



# City of Raleigh | Sound Solutions Report

Prepared by Sound City Planning | September 2025



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## Introduction

Nightlife, entertainment, arts, and culture are important to Raleigh's success and help make the city unique and authentic. They attract companies, young workers, and tourism, celebrate local culture, and build community. However, as a growing city, Raleigh also needs to maintain residential quality of life.

The City of Raleigh is facing challenges with noise conflicts between entertainment and residential uses, especially in the Glenwood South District, a mixed-use district on the Northwest edge of Downtown Raleigh, but this issue is also emerging in other areas of the city. The Glenwood South district is both Raleigh's signature and primary hospitality and nightlife district, and the fastest growing downtown residential district. Managing and resolving this inherent conflict would be a challenge for any city, but to make matters worse, like most cities, Raleigh doesn't have an effective strategy for managing nightlife and entertainment-related sound.

*Noise conflicts between entertainment and residential uses are very common. This may seem like an impossible conflict with no solution but it doesn't have to be this way! Cities can support both vibrant nightlife and entertainment and residential quality of life. But, it takes a proactive effort and a thoughtful and comprehensive approach to sound management for nightlife-related sound.*

The City of Raleigh is seeking to revise its sound ordinance for commercial amplified sound. The focus of this work is to review and evaluate existing and past ordinances, conduct field observations, collect existing sound data, and engage with internal and external stakeholders. The final product is to provide comprehensive and practical recommendations that balance both vibrant entertainment and residential quality of life, and support a comprehensive and effective approach to management for nightlife-related sound.

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# Review of Existing and Past Ordinances

Sound City Planning's approach is based on our Eight Key Principles for Effective Sound Management™. Three of the principles are directly related to sound ordinances, and it is through this lens that the existing and past Raleigh sound ordinances have been evaluated.

## Sound Ordinance Principles

1. Standards are tailored for entertainment-related amplified sound
2. Sound level allowances are customized for specific locations and contexts
3. Provides predictability for all stakeholders

## Raleigh Sound Ordinance Review Summary

	2014 - 2024	Current
<b>Tailored for entertainment-related amplified sound</b>		
Different from approach to general noise?	✓	⊖
Sound levels that accommodate nightlife programming	✗	⊖
Effectively measures and manages amplified sound	✗	✗
<b>Customizes Sound Levels based on Location &amp; Context</b>		
Designated Nightlife and Entertainment Districts	✓	✗
Customized Sound Permits	⊖	✗
<b>Provides Predictability for All Stakeholders</b>		
Objective sound level standard	⊖	✗

Legend: ✓ = yes ⊖ = partial ✗ = no

# Summary of Sound Ordinance

## Key Issues and Challenges

### **Standards are not tailored for entertainment-related amplified sound**

- The previous sound ordinance used an objective decibel level standard and included a standard for measuring bass, however, the decibel levels allowed were far too low to accommodate amplified sound in the hospitality district or for outdoor amplified music.
- The current sound ordinance removed the objective decibel level standard and replaced it with a subjective “reasonable person” standard.

### **Sound levels are not customized for specific locations and contexts**

- The previous sound ordinance created frameworks for both hospitality districts and amplified sound permits that could be used to create customized standards, however standards were not customized.
  - Allowed levels for the hospitality district and permitted establishments were the same as the standard city-wide, with minimal additional allowances for increased vibrancy where appropriate.
- The current sound ordinance removed the hospitality district and amplified entertainment permits and treats amplified sound the same as other commercial noise.

### **The sound ordinance does not provide predictability for all stakeholders**

- The previous ordinance included sound level maximums that were set lower than the ambient level in the hospitality district. This made enforcement difficult and caused confusion and a lack of consistency.
- The current ordinance establishes that noise has to be “Unreasonable” to be prohibited. This is too subjective and is making enforcement difficult and causing confusion and a lack of consistency.
- The current ordinance does set an objective standard of plainly audible 150’ or 300’ from the property line of the sound source. However, when there are multiple sound sources in close proximity this distance creates challenges in determining which establishment is the source of the sound.
  - Especially in a hospitality district, an objective standard measured at the establishment property line is the most predictable standard
  - This type of standard also makes it much easier for an establishment to self-regulate their own sound level



# Field Observations and Sound Data Collection

## Field Observation Locations and Dates

Glenwood South District *(2 Separate Visits)*

- Visit 1
  - Friday, August 2<sup>nd</sup> (3 - 4 pm, 11 pm - 1 am)
  - Saturday, August 3<sup>rd</sup> (2 - 3 pm, 11 pm - 2:30 am)
  - Tuesday, August 6<sup>th</sup> (7 - 9 pm)
- Visit 2
  - Friday, September 5<sup>th</sup> (10 pm – 2 am)
  - Saturday, September 6<sup>th</sup> (11 pm - 1 am)

Bowstring - Friday, August 2<sup>nd</sup> (9 - 10 pm)

Fayetteville Street - Saturday, August 3<sup>rd</sup> (9 - 10 pm)

Red Hat Amphitheater - Saturday, August 3<sup>rd</sup> (9 - 10 pm)

Tap Yard - Sunday, August 4<sup>th</sup> (3 - 4 pm)

Five Points - Monday, August 5<sup>th</sup> (6 - 8 pm)

Glenwood South District

- Observation throughout the peak hours of the night from 11pm-2:30am
- Sound Data collected at:
  - Nightlife establishment property line locations
  - Two residential buildings in very close proximity to nightlife establishments on both the outdoor balconies and inside the units, and on the sidewalk outside of two additional residential locations

Bowstring during a live performance

- Sound data collected at the venue sound board, the back of the audience area, at the public street, and in a residential area where sound complaints have been received approximately .6 miles from the venue

Fayetteville Street District during the early part of the night

Tap Yard during an afternoon event with live DJ's

- Sound data collected in the audience area, the back of the property and at the public street, and on the residential street beyond the establishment

Five Points Hospitality Businesses on a weekday during after work/early evening

# Field Observation Findings

## **Glenwood South**

- The district is both Raleigh's signature and primary hospitality and nightlife district, and the fastest growing downtown residential district
- 20+ nightlife establishments concentrated mostly on the 300, 400 and 600 blocks
- Many have large outdoor patios and rooftop decks with outdoor amplified music, and sound impact in the district is significant
- Residential buildings are in close proximity to the nightlife establishments
- Our recommendation is that a strategy for managing nightlife and entertainment-related sound that supports and balances both nightlife and quality of life in this district should be the highest priority

## **Fayetteville Street**

- Limited number of establishments with sound impact outside the establishment property
- Sound impact in the district is low and there have been minimal complaints about sound disturbance for this area
- A strategy focused on this district is a lower priority and not a pressing concern

## **Establishments in Areas Outside of Downtown**

- Limited number of businesses with sound impact outside the establishment property
- Establishments can provide unique hospitality, entertainment, cultural, and community benefits. But they can also be located in close proximity to neighborhoods and residents, and the scope and intensity of amplified music can vary widely. This can be a very sensitive and impactful issue if not managed.
- Our recommendation is that a strategy for managing entertainment-related sound that supports and balances both entertainment and quality of life citywide should be addressed proactively before it becomes a bigger conflict, and should be the second highest priority.

# Stakeholder Engagement

## Internal Stakeholder Engagement Overview

Several meetings were conducted with internal stakeholders from the City of Raleigh including City Manager's Office, Office of Special Events, Raleigh Police Department, and the City Attorney's Office.

## External Stakeholder Engagement Overview

Extensive stakeholder conversations and meetings were conducted with hospitality establishment owners and managers and residents, including:

- Hospitality Establishment Stakeholder Meetings
  - Dan Lovenheim, CEO, Oak City Group
  - Brian Kite, COO, Oak City Group
  - Niall Hanley, Owner, Hibernian Hospitality
  - David Ballance, COO, Kenner Group
- Hospitality Establishment Sound Tour
  - After Visit #1 we developed preliminary proposed sound levels that were calibrated based on sound data collected in the field, as well as feedback from residents about when sound levels felt more balanced, and business owners related to programming and vibrancy needs
  - During Visit #2 we toured the Glenwood South District with the hospitality business owners from Visit #1. This allowed them to observe and experience for themselves their establishment's sound levels and the proposed sound levels in practice. We received feedback from them, which helped us to determine if any fine tuning of the standards was needed
- Resident Stakeholder Meetings
  - Residents at Paramount Condos
  - Residents at Cortland Apartments
  - Stakeholder meeting with residents represented from six different residential buildings as well as the Glenwood South Neighborhood Collaborative
  - Residents located near Bowstring and Tap Yard



## Stakeholder Meeting Findings

### Glenwood South

- Hospitality Establishments
  - Frustration with confusing subjective standards that seem to them to be enforced inconsistently.
  - Support for clear objective sound level standards, as long as they provide appropriate vibrancy for the success of the busy nightlife district, and all establishments follow them.
  - Residents should understand that since this is the most vibrant nightlife district in the city, there will be increased sound impact in the environment, but there is agreement that extremely loud and disruptive sound impact inside residential units late at night is not appropriate.
- Residents
  - Acknowledge the value and enjoyment of nightlife and walkability, but feel the current situation is out of balance.
  - Desire for a healthier coexistence and balance between vibrant hospitality businesses and peaceful living.
  - Key Issues include:
    - Defining clear, measurable limits for hours and sound levels
    - Preventing excessive use of bass-heavy equipment in mixed-use areas
    - Proactive enforcement, accountability, and consequences for violations



## Common Ground

While trust and relationships between nightlife establishments and residents has been eroded, there is common ground for balancing both vibrant entertainment and residential quality of life.

## Areas of Agreement

- Balancing both vibrant entertainment and residential quality of life
- Clear and measurable standards
- Preventing excessive bass and extremely loud and disruptive sound impact inside residential units, especially late at night
- Standards followed by all establishments so there is both accountability and a level playing field

## Common Ground Areas of Agreement





# City of Raleigh Noise & Nightlife Survey Excerpts

## Amplified Sound Hours

*Should allowed Hours be different on weekdays vs weekends*

- 60% Yes
- 37% No
- 4% Not Sure

*What time should it stop on weekdays?*

- 43% 10pm
- 17% 11pm
- 18% 12am
- 15% 8pm
- 6% 2am
- 1% Other

*What time should it stop on weekends?*

- 36% 2am
- 30% 12am
- 24% 11pm
- 6% 10pm
- 3% Other
- 1% 8pm

**What's most important to you as the City considers updates to commercial establishments sound and nightlife activities?**

- 63% Transparency and accountability
- 56% Limits on volume and time
- 33% Ability to submit complaints



# Sound Ordinance Recommendations

## Key Components of a Solution for Raleigh

- Citywide Baseline Standard
- Glenwood South District Standard
- Permit Option for Additional Amplified Sound Outside of the Glenwood South District

## Features & Benefits

1. Citywide baseline standard for commercial amplified sound levels and hours that broadly protects residential quality of life
2. Predictable standard measured at the establishment property line
3. Unique standard for the Glenwood South District that allows additional amplified sound and hours for businesses in the district. The recommended standards are based on sound data and stakeholder feedback, and are designed to support and balance vibrant nightlife and residential quality of life.
  - Sound levels are calibrated based on sound data collected in the field, and feedback from residents about when sound levels felt more balanced, and business owners about programming and vibrancy needs
  - Sound levels allow sufficient vibrancy for the success of the nightlife district, while also reducing sound impact for residents
  - Additional sound for the Glenwood South District can be allowed either by right for the District or via an optional permit program
4. Framework for additional districts to be added in the future as needed
5. Optional amplified sound permit for businesses outside of the Glenwood South District that includes customized standards based on location and context. This includes robust review criteria, and allows more amplified sound and vibrancy for hospitality businesses where appropriate and with appropriate allowances and restrictions

## Requirements

- Dedicated sound enforcement from staff that are trained in using a sound meter and maintain an awareness and training on standards for the Glenwood South District and permitted establishments outside the district
- Creation of an optional permit program, review criteria, and a review process for businesses outside the Glenwood South District
- Regular communication to ensure that all stakeholders in the Glenwood South District and near permitted businesses understand the standards

## Customization via Sound Permits

### Charlotte, NC

The Charlotte model includes a general restriction with maximum hours and sound levels for amplified sound citywide and also includes a permit option with more robust criteria and review for additional amplified sound allowances.

### Austin, TX

The Austin model requires a permit for all outdoor amplified music that includes robust criteria and review with allowances and restrictions that are customized based on the location and context.

### San Francisco, CA

The San Francisco model requires a permit for entertainment that includes maximum sound levels that can be conditioned and further restricted based on the location and context.

## Customization via Districts

### Austin, TX

While Austin uses customized sound permits, it also uses entertainment districts to designate higher intensity nightlife areas that allow for later hours and higher sound levels. Austin has three designated entertainment districts with later hours for outdoor music.

### Tampa, FL

Tampa has three designated entertainment districts that have higher sound levels and later hours than the rest of the city.

### Ft Lauderdale, FL

Ft Lauderdale's special entertainment district is a planning tool that can be implemented in the city's regional activity centers. The district tool allows higher sound levels and later hours than the rest of the city.

## Customized Approach Examples from Other Cities



## Recommended Standards for Amplified Sound at Commercial Establishments

### Citywide Standard + Permit Option

#### Sunday-Thursday (weekdays)

Time Period	Times	Sound Level Citywide Standard	Sound Level w/Permit*
Daytime	10am - 10pm	70 dBA / 75 dBC	Up to 88 dBC*
Nighttime	10pm - 2am	60 dBC	60 dBC

#### Friday/Saturday (weekends)

Time Period	Times	Sound Level Citywide Standard	Sound Level w/Permit*
Daytime	10am - 11pm	70 dBA / 75 dBC	Up to 88 dBC*
Nighttime	11pm - 2am	60 dBC	60 dBC

\*Permitted times and sound levels may be conditioned to be more restrictive based on review criteria including proximity to residential, orientation of sound, sound system details, topography, venue capacity, sound mitigating design features, and intensity of amplified music

### Glenwood South District Standard\*\*

#### Sunday-Thursday (Weekdays)

Time Period	Times	Sound Level
Primary	10am - 10pm	80 dBA / 88 dBC
Late Night	10pm - 2am	75 dBA / 80 dBC
Overnight	2am - 10am	No Audible Sound

#### Friday/Saturday (Weekends – Step Down Approach)

Time Period	Times	Sound Level
Primary	10am - 12am	82 dBA / 92 dBC
Late Night	12am - 2am	80 dBA / 88 dBC
Overnight	2am - 10am	No Audible Sound

#### OR (Weekends – Consistent Approach)

Primary + Late Night	10am – 2am	80 dBA / 90 dBC
Overnight	2am - 10am	No Audible Sound

\*\*Additional amplified sound beyond the Citywide Standard can be allowed by right for the district, or via a permit program



## Trade Offs of “Step Down” vs “Consistent” Approach

*Both approaches are calibrated to balance nightlife vibrancy with residential quality of life.*

Step Down	Consistent
<ul style="list-style-type: none"> <li>• More Precise</li> <li>• Allows a little more nightlife sound and vibrancy until 12am</li> <li>• Reduces sound impact in the environment a little more after 12am</li> </ul>	<ul style="list-style-type: none"> <li>• Less Complex</li> <li>• A little less nightlife sound and vibrancy until 12am</li> <li>• A little more sound impact in the environment after 12am</li> </ul>
<p>More challenging for compliance and enforcement staff</p> <ul style="list-style-type: none"> <li>• Requires different education and procedures based on time</li> <li>• Likely requires more active intervention to ensure compliance when the sound level changes</li> <li>• Requires sound level compliance to be re-validated at 12am at all bars at the same time</li> </ul>	<p>Easier for compliance and enforcement staff</p> <ul style="list-style-type: none"> <li>• Consistent education and procedures at all times</li> <li>• May require less active intervention in the field since compliance can be monitored throughout the night</li> <li>• Doesn't require sound level compliance to be re-validated at 12am at all bars at the same time</li> </ul>
<p>More challenging for bars to self-regulate sound level</p> <ul style="list-style-type: none"> <li>• Requires different staff training and procedures based on time</li> <li>• Requires a change at peak time in the bar when staff is busiest</li> </ul>	<p>Easier for bars to self-regulate sound level</p> <ul style="list-style-type: none"> <li>• Consistent staff training and procedures at all times</li> <li>• Allows for set it and forget it approach</li> </ul>

## **Recommended Approach to Compliance and Enforcement**

In order to support both vibrant nightlife and residential quality of life, the allowances and restrictions have to be fair and balanced. However, building trust also demands responsive compliance and enforcement.

The best and most successful approach is to have staff dedicated for sound management that respond to complaints in real-time to determine if they are valid. This also requires a complaint tracking system, so the staff can be responsive to complaints and potential compliance issues.

The police department is often not the agency best suited to enforce entertainment-related sound. Patrol officers often have higher priority calls, like violent crimes in progress, and cannot address lower priority calls, like noise complaints, in a timely way. In addition, if an officer is able to respond to the call, they often don't have the detailed knowledge or the tools needed to effectively handle the call, especially if there are customized rules or conditions in place for entertainment-related sound.

A special unit like the Raleigh Police Department's Hospitality Team is a great option since they are dedicated to hospitality. Based on conversation with RPD and the Hospitality Team, the highest and best use of the small number of existing officers in the unit is proactively addressing violent crime including removing illegal guns and preventing violent crime. Since a proactive approach requires a response to complaints, this would take the team away from addressing their highest priority. However, leveraging and building on the Hospitality Unit by bringing on new code compliance staff that can be dedicated to entertainment-related sound enforcement, while not taking away from efforts to fight violent crime is a fantastic solution.

## **Recommendation**

Our recommendation is to have at least two staff that can be trained and at a minimum be 100% dedicated to the sound enforcement function on weekend nights with a primary focus on the Glenwood South District and permitted businesses. Since the staff will be trained, they will have a comprehensive understanding of what is allowed for each district or permitted establishment.

We further recommend that the sound enforcement staff follow the approach that has been very effective in other cities. Cultivating a culture that is proactive, maintaining a focus on building relationships and trust with both establishments and residents, solving problems and seeking compliance. This also includes holding establishments accountable by taking enforcement actions and escalating repeat and chronic issues.

Finally, in order to ensure accountability and foster trust in the sound management system from all stakeholders, we recommend that the City of Raleigh create a complaint management system for commercial amplified sound. This will allow the sound enforcement staff to track and respond to complaints in real time. If the Customer Experience Manager is working towards a 311 system, we recommend that a service request type for commercial amplified sound be included.

## Next Steps for Compliance and Enforcement Implementation

### Standard Operating Procedure

The following is meant to be an illustrative example, rather than a specific or exhaustive recommendation. The intent is to provide a better understanding of what a Standard Operating Procedure might look like, including a list of topics that might be included and examples of how the procedures might be written.

- Topic: Sound Level Meter Requirement
  - Example
    - Class 1 or Class 2 microphone
    - Single Reading + Data Logging
    - Ability to be calibrated by manufacturer on a recommended schedule with a certificate provided
- Topic: Sound Measurement Protocol
  - Example: 15 second Leq (equivalent continuous level) measurement
- Topic: Sound Measurement Location
  - Example:
    - 5-10' beyond the establishment property line in the public right of way. The location is site specific and at the discretion of the enforcement staff, but is typically taken at the back of the sidewalk.
    - Location should be chosen to isolate the sound from the business being measured as much as possible
    - Location should not be too punitive nor too forgiving. For example it should not be right in front of an entry door, but also not too far from the sound source.
- Topic: Sound Measurement Procedure
  - Example:
    - Sound meter is calibrated prior to each shift
    - Sound reading should exclude vehicle noise, and other identifiable background noise that can be reasonably excluded
    - Sound meter is held at chest level away from the body when a measurement is being taken

### Training

Compliance and enforcement staff should be trained on the use of a sound meter and the standard operating procedure

## **Additional Recommendations**

Sound City Planning's "Eight Key Principles for Effective Sound Management™," also include three additional key principles that go beyond the sound ordinance and enforcement, and should be emphasized for successful entertainment-related sound management. The additional recommendations focus on these three principles.

### **1. The quality of life for nearby residents is anticipated and addressed**

After clear, objective, and measurable standards that are fair and balanced are implemented, the City of Raleigh should consider a policy that requires residential developments that are within, or in close proximity to Hospitality Districts to conduct a sound assessment during the development review process.

This approach does not mandate building standards. Instead, it requires residential developers to document that they have studied the soundscape where they are building. This includes assessing the impact of legally compliant sound from nearby hospitality establishments.

The goal is to improve compatibility between hospitality districts and residential uses by ensuring that residential development projects understand that 1.) they are developing in or near a hospitality district, and 2.) they understand the sound levels in the area so they can design and construct the building considering the sound impact from nearby code-compliant hospitality establishments.

### **2. Ongoing stakeholder education that fosters relationships, dialogue, and problem solving is facilitated**

Facilitating ongoing stakeholder education, relationships, dialogue, and problem solving is also a best practice. After clear and measurable standards that are fair and balanced are implemented, the Office of Special Events should provide education and information to stakeholders on sound level allowances, and promote dialogue, relationships, and problem solving.

### **3. Resources are invested and solutions are made available to nightlife and entertainment establishments to support vibrancy while minimizing sound impact to surrounding area**

The City of Raleigh should seek to develop resources in order to provide guidance and support to nightlife and entertainment establishments on improving sound management with a focus on enhancing sound quality inside the establishment and minimizing the sound impact in the surrounding area. This could include support on sound system technology, design, selection, and mixing, as well as sound attenuation and architectural interventions.

## Bowstring Case Study

### Background and Location

Bowstring opened in July, 2020 as a bar and restaurant serving pizza and beer in a restored historic building, and an outdoor space across the parking lot. In 2021 the outdoor space was improved with artificial turf, a small covered stage, and a small sound system for live music performances at the east end of the space oriented west. In 2024 a larger covered stage with a larger sound system was rebuilt on the west end of the space and oriented east, which is how the space is situated today. Bowstring hosts live music on the stage with both local as well as developing and regional touring bands.

Bowstring is located about 2 miles north of downtown, at the edge of a formerly industrial corridor with railroad tracks and a large warehouse area to the east, and just across the main street to the west is a residential neighborhood.

When the live music stage was oriented west, it was approximately 400' from the first home in the neighborhood to the west. As the live music programming expanded this began causing sound impact in the neighborhood and complaints. We understand this was the reason for re-building the stage and orienting it east.

### Sound System and Sound Management

The sound system at Bowstring has been expanded twice, but as far as live music venues go, it is still medium size.

## Bowstring Case Study

The main speakers have been hung low and are angled down which limits the amount of sound impact to the east, and there are only two small subwoofers, which limits the low frequency (bass) sound impact. Bowstring has also set a self-mandated sound curfew of 10pm for live music. During our site visit to Bowstring the sound was mixed at a sound level that provided a good audience experience near the stage, and the sound dropped off towards the back of the audience area and property line to the east.



## **Sound Impact and Sound Mitigation**

The re-orientation of the stage, along with the medium scale of the sound system and approach to sound levels, did a good job mitigating the sound impact to the neighborhood to the west. During our site visit the sound level at Whitaker Mill Road (the street behind the stage) was 70 dBA / 78 BC, which is a very significant reduction from the sound board, and seems to have eliminated disruptive sound impact and complaints from the neighborhood.

However, the venue is now receiving some sound complaints from neighborhoods much further away to the east. The Belvidere Park and Woodcrest Neighborhoods are located approximately 3,000 ft (.6 miles) from Bowstring to the east and southeast.

## **Topography**

The topography of this area is important and illustrates why it may need to be taken into account as part of sound management reviews. Bowstring and the neighborhoods to the east are both on ridges with a creek corridor in the middle at a lower elevation.

The estimated elevations are:

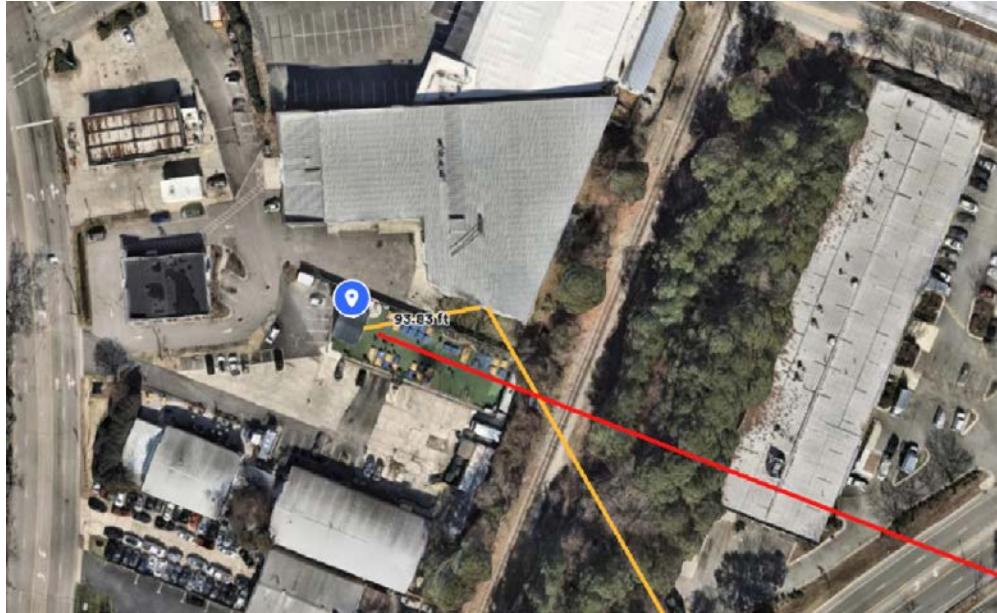
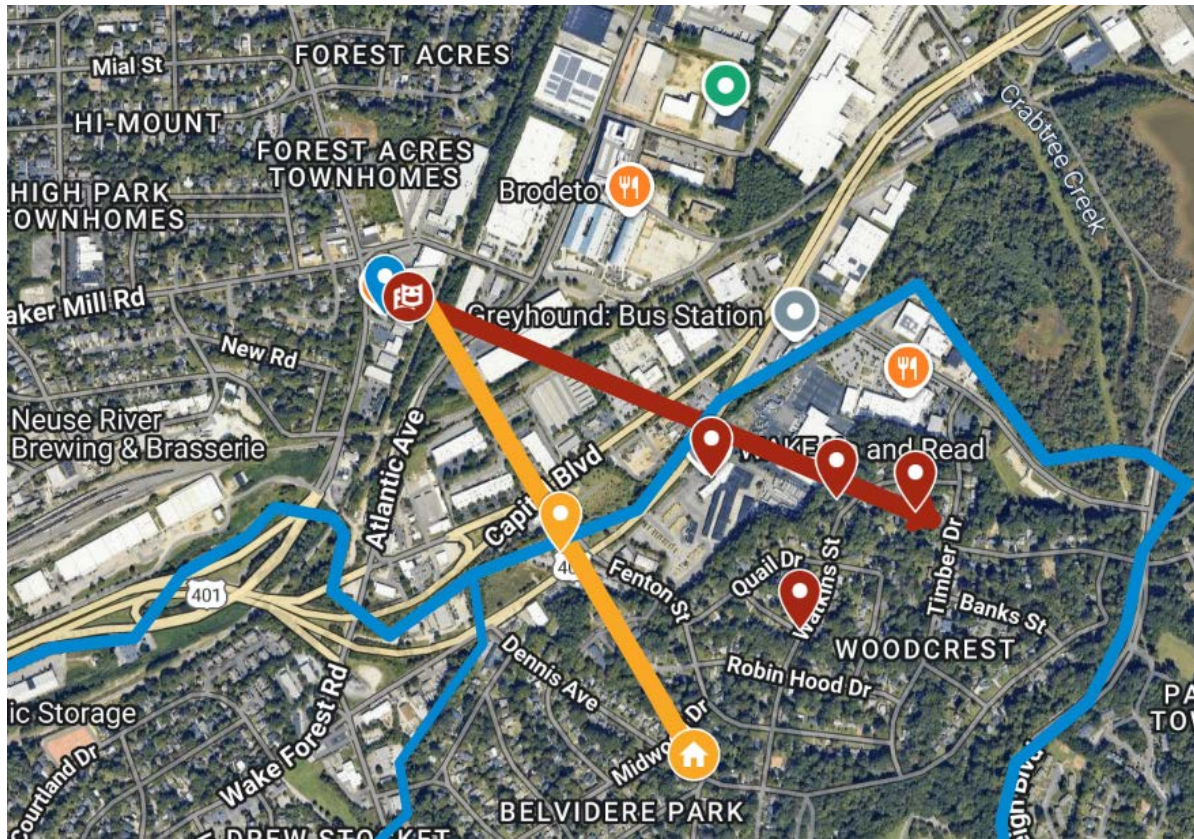
- Bowstring: 256'
- Creek Corridor: 210'
- North Woodcrest Neighborhood: 225'
- Central Woodcrest Neighborhood: 281'
- Belvidere Park Neighborhood: 280'

With the creek valley between the Bowstring and the neighborhoods, the sound is able to travel over the valley and into the neighborhood without anything in the way to absorb, reflect, or reduce the sound except the friction of the air.

## **Reflection**

Another factor that seems to be impacting the sound travel is a reflection issue. The building adjacent to the Bowstring is a tall metal building. The sound appears to be reflecting off the building and redirecting it to the southeast. The sound waves from the speakers recombine with the reflected sound waves, which creates louder sound where the waves align and quieter sound where the waves cancel each other out. That is exactly what seems to be happening, as some neighbors .6 miles away to the southeast have reported hearing sound from the live music, while other nearby neighbors have reported not hearing anything. If the reflection issue was mitigated, it could reduce the sound impact from the music. The good news in this case is that the easiest sound to mitigate is high frequency sound near the source, so there is potential to mitigate the sound.





The red line is the direction of sound, but the yellow line is the angle of reflection off of the metal wall and where sound impact is being experienced and complaints have been received from residents.

## Review Criteria

This case study is very informative because it shows why sound impact is so site specific, and illustrates most of the factors that need to be considered when managing sound. These factors include:

- proximity to residential
- orientation of sound
- sound system details
- topography
- venue capacity
- sound mitigating design features
- intensity of amplified music

In this case the sound is oriented in the best direction to be furthest from residential. However the size of the sound system and the maximum sound level will likely need to be conditioned and restricted with a focus on optimizing sound in the audience area in front of the stage and sound board and having the sound fall off towards the back of the property. The business's desire seems to be to have concert level sound all the way to the back of the property, which is most likely not feasible. While there is nothing that can be done about the topography, there is the ability to pursue sound mitigating design features to reduce or eliminate the reflection off of the metal wall.

## Example Recommendation

- Permit Sound Level: 80 dBA / 88 dBC at the east edge of the property
  - Anticipated sound levels at other locations:
    - 70 dBA / 78 dBC at Whitaker Mill Road
    - 85 dBA / 95 dBC at the sound board
    - 82 dBA / 89 dBC at the back of the outdoor space
- Permit Hours: 10am-10pm
  - Outside of Permit Hours, the citywide standards apply
- Sound System
  - Reduce the size of the sound system. No expansion without further testing to ensure sound impact is adequately mitigated
- Sound Mitigating Design Requirements
  - Venue should work with an acoustical consultant or internal sound engineer to mitigate the sound reflecting off of the metal building. Ideas to explore:
    - A tall fence with mass loaded vinyl along the north property line to absorb sound before it reflects off the metal building
    - Main speakers that have a narrower horizontal pattern so the sound doesn't travel to the north



## **Eight Key Principles for Comprehensive & Effective Sound Management™**

### **Overall Philosophy and Approach**

1. Amplified sound is an integral part of nightlife and entertainment and includes sound to be managed, not noise to be eliminated

### **Sound Ordinance**

2. Proactive approach and system that is tailored for entertainment-related amplified sound
3. Customized sound level allowances for specific locations and contexts
4. Long-term predictability for all stakeholders

### **Beyond Sound Ordinances**

5. Resources are invested and solutions are made available to nightlife and entertainment establishments to support vibrancy while minimizing sound impact to surrounding area
6. The quality of life for nearby residents is anticipated and addressed
7. Ongoing stakeholder education that fosters relationships, dialogue, and problem solving is facilitated
8. Dedicated and responsive compliance and enforcement with an emphasis on building relationships and trust, solving problems, and seeking compliance



## About Sound City Planning

Sound City Planning is an Austin-based consulting practice dedicated to helping cities craft practical, balanced, and comprehensive solutions for managing entertainment-related sound and nightlife in cities. We understand and appreciate the importance of leveraging the nightlife, music, and entertainment that makes cities a great place to live and visit, while preserving livability and compatibility.

We specialize in helping cities develop strategies for noise conflicts between nightlife and residential uses and a proactive approach to sound management.

Founded and led by Brian Block, a nighttime economy management expert with 25 years of experience in city government with a focus on planning, placemaking, economic development, live music, nightlife and entertainment.

Prior to founding Sound City Planning, Brian served for 8 years as the First Nightlife and Entertainment Manager for the City of Austin, overseeing and shaping Austin's innovative and best in class entertainment-related sound management program. His approach focuses on supporting both entertainment and residential quality of life through regulation, planning, policy, and partnerships.

Brian is a leading expert on managing entertainment-related sound and authored the influential paper, *"planning for entertainment-related sound."*

Brian is the founding President and a board member of the Nighttime Economy Culture & Policy Alliance (NITECAP), a non-profit organization dedicated to advancing nighttime management in the US.

### Brian Block

Founder & President

