# ANALYSIS OF & RECOMMENDATIONS FOR THE GAINESVILLE CITY ORDINANCE CHAPTER 15 NOISE

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# **Introduction**

It is the purpose of this analysis to evaluate the effectiveness of the current noise ordinance, and to propose new regulations with an organized system of enforcement.

The matter of the Gainesville City's Noise Ordinance has come to the front of the debate for the preservation of the quality of life in our city. Gainesville is a unique environment, with an ever changing market; therefore an always evolving source of noise pollution. Growth in both the number of active noise sources and the number of structures in Gainesville indicates that a revision of the current noise ordinance is mission critical. Furthermore, the closing gap between residential and commercial land space exposes more citizens to the effects of noise.

This comprehensive report is structured to give the reader the tools to evaluate each individual modification to the ordinance. In the first segment of this report titled "Chapter 15 – Noise {Proposal}," the ordinance is written as would be voted into law. The second portion expounds upon the key differences between the current ordinance and the proposal. Third, each key difference is defended by explaining my rationale and the logic used in creation of the reformation. Finally, in the data subdivision of this testimony, raw statistics are provided to the reader.

This analysis and recommendation is an independent study conducted through the University of Florida, under the supervision of Dr. Robert Fox of the ECE Department. The project was commissioned by Lt. Brian Helmerson of the Gainesville Police Department. The study was conducted in the months of August, September, and October of 2013.

# <u>Chapter 15 – Noise {Proposal}</u>

# Section 15-1. Legislative findings; declaration of necessity.

It is found and declared that:

- (1) Excessive sound within the limits of the city is a condition that has existed for some time and the amount, and intensity of such sound is increasing.
- (2) Such excessive sound is a detriment to the public health, safety, welfare, and quality of life of the residents of the city.
- The necessity in the public interest for the provisions and prohibitions hereinafter contained and enacted is declared as a matter of legislative determination and public policy, and it is further declared that the provisions and prohibitions hereinafter contained and enacted are in pursuance of and for the purpose of securing and promoting the public health, safety, welfare, and quality of life of the city and its inhabitants.

### Section 15-2. Definitions.

For the purpose of this chapter, certain words and phrases used herein are defined as follows:

**A-weighted sound level** means the sound pressure level in decibels as measured with a sound level meter using the A-weighting network. The unit of measurement is the dB(A), which indicates a reference level of 20 micropascals. The reference level of 20 micropascals is said to be the lower pressure limit of human hearing.

*City Block* is defined as the average length between adjacent avenues or streets in Gainesville, FL. This distance is hereby defined as 300 feet.

**Commercial (land use)** means all areas not otherwise classified as residential, as defined in this section.

*Construction* means any site preparation, any assembly, erection, substantial repair, alteration or similar action, excluding demolition, for or on public or private rights-of-way, structures, utilities or similar property.

*Continuous airborne sound* means sound that is measured by the slow-response setting of a meter manufactured to the specifications of ANSI § 1.4-1971 "Specification for Sound Level Meters," or its successor.

*Daytime* means 8:00 a.m. to 10:00 p.m. the same day.

**Decibel (dB)** means a unit for measuring the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

**Demolition** means any dismantling, intentional destruction or removal of structures from the utilities, public or private right-of-way surfaces, or similar property.

**Emergency** means any occurrence or set of circumstances involving actual or imminent physical trauma or property damage, which necessitates immediate action. Economic loss shall not be the sole determining factor in the determination of an emergency. It shall be the burden of an alleged violator to prove an "emergency."

*Emergency work* means any work made necessary to restore property to a safe condition following an emergency, or to protect property threatened by an imminent emergency, to the extent such work is necessary to protect persons or property from exposure to imminent danger or damage.

*Frequency* means the number of complete oscillation cycles per unit of time.

*Impulsive sound* means sound of short duration, usually less than one second, with an abrupt onset and rapid decay. Examples of sources of impulsive sound include explosions and drop forge impacts. *Nighttime* means 10:00 p.m. to 8:00 a.m. the following day.

*Noise* means any sound which disturbs humans or other animals, or which causes or tends to cause an adverse psychological or physiological effect on humans or other animals.

*Noise disturbance* means any sound which:

- (1) Disturbs a reasonable person of normal sensitivities;
- (2) Exceeds the sound level limits set forth in this chapter; or
- (3) Is plainly audible as defined in this section.

**Person** means any person, person's firm, association, co-partnership, joint venture, corporation, or any entity public or private in nature.

**Plainly audible** means any sound or noise produced by any source, or reproduced by a radio, tape player, television, CD player, electronic audio equipment, musical instrument, sound amplifier or other mechanical or electronic sound-making device, or non-amplified human voice that can be clearly heard by a person using his/her normal hearing faculties, at a distance of one city block as defined in <a href="section 15-2">section 15-2</a>. more from the real property line of the source of the sound or noise.

*Public right-of-way* means any street, avenue, boulevard, sidewalk, bike path or alley, or similar place normally accessible to the public that is owned or controlled by a governmental entity.

**Public space**\_means any lot, as that term is defined in <u>section 30-23</u> of the land development code, which contains at least one building that is open to the general public during its hours of operation.

**Reasonable time** when the limits of Table I and Table I-A in section 15-3(b) are exceeded or for a radio, tape player or other mechanical sound-making device or instrument within a motor vehicle is instantly. Otherwise, absent special circumstances, "reasonable time" is 15 minutes in the case of non-vehicular sound emitters and two calendar days for vehicular sound emitters.

**Residential (land use)** means all areas designated as "residential districts" in section 30-41(a)(1) of the land development code; as well as hospitals, as classified in the Standard Industrial Classification Manual, 1987, group number 806; public and private elementary schools, middle schools, high schools, vocational schools, colleges and universities; areas designated as "conservation districts" in section 30-41(a)(6) of the land development code; areas designated as planned development

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districts that contain dwelling units as defined in <u>section 30-23</u> of the land development code; and places of religious assembly as defined in <u>section 30-23</u> of the land development code.

**Sound**\_means an oscillation in pressure, particle displacement, particle velocity or other physical parameter, in a medium with internal forces that causes compression and rarefaction of that medium. The description of sound may include any characteristic of such sound, including duration, intensity and frequency.

*Sound level* means the weighted sound pressure level as measured in dB(A) by a sound level meter and as specified in American National Standards Institute (ANSI) specifications for sound-level meters (ANSI S1.4-1971 (R1976)). If the frequency weighting employed is not indicated, the Aweighting shall apply.

*Sound level meter* means an instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks, for the measurement of sound levels.

**Weekday** means any day Monday through Friday that is not a "paid holiday" as defined in F.S. § 110.117(1).

All technical definitions not defined above shall be in accordance with applicable publications and standards of the American National Standards Institute (ANSI).

# Section 15-3. Prohibited acts.

- (a) <u>General prohibition.</u> It shall be unlawful and a violation of this chapter to make, cause or allow the making of any sound that causes a noise disturbance, as defined in <u>section 15-2</u>.
- (b) Sound causing permanent hearing loss.
  - (1) Sound level limits. Table I and Table I-A specify sound level limits which, if exceeded, will have a high probability of producing permanent hearing loss in anyone in the area where the sound levels are being exceeded. No sound shall be permitted within the city that exceeds the parameters set forth in Table I and Table I-A.

TABLE I. Maximum Continuous Sound Levels

Duration per Day, Continuous Hours	Sound level (dB(A))
8	90
6	92
4	95
3	97
2	100
1½	102

1	105
1/2	110
1/4	115

\*When the daily sound exposure is composed of two or more periods of sound exposure at different levels, the combined effect of all such periods shall constitute a violation of this section if the sum of the percent of allowed period of sound exposure at each level exceeds 100 percent.

TABLE I-A. Maximum Impulsive Sound Levels.

Number of Repetitions per 24-Hour Period	Sound Level (dB(A))
1	145
10	135
100	125

- (2) *Exemptions.* No violation shall exist if the only persons exposed to sound levels in excess of those listed in Table I and Table I-A are exposed as a result of:
  - a. Trespass;
  - b. Invitation upon private property by the person causing or permitting the sound; or
  - c. Employment by the person or a contractor of the person causing or permitting the sound.
- (c) <u>Continuous airborne sound decibel limits.</u> No person shall create, operate or cause to be operated on private property any source of sound in such a manner as to create a continuous airborne sound which exceeds the limits set forth for the source land use category as defined in <u>section 15-2</u> in Table II when measured at a distance of one city block as defined in <u>section 15-2</u> or more from the real property line of the source of the sound. Any source of sound in violation of this subsection shall be deemed prima facie to be a noise disturbance.

TABLE II. Maximum Sound Levels (in dB(A)) for Source Land Uses.

Residential		Commercial	
Daytime	Nighttime	Daytime	Nighttime
62	57	67	62

<sup>\*</sup>See section 15-2 Definitions, for daytime and nighttime hours, and for land use definitions.

- (d) <u>Specific prohibitions.</u> In addition to the general prohibitions set out in subsection (a), and unless otherwise exempted by this chapter, the following specific acts, or the causing or permitting thereof, are hereby regulated as follows:
  - (1) *Motor vehicles*. No person shall operate or cause to be operated a public or private motor vehicle, or combination of vehicles towed by a motor vehicle, that creates a sound exceeding the sound level limits in Table II when the vehicle(s) are not traveling on public streets, highways, driveways, parking lots and ways open to vehicle travel.
  - (2) Radios, televisions, electronic audio equipment, musical instruments or similar devices.

    No person shall operate, play or permit the operation or playing of any radio, tape player, television, electronic audio equipment, musical instrument, sound amplifier or other mechanical or electronic sound-making device that produces, reproduces or amplifies sound in such a manner as to create a noise disturbance across a real property boundary. However, this subsection shall not apply to any use or activity exempted in subsection (e) below and any use or activity for which a special permit has been issued pursuant to section 15-4.
  - (3) Loudspeakers and public address systems. No person shall operate, or permit the operation of, any loudspeaker, public address system or similar device, for any purpose, during nighttime hours in such a manner as to create a noise disturbance.
  - (4) *Animals.* No person shall own, possess or harbor an animal or bird that howls, barks, meows, squawks or makes other sounds that:
    - a. Create a noise disturbance across a residential real property boundary;
    - b. Are of frequent or continued duration for ten or more consecutive minutes; or
    - c. Are intermittent for a period of 30 or more minutes.
  - (5) Construction and demolition. No person shall operate or cause the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between the hours of 9:00 p.m. and 6:00 a.m. the following day such that the sound therefrom creates a noise disturbance across a real property boundary, except for emergency work by public service utilities or for other work approved by the city manager or designee. This section shall not apply to the use of domestic power tools as provided below.
  - (6) *Emergency signaling devices.* 
    - a. No person shall intentionally sound or permit the sounding outdoors of any fire, burglar or civil defense alarm, siren or whistle, or similar stationary emergency signaling device, except for emergency purposes or for testing as follows:

- 1. Testing of a stationary emergency signaling device shall not occur between 7:00 p.m. and 7:00 a.m. the following day.
- 2. Testing of a stationary emergency signaling device shall use only the minimum cycle test time, in no case to exceed 60 seconds.
- 3. Testing of a complete emergency signaling system, including the functioning of the signaling device and the personnel response to the signaling device, shall not occur more than once in each calendar month. Such testing shall only occur on weekdays and not during nighttime hours, and shall be exempt from the time limit specified in paragraph 2 above.
- b. No person shall permit the sounding of any exterior burglar or fire alarm unless such alarm is automatically terminated within 15 minutes of activation.
- (7) *Domestic power tools.* No person shall operate or permit the operation of any mechanically, electrically or gasoline motor-driven tool during nighttime hours so as to cause a noise disturbance.
- (8) Pumps, air conditioners, air-handling equipment and other continuously operating equipment. No person shall operate or permit the operation of any pump, air conditioning, air handling or other continuously operating motorized equipment in such a manner so as to cause a noise disturbance.
- (e) <u>Exemptions.</u> The following uses and activities shall be exempt from the sound level regulations except the levels provided in Table I and Table I-A:
  - (1) Non-amplified human voice, except yelling, shouting, whistling, hooting, or generally creating a racket such that it creates a noise disturbance during the nighttime hours in a residential area in other than time of emergency.
  - (2) Sounds resulting from any authorized emergency vehicle when responding to an emergency call or acting in time of emergency.
  - (3) Sounds resulting from emergency work as defined in section 15-2.
  - (4) Any aircraft operated in conformity with, or pursuant to, federal law, federal air regulations and air traffic control instruction used pursuant to and within the duly adopted federal air regulations; and any aircraft operating under technical difficulties in any kind of distress, under emergency orders of air traffic control, or being operated pursuant to and subsequent to the declaration of an emergency under federal air regulations.
  - (5) All sounds coming from the normal operations of interstate motor and rail carriers, to the extent that local regulation of sound levels of such vehicles has been

- preempted by the Noise Control Act of 1972 (42 U.S.C. § 4901 et seq.) or other applicable federal laws or regulations.
- (6) Sounds from the operation of motor vehicles, to the extent they are regulated by F.S. § 316.293.
- (7) Any non-amplified noise generated by public speaking activities conducted on any public property or public right-of-way pursuant to legal authority.
- (8) Sounds produced at organized sporting events, by fireworks and by permitted parades on public property or public right-of-way.

# Section 15-4. Special Permits.

# (a) **Permit process.**

- (1) Applications for a special permit for relief from the maximum sound level limits designated in this chapter, except from Table I and Table I-A, for the events or activities described below, may be made in writing to the city manager or designee. Except as provided in Table I and Table I-A, a special permit is not required under this section if sound levels, including amplified sound, will not exceed the maximum sound level limits designated in this chapter.
- (2) The permit application shall include the name, address and telephone number of the permit applicant; the date, hours and location for which the permit is requested; and the nature of the event or activity. The application must be submitted at least ten days in advance of the event, not including holidays and weekends.
- Upon receipt of the permit application, the city manager or designee will review the application and issue a decision promptly, but in no event less than three days prior to the date of the event. If no decision is issued by the time specified, the permit will be considered to be issued. The permit shall be issued provided the proposed activity meets the requirements of this section.
- (4) Any permit granted must be in writing and shall contain all conditions upon which the permit shall be effective.
- (5) The city manager or designee may prescribe any reasonable conditions or requirements he/she deems necessary to minimize noise disturbances upon the community or the surrounding neighborhood, including use of mufflers, screens or other sound-attenuating devices.
- (6) Any final decision of the city manager or designee pursuant to this section which denies the applicant the right to create sound levels, including amplified sound, which do not exceed the maximum sound level limits designated in this chapter, except as provided in Table I and Table I-A, will be immediately reviewed as a

matter of right by the circuit court upon the filing of an appropriate pleading by the city.

- (b) <u>Permits for entertainment.</u> Permits may be granted for the purpose of entertainment under the following conditions:
  - (1) The function must be open to the general public (admission may be charged).
  - (2) The function must take place on public property, or public space, provided only six functions requiring a special permit may be held on any particular public space per calendar year.
  - (3) The permit will be granted for only four hours in one 24-hour day or any reasonable extension thereof as authorized by the city manager or designee.
  - (4) The permit will only be granted for hours between 9:00 a.m. and. 12:00 midnight on all days other than Friday and Saturday; and, on Friday and Saturday, between the hours of 9:00 a.m. and 1:30 a.m. of the following day, except in the following circumstances:
    - a. A permit will be granted for hours between 9:00 a.m. on New Year's Eve and 1:30 a.m. the following day (New Year's Day).
    - b. A permit will be granted for hours between 9:00 a.m. and 2:00 a.m. the following day if there are no private residences, hospitals or nursing homes within a 0.5-mile radius of the property where the function is taking place.
  - (5) Functions for which the permits are issued shall be limited to a continuous airborne sound level not to exceed 70 dB(A), as measured at a distance of one city block as defined in section 15-4 or more from the real property boundary of the source property. When one or more streets are closed adjacent to the source of the sound, the measurement shall be taken at a distance of one city block as defined in section 15-4 or more from the boundary of the closed area.
- (c) <u>Other permits.</u> Special permits for non-entertainment special purposes, other than for emergency work that is exempt pursuant to <u>section 15-3(e)(3)</u>, may be issued under the following conditions:
  - (1) Nonrecurring.
    - a. If the special purpose relates to the operation of a trade or business, the special purpose shall not be in the ordinary course of that trade or business;
       or
    - If the special purpose does not relate to the operation of a trade or business,
       the special purpose shall not be an ordinary event in the affairs of the
       applicant;
  - (2) *Recurring.* If the special purpose is a recurring purpose, it shall not recur more often than four times each calendar year; and:

- a. The special purpose shall be essential to the operation of the applicant's trade or business; or
- If the special purpose is not essential to the operation of a trade or business, the special purpose shall be compatible with the ordinary activities of the surrounding neighborhood;
- (3) *Hours.* The special permit may be issued only for hours between 7:00 a.m. and 11:00 p.m. the same day on weekdays; and
- (4) *Duration.* Special permits may be issued for no longer than one week, renewable by further application to the city manager or designee provided the applicant otherwise meets the provisions of this chapter.
- (d) <u>Use of loudspeakers on exterior of building.</u> No permit may be issued to permit the use of any loudspeaker or sound device on the exterior of any building which at any time exceeds the sound level limits in Table II, except those used for emergency systems or devices as allowed by <u>section 15-3(d)(6)</u> above.
- (e) <u>Fraternity or sorority events.</u> Special permits shall be issued for off-campus fraternity/sorority events as follows:
  - (1) Sound level permits may be obtained to allow an increased residential sound level of 67 dB(A) between 9:00 p.m. and 1:30 a.m. the following day on designated dates, which permits will be valid only at the fraternity/sorority residence and only when all sources of music are located in a completely enclosed building as defined in section 30-23 of the land development code. Each fraternity/sorority is responsible for obtaining its sound level permit on the appropriate date.
  - (2) All fraternities/sororities will receive sound level permits on five dates each year, three of which shall be the last Saturday of fall and spring rush and the Saturday of the University of Florida Homecoming.
  - (3) The off-campus fraternities/sororities, collectively, shall choose the two optional dates on which they may receive additional sound level permits, which dates shall be submitted to the city manager or designee on or before September 30th of each year. After the submission of dates, the city manager or designee will approve and designate the optional dates hereinabove described.
- (4) Other student organizations officially registered with the University of Florida may file an application with the city manager or designee for issuance of a special permit for comparable events.

# Section 15-5. Measurement or assessment of sound.

- (a) <u>Measurement with sound level meter.</u>
  - (1) The measurement of sound shall be made with a sound level meter meeting the standards prescribed by ANSI S1.4-1971 (R1976). The instruments shall be

maintained in calibration and good working order. A calibration check shall be made of the system at the time of any sound level measurement. Measurements recorded shall be taken so as to provide a proper representation of the source of the sound. The microphone during measurement shall be positioned so as not to create any unnatural enhancement or diminution of the measured sound. A windscreen for the microphone shall be used at all times. However, a violation of this chapter may occur without the occasion of the measurements being made as otherwise provided.

- (2) Sound tests must be performed at a distance of a city block or more to sanction a violation of this chapter.
- (3) The slow meter response of the sound level meter shall be used in order to best determine the average amplitude.
- (4) The measurement shall be made at any point on the property into which the sound is being transmitted and shall be made at least three feet away from any ground, wall, floor, ceiling, roof and other plane surface.
- In case of multiple occupancy of a property, the measurement may be made at any point inside the premises to which any complainant has right of legal private occupancy; provided that the measurement shall not be made within three feet of any ground, wall, floor, ceiling, roof or other plane surface.
- (6) All measurements of sound provided for in this chapter will be made by qualified officials of the city who are designated by the city manager or designee to operate the apparatus used to make the measurements.
- (b) Assessment without sound level meter. Any police officer or other official designated by the city manager or designee who hears a noise or sound that is plainly audible, as defined in section 15-2, in violation of this chapter, shall assess the noise or sound according to the following standards:
  - (1) The primary means of detection shall be by means of the official's normal hearing faculties, so long as any mechanical device, such as a hearing aid, does not enhance the official's hearing.
  - The official must have a direct line of sight and hearing to the real property of the source of the sound or noise so that the official can readily identify the offending source of the sound or noise and the distance involved. If the official is unable to have a direct line of sight and hearing to the real property of the source of the sound or noise, then the official shall confirm the source of the sound or noise by approaching the suspected real property source of the sound or noise until the official is able to obtain a direct line of sight and hearing, and identify the identical or same sound or noise that was heard at the place of original assessment of the sound or noise.

- (3) The official need not determine the particular words or phrases being said or produced or the name of any song or artist producing the noise or sound. The detection of a rhythmic bass reverberating type of noise or sound is sufficient to constitute a plainly audible noise or sound at a minimum distance of one city block, both as detailed in section 15-2.
- (4) A source suspected of creating a noise disturbance cannot be declared in violation of this chapter because of a noise of sound that is plainly audible at a distance less that of a city block.

# Section 15-6. Violation procedures.

# (a) <u>Violation of sound level limits; violation of plainly audible standard on other than</u> posted property.

### (1) Warnings:

- a. When a designated official of the city determines that there is a violation of section 15-3 and the sound is coming from non-posted property, the official shall issue a written warning to the person or persons responsible for the sound. The warning shall advise the person of the violation, and of the possible penalty if the person fails to eliminate the sound or reduce the sound so that it is within permitted limits.
- b. The person or persons receiving the warning shall have a reasonable time, as defined in <u>section 15-2</u>, to comply with the warning.
- c. For the purposes of this section, it is sufficient warning for all prohibited sounds if the person or persons responsible for any succeeding sounds are warned of, or cited for, one or more offending sounds of the same type within the previous year (365 days), or in the case of a business, in the time period since ownership of the business changed, whichever is less.

### (2) *Citation; confiscation of sound emitter.*

- a. If the sound is not eliminated or is not reduced to allowable limits within a reasonable time after the warning, or if the noise or sound is abated after warning and then reoccurs, the person so warned and not complying shall be cited for a violation of this chapter.
- b. The city manager or designee shall notify the operator of any device that produces sound in excess of the limits set by Table I or Table I-A in section 15-3(b) that the device is a health hazard. The city manager or designee shall have the power and authority to have the device removed or toned down instantly until such time as it can be otherwise operated in compliance with this chapter.

# (b) <u>Violation of plainly audible standard on posted property.</u>

- (1) When a designated official of the city determines a person or persons are making, causing or allowing the making of sound that is in violation of the plainly audible standard on property posted as described below, the official shall issue a citation for violation of this chapter to such person or persons.
- (2) Property shall be considered posted for the purposes of this subsection if at least one warning sign is posted in a conspicuous place on the property, clearly visible and readable to all persons entering the property, warning persons that noise that is plainly audible is prohibited. Signs shall read as follows:

### WARNING

Playing a stereo
radio, or amplifier
that can be heard one city block
away is prohibited.
City Ord. Sec. 15-3

Letters in the word "WARNING" must be at least two inches high in bold type. Letters for the remaining text must be at least one inch high in normal type, and the words "City Ord. Sec. 15-3" must be at least one-half inch high in normal type. All letters must be light-reflective on a contrasting background. The sign structure containing the required warning must be permanently installed with the word "WARNING" not less than three feet and not more than six feet above ground level.

- (3) The city manager or designee may require a property to be posted if it is used for commercial purposes, including as a parking lot for an adjacent business, and:
  - a. The business is generally unattended by the owner or an agent of the owner during normal operating hours; or
  - b. Two or more citations for violation of this chapter resulting in payment of a fine or adjudication of guilt by a judge are issued due to acts of patrons or visitors during any 90-day period.

### (c) Other limits; complaint procedure.

- (1) Any complaint regarding a sound or noise disturbance based solely on its disturbing a reasonable person of normal sensitivities must be filed by a person who is disturbed by the sound or noise. The burden of proof of this complaint will be on the complainant if the complaint results in a hearing before a judge. The complaint may be filed at the time of the disturbance or within a reasonable period of time after the fact.
- (2) When a complaint has been received, a designated official shall investigate the charges by assessing or measuring the sound based upon section 15-5.

- a. If the official finds probable cause to believe the owner/operator is in violation of this chapter, the official shall issue a warning to cease and desist the violation.
  - Should it be the judgment of the official to issue a warning, the owner/operator has the right to accompany the official to the measurement location and be taken through the measurement processes as defined in section 15-5.
  - 2. The complainant shares the aforementioned rights of the owner/operator.
- b. If the official cannot justify that a noise disturbance as defined in <u>section</u>
   15-2 has taken place, then no warning shall be issued and the owner/operator has the right to continue the generation of noise or sound at levels that comply with this chapter.
- (3) If the owner/operator does not take corrective action within a reasonable time as defined in section 15-2, or if the noise or sound is abated after warning and then reoccurs, the official may issue a citation or file a sworn complaint with the state attorney. For purposes of section 15-3(d)(5) (animal noises), the noise will be considered to be unabated, or abated and reoccurring, if the official hears the same noise more than ten minutes after issuing the warning; and the official may then issue a citation based on this violation.
- (d) <u>Joint and several responsibility.</u> The owner, tenant or lessee of property, or a manager, overseer or agent, or any other person lawfully entitled to possess the property from which the offending sound is emitted at the time the offending sound is emitted, shall be responsible for compliance with this chapter. It shall not be a lawful defense to assert that some other person caused the sound. The lawful possessor or operator of the premises shall be responsible for operating or maintaining the premises in compliance with this chapter and shall be punished whether or not the person actually causing the sound is also punished.
- (e) <u>Violation may be declared public nuisance.</u> The operation or maintenance of any device, instrument, vehicle or machinery in violation of any provisions of this chapter which endangers the public health, safety and quality of life of residents in the area is declared to be a public nuisance, and may be subject to abatement summarily by a restraining order or injunction issued by a court of competent jurisdiction.

### Section 15-7. Penalties.

(a) The provisions of this chapter may be enforced by civil citation or by criminal citation. Any person not in compliance with this chapter shall, upon conviction, be subject to the penalties

- designated in <u>section 1-9</u> or <u>section 2-339</u>. Each violation shall be considered a separate offense, which can be prosecuted separately.
- (b) Any person responsible for an unlawful sound shall be subject to the confiscation of the sound emitter or emitters if convicted three times under this chapter within a 12-month period and provided the convictions are for sounds created by the same or same type of sound emitter. Upon the third conviction, the appropriate court shall authorize the city to confiscate the sound emitter until such time as the offender can positively demonstrate to the court both willingness and ability to operate the emitter within the limits prescribed by this chapter. Any further conviction shall authorize the permanent confiscation of the sound emitter by the appropriate court.

# **Key Differences**

# Modifications to Section 15-2. Definitions.

<u>City Block</u> is defined as the average length between adjacent avenues or streets in Gainesville, FL. This distance is hereby defined as 300 feet.

<u>Plainly audible</u> means any sound or noise produced by any source, or reproduced by a radio, tape player, television, CD player, electronic audio equipment, musical instrument, sound amplifier or other mechanical or electronic sound-making device, or non-amplified human voice that can be clearly heard by a person using his/her normal hearing faculties, at a distance of one city block as defined in <u>section 15-2</u> more from the real property line of the source of the sound or noise.

# Modifications to Section 15-3. Prohibited acts.

TABLE III. Modifications to TABLE II.

Residential		Commercial	
Daytime	Nighttime	Daytime	Nighttime
61→62	55→57	66→67	60→62

<sup>\*</sup>See Section 15-2 Definitions, for daytime and nighttime hours, and for land use definitions.

# **Modifications to Section 15-4. Special Permits.**

- (b) **Permits for entertainment.** Permits may be granted for the purpose of entertainment under the following conditions:
  - (1) The function must be open to the general public (admission may be charged).
  - (2) The function must take place on public property, or public space, provided only six functions requiring a special permit may be held on any particular public space per calendar year.
  - (3) The permit will be granted for only four hours in one 24-hour day or any reasonable extension thereof as authorized by the city manager or designee.
  - (4) The permit will only be granted for hours between 9:00 a.m. and. 12:00 midnight on all days other than Friday and Saturday; and, on Friday and Saturday, between the hours of 9:00 a.m. and 1:30 a.m. of the following day, except in the following circumstances:
    - a. A permit will be granted for hours between 9:00 a.m. on New Year's Eve and 1:30 a.m. the following day (New Year's Day).
    - b. A permit will be granted for hours between 9:00 a.m. and 2:00 a.m. the following day if there are no private residences, hospitals or nursing homes within a 0.5-mile radius of the property where the function is taking place.

- (5) Functions for which the permits are issued shall be limited to a continuous airborne sound level not to exceed 70 dB(A), as measured at a distance of one city block as defined in section 15-2 or more from the real property boundary of the source property. When one or more streets are closed adjacent to the source of the sound, the measurement shall be taken at a distance of one city block as defined in section 15-2 or more from the boundary of the closed area.
- (e) <u>Fraternity or sorority events.</u> Special permits shall be issued for off-campus fraternity/sorority events as follows:
  - (1) Sound level permits may be obtained to allow an increased residential sound level of 67 dB(A) between 9:00 p.m. and 1:30 a.m. the following day on designated dates, which permits will be valid only at the fraternity/sorority residence and only when all sources of music are located in a completely enclosed building as defined in section 30-23 of the land development code. Each fraternity/sorority is responsible for obtaining its sound level permit on the appropriate date.
  - (2) All fraternities/sororities will receive sound level permits on five dates each year, three of which shall be the last Saturday of fall and spring rush and the Saturday of the University of Florida Homecoming.
  - (3) The off-campus fraternities/sororities, collectively, shall choose the two optional dates on which they may receive additional sound level permits, which dates shall be submitted to the city manager or designee on or before September 30th of each year. After the submission of dates, the city manager or designee will approve and designate the optional dates hereinabove described.
  - (4) Other student organizations officially registered with the University of Florida may file an application with the city manager or designee for issuance of a special permit for comparable events.

# Modifications to Section 15-5. Measurement or assessment of sound.

## (a) <u>Measurement with sound level meter.</u>

(1) The measurement of sound shall be made with a sound level meter meeting the standards prescribed by ANSI S1.4-1971 (R1976). The instruments shall be maintained in calibration and good working order. A calibration check shall be made of the system at the time of any sound level measurement. Measurements recorded shall be taken so as to provide a proper representation of the source of the sound. The microphone during measurement shall be positioned so as not to create any unnatural enhancement or diminution of the measured sound. A windscreen for the

- microphone shall be used at all times. However, a violation of this chapter may occur without the occasion of the measurements being made as otherwise provided.
- (2) When a sound test is conducted, it must be performed at a distance of a city block or more in order to sanction a violation of this chapter.
- (3) The slow meter response of the sound level meter shall be used in order to best determine the average amplitude.
- (4) The measurement shall be made at any point on the property into which the sound is being transmitted and shall be made at least three feet away from any ground, wall, floor, ceiling, roof and other plane surface.
- (5) In case of multiple occupancy of a property, the measurement may be made at any point inside the premises to which any complainant has right of legal private occupancy; provided that the measurement shall not be made within three feet of any ground, wall, floor, ceiling, roof or other plane surface.
- (6) All measurements of sound provided for in this chapter will be made by qualified officials of the city who are designated by the city manager or designee to operate the apparatus used to make the measurements.
- (b) Assessment without sound level meter. Any police officer or other official designated by the city manager or designee who hears a noise or sound that is plainly audible, as defined in section 15-2, in violation of this chapter, shall assess the noise or sound according to the following standards:
  - (1) The primary means of detection shall be by means of the official's normal hearing faculties, so long as any mechanical device, such as a hearing aid, does not enhance the official's hearing.
  - The official must have a direct line of sight and hearing to the real property of the source of the sound or noise so that the official can readily identify the offending source of the sound or noise and the distance involved. If the official is unable to have a direct line of sight and hearing to the real property of the source of the sound or noise, then the official shall confirm the source of the sound or noise by approaching the suspected real property source of the sound or noise until the official is able to obtain a direct line of sight and hearing, and identify the identical or same sound or noise that was heard at the place of original assessment of the sound or noise.
  - (3) The official need not determine the particular words or phrases being said or produced or the name of any song or artist producing the noise or sound. The detection of a rhythmic bass reverberating type of noise or sound is sufficient to constitute a plainly audible noise or sound at a minimum distance of one city block, both as detailed in section 15-2.

(4) A source suspected of creating a noise disturbance cannot be declared in violation of this chapter because of a noise of sound that is plainly audible at a distance less that of a city block.

# Modifications to Section 15-6. Violation procedures.

- (c) Other limits; complaint procedure.
  - (1) Any complaint regarding a sound or noise disturbance based solely on its disturbing a reasonable person of normal sensitivities must be filed by a person who is disturbed by the sound or noise. The burden of proof of this complaint will be on the complainant if the complaint results in a hearing before a judge. The complaint may be filed at the time of the disturbance or within a reasonable period of time after the fact.
  - (2) When a complaint has been received, a designated official shall investigate the charges by assessing or measuring the sound based upon <u>section 15-5</u>.
    - a. If the official finds probable cause to believe the owner/operator is in violation of this chapter, the official shall issue a warning to cease and desist the violation.
      - Should it be the judgment of the official to issue a warning, the owner/operator has the right to accompany the official to the measurement location and be taken through the measurement processes as defined in section 15-5.
      - 2. The complainant shares the aforementioned rights of the owner/operator.
    - If the official cannot justify that a noise disturbance as defined in <u>section</u>
       15-2 has taken place, then no warning shall be issued and the owner/operator has the right to continue the generation of noise or sound at levels that comply with this chapter.
  - (3) If the owner/operator does not take corrective action within a reasonable time as defined in section 15-2, or if the noise or sound is abated after warning and then reoccurs, the official may issue a citation or file a sworn complaint with the state attorney. For purposes of section 15-3(d)(5) (animal noises), the noise will be considered to be unabated, or abated and reoccurring, if the official hears the same noise more than ten minutes after issuing the warning; and the official may then issue a citation based on this violation.

# **Defense of Proposal**

In this section, I will provide justification for either altering or preserving the content in each subsection

# Defense of Modifications to Section 15-2. Definitions.

The creation and use of the term city block is key to the revision of the ordinance. The equivalent distance of a "city block" is determined to be 300 feet. This number is chosen based on the typical distance between sequentially numbered adjacent streets, avenues, etc. An average distance calculation was preformed with a sample size of 100. It is determined that the average length of a "city block" is 300 feet. For the purposes of this ordinance, it is a fair and reasonable conclusion to declare that a city block is equivalent to 300 feet. A source suspected of creating a noise disturbance cannot be declared in violation of this chapter because a noise of sound that is plainly audible at a distance less that of a city block. Furthermore, sound tests must be performed at a distance of a city block or more to sanction a violation of this chapter. As a result, the plainly audible standard must also be redefined to include the measurement distance of a city block.

### Defense of Modifications to Section 15-3. Prohibited acts.

The alterations to Table II are based upon multiple sound tests conducted in various locations over an extended period of time. The results of these sound tests can be found in the data section of this analysis. All sound level test were preformed up to the standards of this chapter. These sound tests were conducted using sound meters issued to me by Lt. Brian Helmerson of the Gainesville Police Department. These sound meters were accompanied by calibration documents stating that calibration occurred in the summer of 2013.

# **Defense of Modifications to Section 15-4. Special Permits.**

Revisions of the special permits section include the extension of permit hours and adjustment of decibel levels in the special subsection of University of Florida Student Organizations. My recommendation is to lengthen the weekend hours until 1:30 am for all permits, and to raise the decibel level of subsection (e) to 67 dB. The decibel level and time extension reconsiderations are based on baseline readings and comprehensive listening tests outlined in the data section of this analysis.

# Defense of Modifications to Section 15-5. Measurement or assessment of sound.

In order to stay consistent with the rest of the chapter, the global change of "200 feet" to "city block" is enacted in this section. Two key points are also put forth in this section. The first of these is the statement that when a sound test is conducted, it must be performed at a distance of a city block or more in order to sanction a violation of this chapter. Secondly, a source suspected of creating a noise disturbance cannot be declared in violation of this chapter because of a noise of sound that is plainly

audible at a distance less that of a city block. These guidelines are put in place to keep the measurement process of the sound consistent with the parameters that constitute a noise disturbance.

# **Defense of Modifications to Section 15-6. Violation procedures.**

An examination of the violation procedures is necessary to maintain coherence with the rest of the chapter. In this modification, the violation determination process is delineated into a specific set procedure. It is determined that the fair and reasonable way to test a source for creation of a noise disturbance is as sketched in Figure 1. The modifications to the procedure gives all key parties involved the right to be with an official while the sound measurement test is being conducted. This will allow for a fair and just conclusion to be made as to if the source is in violation of this chapter.

12/4/13

Complaint Occurs. Official arrives to location of individual whom issued complaint. Does the Is the location of official have a the individual proper sound within one city meter? block from the source? No Yes No Yes Engage in a Engage in listening test to decibel level The official can determine if the measure at this testing in noise or sound is Relocate to a location accordance plainly audible, as defined in section location in greater than or equal accordance with with section to the distance of one 15-5. section 15-5. 15-2. city block away, and test in accordance with section 15-5. Does the Is the sound level source exceed the plainly limits put audible? forth in this chapter? No Yes Yes No The source is a The source is a The source noise noise is not a The source disturbance noise disturbance is not a disturbance noise disturbance

Figure 1. Violation Determination Process.

**Data** 

TABLE IV. Saturday, October 12, 2013 Nighttime Sound Measurements.

	Saturday, October			asurements.
Location	Baseline dB(A)	Peak [dB(A)]	Time	Comments
Lacrosse	50	-	10:54 pm	Water Flow /
Stadium				Fountain
Frat Row	48	66	11:05 pm	Car caused peak
Flavet Field	48.5	62	11:07 pm	Empty
Band Shell	48.2	61	11:09 pm	Empty
Bull Gator	51	74.4	11:20 pm	Bus caused peak
Gate 3	51	-	11:24 pm	Walking by
Rear of Emerson	50	55	11:32 pm	Tested with source
Alumni Hall				of 90 dB(A)
NW 18th St &	47	68	11:33 pm	Car caused peak,
2 <sup>nd</sup> Ave				Scooter on main - 59
NW 17 <sup>th</sup> St &	54	62	11:40 pm	One city block from
2 <sup>nd</sup> Ave				Shucks
NW 17 <sup>th</sup> St &	63	-	11:43 pm	Music
1st Ave				
Shucks / Cantina	82	90	11:46 pm	Very close to source
Swamp	63	65	11:47 pm	Traffic & talking
Fat Daddy's	60	70	11:49 pm	Traffic & no music
Jimmy John's	-	67	11:50 pm	Gator City: 73
Midtown				
SW 6th St &	48.5	68	12:07 am	Car with loud music
2 <sup>nd</sup> Ave				caused peak
SE 1 <sup>st</sup> St &	53.4	80.4	12:15 am	Bus created peak
1 <sup>st</sup> Ave				
High Dive	64	-	12:20 am	Food truck, no band
				from 30 feet away
One city block	60	-	12:20 am	Sound from High
south of Loosey's				Dive
Jack's	67.4	-	12:24 am	Various music
				sources
The Bull	66.5	-	12:24 am	No band

Dragonfly	65	-	12:28 am	From 50 feet away
Tall Paul's	-	83	12:29 am	Directly in front
Rocky's	-	73	12:30 am	Various music
				sources
Simon's Doors	-	85	12:32 am	Long line, people
Open				walking in and out
University Ave &	68	-	12:33 am	Traffic & music
Main St				
NW 2nd St &	50	-	12:38 am	Two city blocks
2 <sup>nd</sup> Ave				away from Univ Ave
NW 3rd St &	44.7	-	12:40 am	Dog bark from 100 ft
2 <sup>nd</sup> Ave				raised sound level
				0.5 dB(A)
W University	70	75	12:46 am	Opening of doors at
Ave & 3rd St				levels raised sound
				level by 5 dB(A)
NW 13 <sup>th</sup> St &	46	-	1:13 am	GREC Plant
59th Terrace				Listening Test;
				Plant Operating;
				No Traffic;
				Car Raises Peak - 57
Turkey Creek	41	45	1:24 am	GREC Plant Noise is
Entrance**				detectable to the ear
				but does not exceed
				any limits set forth
				by this chapter
Closest Point to	41	44	1:28 am	GREC Plant is
GREC Plant in				located about 0.5
Turkey Creek**				miles from this
				location

<sup>\*</sup>All measurements were carried out in accordance with this chapter. Businesses titles are included in this table to give the reader a clear picture of where the sound is measured. Locations mentioned in this table are not necessarily the source of any noise or sound. These test were conducted in moderate temperatures, with little to no wind, and fair weather.

<sup>\*\*</sup>A full investigative study into the noise issue of the GREC Plant will follow and compliment this report.

TABLE V. Saturday, October 12, 2013 Daytime Sound Measurements.

Location	Baseline dB(A)	Peak [dB(A)]	Time	Comments
Football Stadium	54.5	-	11:05 am	Ambient
Gate 3				
Football Stadium	52.2	-	11:15 am	Ambient
Gate 18				
Frat Row	41	-	11:30 am	Ambient
Flavet Field	43	-	11:35 am	Ambient
Swamp	56	60	10:37 am	Ambient; road noise
Shucks / Cantina	55.6	-	10:40 am	Ambient; road noise
Butler Plaza	52	-	11:55 am	Best Buy Parking Lot
SE 1st St & 1St Ave	50	66	10:00 am	Car caused peak
SW 6th St &	48	70	10:10 am	Car caused peak
2 <sup>nd</sup> Ave				
Fat Daddy's	52.5	72.4	10:35 am	Car caused peak
NW 17 <sup>th</sup> St &	47.5	69	10:45 am	Car caused peak
2 <sup>nd</sup> Ave				
NW 2 <sup>nd</sup> St &	47	-	10:20 am	Quiet & Calm
2 <sup>nd</sup> Ave				
Bull Gator	52.5	62	11:20 am	Road noise

\*All measurements were carried out in accordance with this chapter. Businesses titles are included in this table to give the reader a clear picture of where the sound is measured. Locations mentioned in this table are not necessarily the source of any noise or sound. These test were conducted in moderate temperatures, with little to no wind, and fair weather.

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