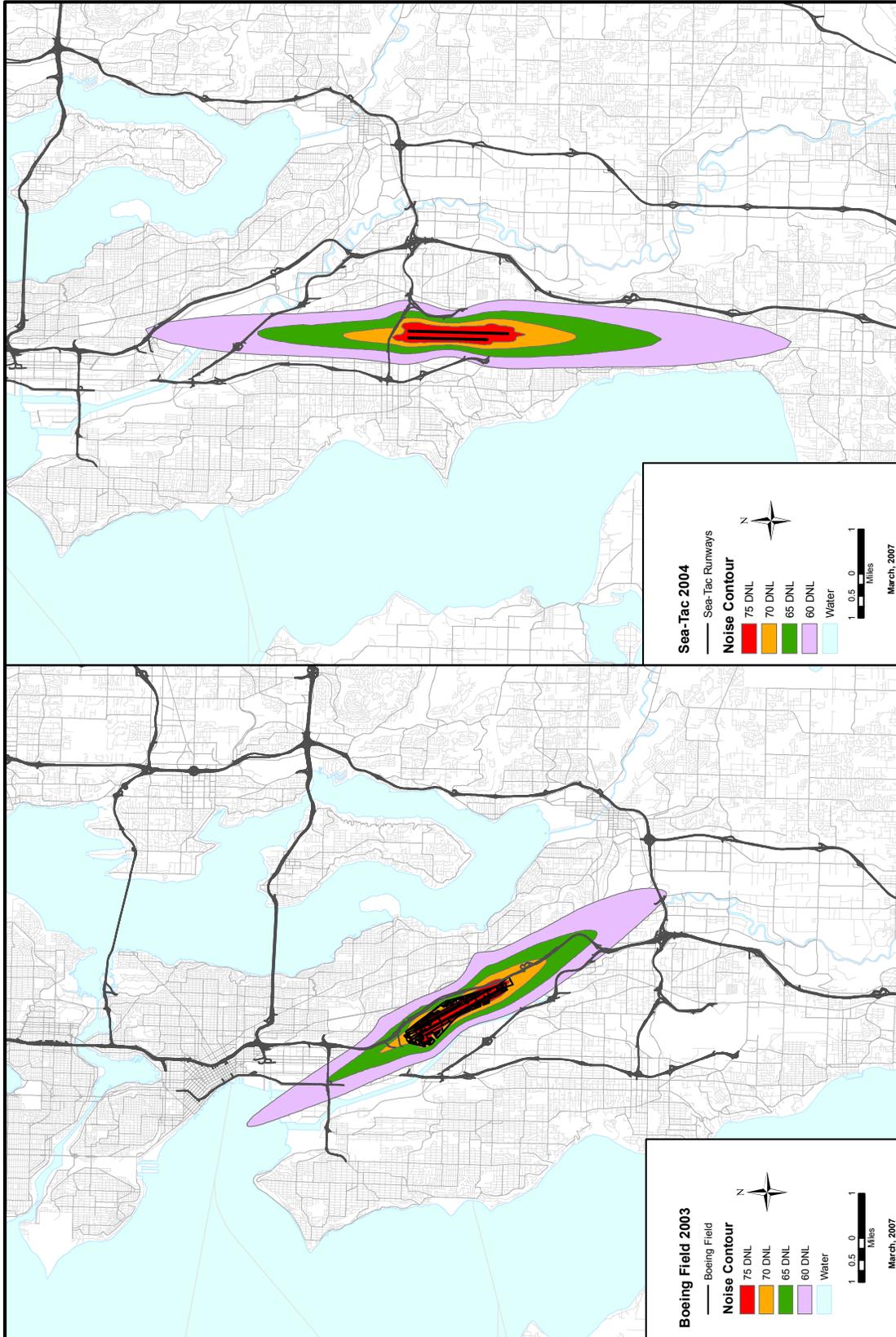


Figure 19.2 shows noise contours for both Boeing Field (2003) and Sea-Tac Airport (2004). Noises contours—established by modeling annual operations at each airport—graphically illustrate noise levels from air traffic by connecting points of equal noise exposure across an area. Noise exposure is measured in terms of **DNL** (Day-Night Average Sound Level) to represent cumulative exposure to aircraft noise over a 24 hour period. DNL is the average sound level in decibels over a given time, and include a 10 decibel penalty for noise occurring at night between the hours of 10 pm and 7 am to account for increased sensitivity to night-time noise.

Federal Aviation Administration (FAA) guidelines consider aircraft noise exposure levels below 65 DNL to be compatible with all land uses. The 65 DNL noise contour around Boeing Field encompassed nearly 3,000 acres, but only about one-sixth of the area is comprised of residential land uses, according to the 2003 modeling study for this airport. In contrast, the 65 DNL noise contour around Sea-Tac Airport encompassed over 4,000 acres. Land uses within the Sea-Tac Airport contours were not provided by the 2004 modeling study.

Other airports and airfields located in King County (but not included in this analysis) include: Auburn Municipal Airport, Bandera State Airport, Crest Airport, Kenmore Air Harbor, Renton Municipal Airport, Skykomish State Airport and Vashon Municipal Airport.



**2003 & 2004  
Noise Contours  
Boeing Field & Sea-Tac Airport**

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March, 2007