## Introduction

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The Detroit Metropolitan Wayne County Airport (DTW) Federal Aviation Regulation (FAR) Part 150 Study is a five-year program. The baseline year for this update is 2004 with the future baseline being 2011. 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 previously accepted Noise Exposure Maps (found on pages D.48 and I.5), a Noise Compatibility Program (NCP) has also been prepared which is presented in the Issues/Actions and Recommendations Chapter. The Recommendations, once approved, forms the NCP. The NCP contains the recommendations for noise mitigation and abatement that the sponsoring agency, the Wayne County Airport Authority in this case, is recommending for implementation. The parties responsible for that implementation, is also presented. This document represents a submittal of the Noise Compatibility Program.

## **Noise Exposure Maps**

The Noise Exposure Maps presented in this document were accepted by the Federal Aviation Administration in March 2006. The Maps are still accurate and valid for purposes of Part 150. There are no substantial new non-compatible uses within the contours nor is there a significant new reduction in noise over existing non-compatible uses<sup>1</sup>.

Subsequent to the development and acceptance of the Noise Exposure Maps, the Noise Compatibility Program was developed through a public process. During the development of the Noise Compatibility Program, Northwest Airlines and Delta Airlines announced their intent to enter into a merger, and it is anticipated the Detroit Metropolitan Wayne County Airport may become an even larger airline hub after the merger with growth in airport operations and enplanements. Once the merger is complete and aircraft operations have stabilized, and any necessary environmental processing is completed, the Airport will consider updating the NEM's to reflect updated activity levels.

Prior to the initiation of the Part 150 Study, and pursuant to a separate commitment made by the Airport, the FAA agreed to test two new flight procedures. It was determined that the test and the evaluation of the test would be conducted during the preparation of the Part 150 Study. The test procedures, protocol and evaluation methodology, along with the test results were presented and discussed at several Committee meetings during the Part 150 process. In fact, a separate "hot line" was set up so that the public could comment during the test. Due to the fact that the test was pursuant to a separate agreement outside the Part 150 process, the implementation of the two additional departure headings were not included in the NCP, and have been treated as a separate issue to be implemented outside the parameters of the Part 150 Study. The complaint data showed that

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<sup>&</sup>lt;sup>1</sup> 14 CFR 150.21(d)(1) A change in the operation of an airport creates a substantial new noncompatible use if that change results in an increase in the yearly day-night average sound level of 1.5 dB or greater in either a land use which was formerly compatible but is thereby made noncompatible under Appendix A (Table 1), or in a land area which was previously determined to be noncompatible under that Table and whose noncompatibility is now significantly increased. A change in the operation of the airport creates a significant reduction in noise over existing noncompatible uses if that change results in a decrease in the yearly day-night average sound level of 1.5 dB or greater in land area which was formerly noncompatible but is thereby made compatible under Appendix A.

there was little reaction to the test in terms of complaints. In fact, only three callers asked about a potential change. The Future NEM with the test procedures would not result in substantial new non-compatible uses within the contours nor is there a significant new reduction in noise over existing non-compatible uses from the Future NEM without the test, which is the previously accepted NEM.

## **Summary**

The various measures are listed and described, and each is evaluated in terms of its appropriateness with, and relationship to, Detroit Metropolitan Wayne County 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 Study Advisory Committee, Airport Staff and Management, the Airport Authority, the Federal Aviation Administration and other interested parties. All proposals are consistent with the Airport Master Plan and Airport Layout Plan.