

Introduction

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The Centennial Airport Federal Aviation Regulation (FAR) Part 150 Study is a five-year program. The baseline year for this Study is 1999 with the future baseline being 2005. The purposes of an FAR Part 150 Program are: to assess the noise environment, to prepare forecasts of aviation operations, to identify land uses within the airport environs, and to explore ways to mitigate land use compatibility conflicts.

FAR Part 150 requires the development of Noise Exposure Maps that depict the existing aircraft noise levels, expressed in terms of the Day-Night Noise Level (DNL) metric, and the five year future noise levels in terms of DNL. Thus the Study has a five-year planning horizon. The threshold DNL used for compatibility purposes is the 65 DNL noise contour. In addition to the Noise Exposure Maps, a Noise Compatibility Program (NCP) can also be prepared. The NCP contains the recommendations for noise mitigation and abatement that the sponsoring agency, the Arapaho County Public Airport Authority in this case, is recommending for implementation. A generalized schedule for implementation, along with the parties responsible for that implementation, is also presented.

Summary

This document contains a review of the existing land use controls available for implementation, future land uses, and existing zoning in the airport environs. A review of historical aviation activity is also presented and a forecast of activity for the study period. The Forecasts are consistent with the Terminal Area Forecasts prepared by the Federal Aviation Administration. The existing and future noise contours associated with the aviation activity is presented along with the noise measurement program and analysis used to develop these contours. Using these contours as a base, the noise compatibility process discusses the development of

realistic and effective operational alternatives to mitigate the noise exposure. In addition to operational alternatives, a wide range of feasible land use alternatives, noise control actions, and noise impact patterns are evaluated and potential solutions which accommodate both airport users and inhabitants of the airport's environs within acceptable safety, economic and environmental parameters are discussed.

The various measures are listed and described, and each is evaluated in terms of its appropriateness with, and relationship to, Centennial Airport. In addition, recommendations are made as to which alternatives should be implemented at the Airport. The document then presents a schedule for review and updating of the elements contained in this FAR Part 150 Plan and Program to ensure success of the program.

This document, in terms of content and recommendations, has culminated from many meetings, with the Citizens Advisory Committee, the Technical Advisory Committee, Airport Staff and Management, the Authority, the Federal Aviation Administration and other interested parties.

All proposals contained in this document are consistent with the Approved Airport Layout Plan and the Airport Master Plan and the State System Plan.