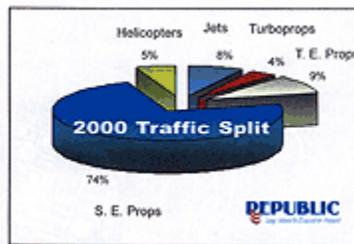


## Republic Airport Noise Contour Update Summary Calendar Year 2000

### 2000 Calendar Year - Total Traffic

A total of 161,840 takeoffs and landings occurred in 2000. This was a 6.0% decrease in activity over 1999. Jet traffic increased by nearly 17% and twin engine aircraft volume was up 2%. All other categories declined; turboprops down 2.3%, single engine down 8.4% and helicopters down nearly 8%.

A total of 89% of jet movements took place during the day (7am to 10pm) while nearly 94% of propeller driven aircraft traffic occurred during the day. Over 58% of total traffic used Runway 1/19 overall with a similar split during the night period.



### Day Night Average Sound Level

Noise levels around the 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 6.0b. The Day Night Average Sound level departs from a 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 models calculate a series of nested contours which are displayed in his case on an aerial photograph of the Airport and vicinity. The key criterion is the placement of the DNL 65 level contour.

### 2000 Noise Exposure Map

The [Noise Exposure Map for 2000](#) 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 land uses outside the areas defined to be compatible. For 2000, there was no encroachment of the DNL 65 contour on any residentially developed area around the Airport. Total area enclosed within the DNL 65 is 1.43 square miles. This is a 9% increase from 1999 calculated area. The DNL 70 contour and the DNL 75 contour increased to 0.68 and 0.37 square miles. Grid point analysis of a point one mile from each runway end showed decreases at two points and increases at two points. The highest level found was at the north point.

The increases were caused by the overall increase in jet traffic. A 17 percent increase occurred. Among the jet aircraft, older noisier Stage 2 aircraft, primarily Gulfstream II series aircraft, increased in activity and had substantially greater activity during the night period than in 1999.

### Noise Complaints

The total noise complaints increased to 1,481 from 624. The distribution of complaints changed from the historical pattern with a greater percentage from areas north, south, and southeast than had been previously observed. Complaints from the north increased the most due to new residential development in that area. The increased complaint rate appeared to coincide with public reaction to airport development proposals.