

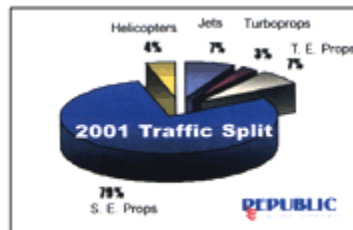
## Republic Airport Noise Contour Update Summary Calendar Year 2001

### 2001 Calendar Year - Total Traffic

A total of 156,304 takeoffs and landings occurred in 2001. This was a 3.4% decrease in activity over 2000. Jet traffic increased by 9%. All other categories declined; turboprops down 22%, twin engine props down 18%, single engine down 2% and helicopters down over 8%.

A total of 90% of jet movements took place during the day (7am to 10pm) while nearly 96% of propeller driven aircraft traffic occurred during the day.

Over 50% of total traffic used Runway 1/19 overall rising to a 52% split during the night period.



### Day Night Average Sound Level

Noise levels around airports are customarily defined by the annual average noise levels. These are normally calculated with the use of a computer model, in the case the FAA's INM Version 6.0c. The Day Night Average Sound level departs from the strict average by placing a 10 decibel penalty on all noises during the night period (10pm to 7am) to account for the greater disturbance that normally occurs. The computer model calculates a series of nested contours which are displayed in this case on an [aerial photograph](#) of the Airport and vicinity. The key criterion is the placement of DNL 65 level contour.

### 2001 Noise Exposure Map

The Airport monitors noise levels annually to determine the effectiveness of noise abatement measures. On the reverse of this sheet, the [Noise Exposure Map for the 2001](#) shows cumulative noise contours from the DNL 65 to the DNL 75 level. The Scale of this display is approximately 1 inch equals 1600 feet.

Federal guidelines consider all the land uses outside the areas defined to be compatible. For 2001, there was no encroachment to the DNL 65 contour on any residentially developed area around the Airport.

Total area enclosed within the DNL 65 is 1.14 square miles. This is a 20% decrease from the 2000 calculated area. The DNL 70 contour and the DNL 75 contour decreased to 0.59 and 0.33 square miles. Grid point analysis of a point one mile from each runway end showed decreases at all points. The highest level found was at the north point. This point showed the greatest decline, 1.6 dB.

These decreases were partially the result of declining traffic. Suspension of flight activities for certain categories of aircraft during the latter part of the year accounted for the decline. A revision to the INM database for the Gulfstream IIB aircraft type was introduced in INM Version 6.0c by the Federal Aviation Administration. This substituted a thrust cutback noise abatement profile for the previous standard profile. Results from the noise monitoring data were used to confirm the accuracy of this adjustment.

### Noise Complaints

Total noise complaints decreased to 1,449 from 1,481, a 2% reduction. The distribution of complaints changed from the historical pattern with a greater percentage from areas north, and southeast than had been previously observed. Complaint rates were elevated during the first six months of the year, but declined during the last six months in comparison to the prior year.