I'm Sorry, I Can't Hear You!

--- City of Denver

The NOISE CYCLE

EVENT HAPPENS
   Festival Designation (80 dbA allowed)
   No Active Notification to Residents

It's LOUD! At my house!

Don't Like it?
   LEAVE until it's over
   FUME and do nothing
   COMPLAIN - 311, email, phone call

It's OVER - NO VIOLATIONS Recorded

REPEAT through the Noisy Season
What is LOUD?

The noise produced by a rock concert on average measures between 108 and 114 decibels — about as loud as the inside of a steel mill and louder than a jackhammer. By comparison, a normal conversation is about 60 decibels, an interstate highway measures 76 decibels and a baby’s cry comes in at 115 decibels. A noise begins to cause pain to the ear between 115 and 140 decibels, and prolonged exposure to noise in excess of 85 decibels can cause hearing loss.

---- Bangor Daily News, May 12, 2015

Talking loud is bad


Sec. 36-1. Purpose.

This chapter is enacted to protect, preserve and promote the health, safety, welfare, peace and quiet for the citizens of the city through the reduction, control, and prevention of noise. This chapter establishes standards intended to eliminate and reduce unnecessary and excessive motor vehicle and community noises that are physically harmful and otherwise detrimental to individuals and the community in the enjoyment of life and property and to the conduct of business.

Sec. 36-2. Definitions.

(10.3) **Festival**, for this [sic] purpose of this chapter, means cultural, athletic, educational, charitable, or civic events (including those with entertainment) provided the event does not exceed four days, is not part of a series of two (2) or more separate events in the same vicinity, is open to the general public, a permit for street closure or occupancy is obtained, and a license is, or licenses are, obtained to serve food, beverage, or liquor.

Sec. 36-4. Inspections.

(a) For the purpose of determining compliance with the provisions of this chapter, the manager of environmental health and the chief of police or their authorized representatives are hereby authorized to make inspections of all noise sources and to take measurements and tests whenever necessary to determine the quantity and character of noise.
Denver Law: Allowable Sound Pressure Levels in dBA

<table>
<thead>
<tr>
<th>Source (who is making the noise)</th>
<th>Residential</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9pm-10pm</td>
<td>10pm-11pm</td>
<td>11pm-12am</td>
<td>12am-1am</td>
</tr>
<tr>
<td>Residential</td>
<td>55</td>
<td>55</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Commercial</td>
<td>55</td>
<td>55</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Industrial</td>
<td>(60)</td>
<td>(60)</td>
<td>(60)</td>
<td>(60)</td>
</tr>
<tr>
<td>Public</td>
<td>(60)</td>
<td>(60)</td>
<td>(60)</td>
<td>(60)</td>
</tr>
<tr>
<td>Festival</td>
<td>80</td>
<td>*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* For festivities and associated activities, between the hours of 8:00 a.m. and 10:00 p.m. - events of amplification of music may not exceed a sound pressure level of 100 dBA when measured from the source of the noise source presence.

A band cutout less - less nerve damage
low frequencies travel further

dbA Measure Subtracts Sound

[Diagram of dB(A), dB(B) and dB(C) Calculation]
Enforcement

Model is complaint-driven. Doesn’t work for events
DPD does not “do noise” unless you’re willing to file
a criminal complaint (neighbor, repetitive)
No data collection or analysis (311)
dBA vs. dB C. Denver code does not include limits/
measurements in the range that cause problems

Citizen Engagement

Chive Fest (August, 2014) Riot Fest (Sept, 2014) - meetings,
letters, complaints
INC Resolution on Revising Ordinance to include full
spectrum measures (dB C) (Sept, 2014)
Meeting with EH, Mayor’s representative (Nov, 2014)
--- No response.
2015: the Noise Cycle begins in City Park with the Colfax
Marathon
What is City Policy?

Noise from park events affects neighborhood residents

10+ year Denver policy to promote “activation” of parks

ABE policy encourages loud commercial activity, use of public assets (parks) for private profit

Office of Special Events created to facilitate events

Are parks venues?

What about Office of Special Events?

Their role is to facilitate events

No role in policy or enforcement

Holding post-mortem meetings on an event-by-event basis to assist promoters in improving their events

Planning to produce an event calendar
What could help?

Noise limits to reflect dB range - requires City Council to change ordinance

311 to produce & post meaningful reports to encourage reporting/engagement

Active notification of events

Require event planners to pay for noise measurement & enforcement

Model noise planning & enforcement on zoning, a la Portland, Oregon

Vuvu Fest?

<table>
<thead>
<tr>
<th>Noise Source</th>
<th>Decibel Level</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jet take-off (at 25 meters)</td>
<td>150</td>
<td>Ear drum rupture</td>
</tr>
<tr>
<td>Aircraft carrier deck</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>Military jet aircraft take-off from aircraft carrier with afterburner at 50 ft (130 dB)</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Thunderclap, chain saw, Oxygen torch (121 dB)</td>
<td>120</td>
<td>Painful. 30 times as loud as 70 dB</td>
</tr>
<tr>
<td>Steel mill, auto horn at 1 meter Turbo-fan aircraft at takeoff power at 200 ft (118 dB) Riveting machine (110 dB), live rock music (108 - 114 dB)</td>
<td>110</td>
<td>Average human pain threshold 16 times as loud as 70 dB</td>
</tr>
<tr>
<td>Jet take-off (at 305 meters), use of outboard motor, power lawn mower, motorcycle, farm tractor, jackhammer, garbage truck Boeing 707 or DC-8 aircraft at one nautical mile (6080 ft) before landing (106 dB), jet flyover at 1000 feet (103 dB), Bel-J-2A helicopter at 100 ft (100 dB) Boeing 737 or DC-9 aircraft at one nautical mile (6080 ft) before landing (97 dB), power mower (95 dB), motorcycle at 25 ft (90 dB) Newspaper press (97 dB) Garbage disposal, dishwasher, average factory, freight train (at 15 meters). Car wash at 20 ft (89 dB), propeller plane flyover at 1000 ft (88 dB), diesel truck 40 mph at 50 ft (64 dB), diesel train at 45 mph at 100 ft (63 dB)</td>
<td>100</td>
<td>8 times as loud as 70 dB. Serious damage possible in 8 hr exposure</td>
</tr>
<tr>
<td></td>
<td>95</td>
<td>4 times as loud as 70 dB. Likely damage 6 hr exp</td>
</tr>
<tr>
<td>Passenger car at 65 mph at 25 ft (77 dB), freeway at 50 ft from pavement edge 10 a.m. (76 dB), Living room music (76 dB), radio or TV audio, vacuum cleaner (70 dB)</td>
<td>70</td>
<td>Arbitrary base of comparison. Upper 73s are annoyingly loud to some people</td>
</tr>
<tr>
<td>Conversation in restaurant, office, background music, Air conditioning unit at 100 ft</td>
<td>60</td>
<td>Half as loud as 70 dB Fairly quiet</td>
</tr>
<tr>
<td>Quiet suburb, conversation at home. Large electrical transformers at 100 ft</td>
<td>50</td>
<td>One-fourth as loud as 70 dB</td>
</tr>
<tr>
<td>Library, book cases (44 dB), lowest limit of urban ambient sound</td>
<td>40</td>
<td>One-eighth as loud as 70 dB</td>
</tr>
<tr>
<td>Quiet rural area</td>
<td>30</td>
<td>One-sixteenth as loud as 70 dB. Very Quiet</td>
</tr>
<tr>
<td>Whisper, rustling leaves</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Breathing</td>
<td>10</td>
<td>Barely audible</td>
</tr>
</tbody>
</table>