

Suggested Airport Noise Questions for County Executive Joe Parisi

DRAFT - November 4, 2011

Airport Noise Control Measures

1. What steps has county airport staff taken to reduce noise during the last 10 years?
2. Using a grading scale from A to F, how would county airport staff grade the performance of their efforts to control noise generated by airport operations?
3. If airport staff has awarded itself a grade of less than A, what improvements can be made to achieve an A?
4. What steps has county airport military staff taken to reduce noise during the last 10 years?
5. Using a grading scale from A to F, how would county airport military staff grade the performance of their efforts to control noise generated by airport operations?
6. If airport military staff has awarded itself a grade of less than A, what improvements can be made to achieve an A?
7. During 2010, what activities did airport staff to reduce the noise from airport operations and what was the estimated cost of these activities?

Evaluating Available Airport Noise Abatement Procedures

1. According to the FAA, the county airport's noise abatement plan was last updated in 1996. What would be needed to conduct a study compiling current noise abatement procedures in use by other airports and evaluating the cost and steps needed to implement each of these procedures at the county airport?

Independent Oversight of Airport Noise Control Program

1. What would be the cost to have an independent contractor audit the county airport's noise control program and provide suggestions for improvements?
2. What county department outside of the county airport is best suited to provide independent oversight of the airport's noise control program?
3. What would be the cost to county airport to fund a staff position to provided independent oversight of the airport's noise control program?

Military Flights

1. The military jet airplane flights generate the worst airplane noise and vibrations. How has the number and types of military flights changed over the past 10 years?
2. In 2000, military flights were moved to Volk Field during runway construction. What steps can airport staff take to have military flights partially or permanently moved to Volk Field?
3. What steps can airport staff take to have military flights scheduled to only takeoff, fly and land only when able to do so north of populated areas of the city?

Military Jet Engine Testing

Airport and military staff have installed a hush house for testing jet engines, but the noise from testing jet engines on the ground remains too loud, can be heard from miles away, and shakes the ground like an earthquake.

1. What tests have been conducted to determine the noise levels during jet engine testing?
2. What tests have been conducted to determine the effectiveness of the hush house?
3. What steps can be taken record the number of times that jet engines are tested so this noise generating activity can be reported to the public?
4. What steps can be taken to reduce the number of times that jet engines are tested?
5. What further steps can be taken to eliminate or reduce this noise from jet engine testing?

Home and School Noise Abatement Programs

1. In its 1997 noise study for the new Runway 3-21, the county airport determined there were 1,500 homes impacted by county airport noise above the FAA standard (i.e. inside the 75-decibel noise contour). How many of these homeowners were offered noise abatement measures by the county airport?
2. Other airports have on-going home noise abatement programs. The Twin Cities metro airport provides up to \$14,000 to add noise abatement insulation and other measures to homes within the 60-decibel noise contour. Why doesn't the county airport have a program to install noise abatement on home, schools and businesses in the populated areas of the Madison?
3. What would be the cost to implement a home noise abatement program for all residences and schools within 3 miles of the county airport?

Airport Noise Abatement Subcommittee

1. How are members of the subcommittee chosen?
2. How much influence does this subcommittee hold over changes to airport operations?
3. Is any expertise in airport noise abatement required to serve on the committee?
4. How many members of the committee live within 3 miles of the airport?
5. During each of the 10 years, please identify improvements to the airport's noise abatement procedures which have been recommended by committee members?
6. Which of these improvements have been implemented?
7. What steps would be required to require the airport noise abatement committee to prepare an annual report on improvements it has implemented to the airport's noise abatement procedures?
8. What steps would be required to assure that a majority of the subcommittee members are chosen from residents living within 3 miles of the airport?
9. What steps would be necessary to hold the semi-annual committee meetings within the city neighborhoods most impacted by airport noise?
10. What steps would be necessary to assure accurate minutes are prepared of committee meetings?

Airport Noise Control Plan

1. According to the FAA web site, the airport's noise control plan was last updated in 1996. Other airports such as the Twin Cities Metro Airport update their plan annually. Why is the county airport plan not updated on a regular basis?
2. At the April 2010 airport noise committee, airport staff gave a presentation that included a figure showing noise contours around the airport. This figure appeared to come from the 1996 airport noise control plan. County Supervisor Hendrick contacted airport staff to answer questions about this noise contour figure but received no response.
 - a) When were these noise contours developed?
 - b) Do these contours represent instantaneous noise levels or average noise levels over a day?

- c) Does airport staff believe these contours accurately represent the noise impacts on Madison neighborhoods?
- d) What were the air traffic assumptions used to develop these contours?
- e) Do these contours include noise from military flights including fighter jets and helicopters?
- f) Do these contours include noise generated by the revving of airplanes on the ground like fighter jets?
- g) What would be the cost to update the noise contours?

Contra-Flow Noise Control Strategy

1. The airport's web site states that: "*Weather and air traffic permitting, aircraft comply with the airport's voluntary noise abatement program by landing from and taking off to the north to minimize noise above the populated areas of the city.*" This program has been called the "counter-flow strategy". What does airport staff currently call this program?
2. During each of the past five years, what were the number flights and percentage of all flights that did not land from or take off to the north, but instead flew over populated areas of the city?
3. What steps can airport staff take to reduce the number of flights which fly over populated areas of the city?
4. To help improve the counter-flow noise control strategy, how much time and cost would it take airport staff to record every flight including information such as the runway, takeoff/landing direction, type of aircraft, airline, flight controller, pilot, wind speed, wind direction and visibility?
5. What would be the cost of collecting this information for flights outside normal business hours?
6. What steps would be needed to report to the public the number of monthly flights over populated areas?

5 Knot per Hour Wind Speed Threshold

Airport staff frequently cite a 5 knot per hour wind speed as the threshold to determine when aircraft can follow the contra-flow noise control strategy. For example, if the wind from the north exceeds 5 knots per hour, airplanes cannot land from the north, but must land from the south over populated areas of the city. This wind speed threshold severely limits the number of aircraft that can follow the contra-flow noise control strategy.

1. Is this threshold mandated by the FAA or was it developed by the county airport?
2. What thresholds do other airports use, if any?
3. What is the basis for this 5 knot per hour threshold?
4. Are all aircraft required to comply with this threshold?
5. Is this threshold only used by airport staff to determine which flights should have followed the contra-flow strategy?
6. What aircraft currently ignore this threshold by landing with greater than a 5 knot tailwind, or takeoff into greater than a 5 knot tailwind?

Noise Monitoring

1. Other airports such as the Milwaukee Airport have installed noise monitors throughout the area surrounding the airport and report the noise levels experienced by the public. Why has the county airport not installed noise monitors?
2. What would be the procedures and cost for the county airport to install a noise monitoring system in areas most impacted by airport operations?

Reducing the Number of Noisy Airplanes

1. What would be the cost of developing an inventory of the noise levels generated by each type of airplane using the county airport?
2. What procedures could be implemented to encourage the use of quieter aircraft?

Flight Curfew

1. The East Hampton Airport in New York and the Santa Barbara Airport in California have voluntary curfews to limit early morning and late night flights. The Santa Barbara Airport petitioned the FAA to officially adopt the flight curfew as part of their noise abatement procedures. When the FAA did not approve the request, the airport adopted a voluntary curfew. What steps would be needed for the county airport to petition the FAA to adopt a flight curfew, or if not approved by FAA, to adopt a voluntary curfew?

Aircraft Penalties for Violating Noise Abatement Procedures

1. The East Hampton Airport in New York considered fining airplane pilots \$25,000 for violating the airport's voluntary curfew. What other airports fine aircraft operators for violating noise abatement procedures?
2. What steps would be needed for the county airport to develop a fine system to encourage compliance with its noise abatement program?

Effectiveness of New Runway 3-21

1. In 1995 the county airport built a new runway 3-21 for \$26 million to reduce traffic over populated areas of the city. Have airport staff conducted any studies to determine the effectiveness of this new runway?
2. If not, what were the number of flights which used this new runway in 2010 and what percentage of total flights does this represent?
3. What types of flights are unable to use this new runway and what percentage of total flights do these represent?

Economic Impacts

1. Madison's neighborhood indicators web site shows that the county airport is surrounded by the greatest number of families in poverty in Madison. What steps can airport staff take to reduce the amount of poverty surrounding the airport?
2. How many of current airport employees live within 3 miles of the airport?
3. What steps would be needed for the airport to give preferential hiring to those living within 3 miles of the airport?
4. What steps would be needed to require all airport staff to live within 3 miles of the airport?
5. Can the City of Madison charge a toll or airport passenger fee to pay for implementing its own airport noise abatement program?
6. In 2011 dollars, what is the average airline ticket price at the county airport currently, and then 10, 20 and 30 years ago?