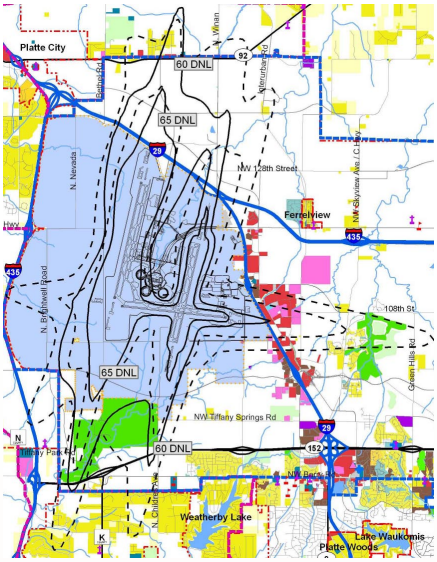
KCI Part 150

Public Workshop #1



What Is a Part 150 Study?

The F.A.R. Part 150 Noise Compatibility Program is a voluntary program undertaken by airport management to improve the compatibility of airport operations with the uses of surrounding lands. Its purpose is to reduce noise impacts on existing incompatible land use and to prevent the introduction of new incompatible land uses in areas exposed to high levels of aircraft noise. The Part 150 process assesses the existing and future (forecasted) noise conditions and prepares a plan to reduce aircraft noise impacts through the application of noise abatement techniques, to mitigate noise impacts on existing land uses, and to make the airport eligible for FAA funding assistance for program implementation.

Typically, the program measures developed for a Part 150 Study include noise abatement strategies that modify the locations where aircraft fly, land use mitigation techniques (sound insulation, acquisition, etc.), and land use management recommendations (planning, zoning regulations, subdivision specifications, etc.). The Part 150 process for Kansas City International Airport (KCI) will review the noise compatibility program prepared in 1994 for its continued effectiveness in achieving its noise management purpose, as applied to current and anticipated noise exposure patterns, and as appropriate, will develop additional measures to maintain the compatibility between the airport and its environs.

Why Is a Part 150 Study Being Conducted for KCI?

The Kansas City Aviation Department last conducted a Part 150 Study in 1994 and the FAA issued its Record of Approval in 1996. The future year assessed in that update was 1998, with projections to the year 2010. The study included the construction of an east parallel runway (1R/19L), which was completed in 1994. The 1994 study included recommendations for 24 separate measures, of which twenty were approved by the FAA as being eligible for federal participation, if applicable. A listing of those measures, and their current status of adoption is attached.

Since the 1994 Part 150 Study was approved, a number of changes have occurred at KCI that require another look at the currently approved measures. The most notable change has been the elimination from the air carrier and cargo fleet of aircraft not certified to meet the most stringent noise level limits now approved by the federal government. The growth of Southwest and Midwest Airlines was not fully anticipated by the previous study, nor was the conversion of many larger air carrier aircraft to smaller, more cost-efficient regional jets. The result of these changes has been a general, and substantial, reduction of the noise level of the typical aircraft operating from the airport in 2007, as compared to the levels projected by the earlier study. It is expected that the growth and fleet conversion trends exhibited during the last five years will continue to be present through the foreseeable future.

2006 and 2012 Baseline Noise Exposure Patterns

Baseline noise exposure contours were prepared for 2006 and 2012 conditions, using the FAA's Integrated Noise Model. Attached to this handout are map exhibits showing these noise exposure contours on the study area map that was developed for use in this Part 150 Study.

To assist the evaluation of alternatives for the concurrent Airport Master Plan effort, a baseline noise pattern has been developed for the year 2025, assuming the continued use of all airfield facilities and no development of additional runways. This map will serve as a baseline for the assessment of noise compatibility effects related to potential airfield development alternatives.

Assumptions Used to Develop the 2012 and 2025 Baseline Noise Exposure Patterns

- No changes to the existing airfield layout
- Growth of operating levels and changes of fleet mix in accordance with Master Plan forecast
- Continued use of current runway use patterns
  - Cargo, Terminal A and west half of Terminal B users predominantly on west parallel runway 1L/19R.
  - East half of Terminal B and Terminal C users predominantly on east parallel runway 1R/19L.
  - Use of crosswind runway during high east/west winds or during peak periods to relieve demand on parallel runways.

Progress to Date

- Study initiated September 2006
- Land use survey completed, digital land use data base prepared, and preliminary land use map prepared
- Radar data of flight tracks for all seasons consolidated into flight corridors for use in noise modeling
- User fleet mix and operations forecasts developed for 2006, 2012 and 2025 baseline cases.
- Noise measurement program conducted at 14 sites around the airport to provide comparisons with computer generated noise levels.
- Noise contours modeled using the FAA Integrated Noise Model; 2006, 2012 and 2025 baseline noise exposure patterns completed.

Preliminary Conclusions to Date

- Noise exposure forecasts prepared during the 1994 Study overestimated the extent of land exposed to environmentally significant levels of aircraft noise. The elimination of older, louder aircraft from the operating fleet has created a substantial reduction in noise pattern size.
- Runway use patterns for the condition do not reflect the pattern proposed by the 1994 Noise Compatibility Program. The east parallel runway is not used as much as had been anticipated, and the crosswind runway is used much less than had been anticipated.
- The 1994 NCP recommendation for late night landings on the left runway and takeoffs from the right runway, whether in north or south traffic flow, has not been adopted. Nearly all late night traffic operates from the west parallel runway.
- The baseline 2006 noise contours include one home within the environmentally significant 65 DNL contour, and 38 homes within the 60-65 DNL contour range. The 1998 NCP contours included nine homes within the 65 DNL contour and 226 exposed to noise between 60 and 65 DNL. An offer to acquire the single home within the 65 DNL contour has been made, but the owner prefers to remain.
- The baseline 2012 noise contours include one home within the environmentally significant 65 DNL contour, and 41 homes within the 60-65 DNL contour range.
- The baseline 2025 noise contours include one home within the environmentally significant 65 DNL contour, and 54 homes within the 60-65 DNL contour range.

Next Steps

Aviation and Land Use Technical Committee meetings to discuss and evaluate abatement and mitigation alternatives