GPAC Noise Element Subcommittee – Agenda – July 25, 2024

Time: 07/25/2024, 3:00 pm - 4:30 pm
Location: City Hall, Newport Beach Conference Room, Bay 1B/Hybrid (details)

1. **Roll call**
2. **Noise measurement terminology** (see Attachment A)
    - Objective: Ensure members are comfortable with the noise measurement terms found in the Dudek memo (below) and in the existing Noise Element: dBA, Leq, CNEL, DNL and "ambient."
3. **Dudek Review Memo**
    - Dana Lodico, Senior Acoustician with Dudek, will be attending remotely to discuss her June 27, 2024, Review of City of Newport Beach General Plan Noise Element memo.
    - Objective: Ensure members understand the recommendations, particularly with regard to whether the noise contours need to be updated, and if there are noise mitigation measures that may have been overlooked.
4. **Discussion of Future Noise Sources**
    - The Dudek memo, as well as the state guidelines for Noise Element updates, encourage the subcommittee to consider new sources of noise that may emerge within the update's time horizon of 20-30 years.
    - The subcommittee can discuss how to approach this.
5. **Status of Noise Complaint Data Compilation**
    - Staff liaison and Principal Planner Ben Zdeba will update the subcommittee on his efforts to collect noise complaint data from the various City departments.
6. **Open Discussion**
    - If time remains, topics should include what subcommittee members feel we need to do and cover to achieve a productive outcome.
    - The subcommittee may also wish to continue discussion of carryover topics from the previous meetings (see Attachment B and C)
7. **Future Meetings**
    - Set date for next meeting.

A. Noise measurement terminology

The intensity of noise can vary over milliseconds of time, so all discussions of it, and especially its regulation, require clearly defined terms for describing it.

The Dudek memo uses several of those, all expressed on scale of "A-weighted decibels" (dB). Definitions can be found in the introduction to the existing Noise Element, as well as the General Plan Glossary, and in more detail in the associated Community Noise Control ordinance (Newport Beach Municipal Code Chapter 10.26).

In essence, my understanding is:

- **Leq** (Equivalent Continuous Sound Pressure Level) is the loudness averaged over a specified interval of time, typically anywhere from 1 second to 24 hours. What would commonly be thought of as "loudness" shown on a sound meter, or as the ordinance refers to it, "instantaneous noise level" is the Leq over one second. Most of the City regulations are based on the Leq over 15 minutes.
- **CNEL** ("Community Noise Equivalent Level") is essentially the Leq over 24 hours, but with extra weight given to the readings in the evening hours (7 to 10 p.m.) and even more to late night hours (10 p.m. to 7 a.m.). It was defined in California law in connection with aviation noise.
- **DNL** ("Day-Night Average Sound Level"), sometimes abbreviated "Ldn," is a federally-defined metric similar to CNEL, but applying the additional weighting only during the late night hours (10 p.m. to 7 a.m.).
- **Ambient** is a less clearly defined term. In some contexts it can be used to mean the background, or near-minimum noise level. In others, it can mean essentially the average for the location, and in still others the average that would be recorded without a noise source of interest.

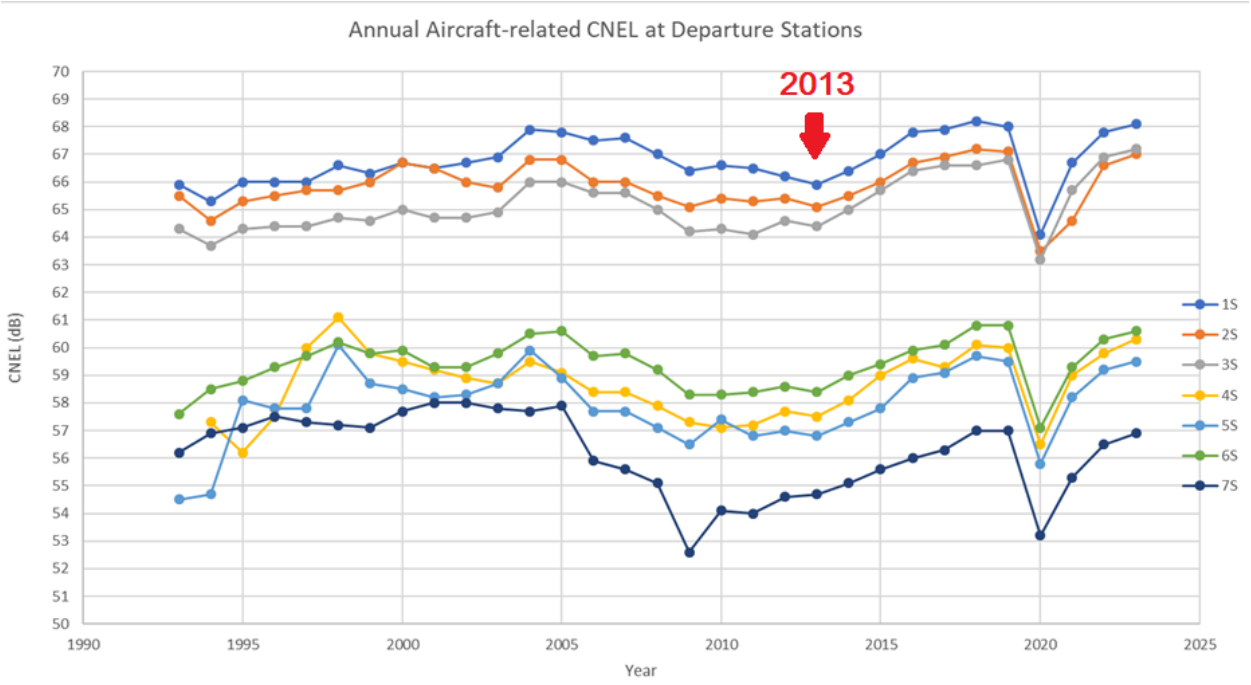
Because of the non-intuitive way the decibel scale works, averages are strongly skewed toward the highest decibels being averaged. And since at most locations and at most times, the noise consists of a background level interrupted by occasional spikes, the average tends to reflect the number and intensity of those spikes, and less so the background.

B. Carryover Topic: Airport Noise

At the June 18 meeting, there was some disagreement between members as to whether noise impacts from John Wayne Airport have increased or decreased since the Noise Element was last reviewed circa 2003. One member felt the jet aircraft today are significantly quieter than they are today; another that there are many more of them.

Both are correct, but so far, by most measures, the increase in numbers has more than offset the improvements in technology, resulting in an increased impact.

The following graph is a compilation of annual CNEL data published by JWA for the seven noise monitor stations they operate in Newport Beach.



Although the peak loudness of the flyovers is likely less than it was in 2003, the increase in numbers has led to slightly higher CNEL's at most of the monitors, except the most distant one, NMS 7S at the Newport Dunes.

Even if the CNEL has not changed much, the increased numbers means that by other metrics, such as the minutes per day at a level interrupting conversation, the impact is likely greater than it was.

The year 2013 is highlighted in the image because the Environmental Impact Report for the increased level of activity allowed by the County's present Settlement Agreement with the City was predicated on a promise improvements in technology would limit the increase in CNEL to less than 1 dB at the three noise monitors at the top. Since that threshold has been exceeded, further increases in activity anticipated in 2026 and beyond may be delayed until quieter aircraft become more common.

I do not have ready access to equally comprehensive information on number of jet departures, but an old quarterly report I have says the average daily jet "operations" (twice the number of departures) at JWA in the 12 months ending September 30, 2000, was 275. The most recent report indicates the number in the 12 months ending March 31, 2024, was 399 - a 45% increase (largely fueled by "General Aviation" business and charter jets).

C. Carryover Topic: Construction Noise

The subcommittee has received information that the most frequent topic of noise complaints received by the Community Development Department is construction noise.

The subcommittee awaits quantitative information on how many complaints and the breakdown between complaints about noise during allowed hours (currently unregulated and non-citable) and noise generated during non-allowed hours (prohibited and subject to citation).

At the June 18 meeting, there was discussion of whether excess noise during allowed hours could or should be regulated.

As to whether it could be regulated, a review of other city's and county's noise ordinances indicates regulation is fairly rare, and where it is regulated there are a variety of approaches. They range from setting limits on allowable noise from various classes of equipment to setting an allowable noise a site can generate averaged over the construction day.