

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

VITAUTAS MATULYAUSKAS,

Complainant,

v.

PCB 2026-044

LISLE PARK DISTRICT,

Respondent.

**COMPLAINANT'S MOTION FOR LEAVE TO FILE
SUPPLEMENTAL MEMORANDUM AND AUTHORITY**

NOW COMES Complainant, Vitautas Matulyauskas, proceeding pro se, and respectfully moves for leave to file a Supplemental Memorandum on Statutory Interpretation and supplemental authority in support of his Response to Respondent's Motion to Dismiss. In support of this Motion, Complainant states as follows:

I. PROCEDURAL POSTURE

1. Complainant filed his Response to Respondent's Motion to Dismiss on February 11, 2026.
2. The Motion to Dismiss remains pending before the Board, and no ruling has yet been issued.
3. Since the filing of the Response, additional published and documentary materials have become available that bear directly on issues raised in the Motion to Dismiss, specifically: municipal responsibility for court siting and noise mitigation, foreseeability of harm from chronic impulse noise exposure in residential settings, and the character of pickleball impulse noise as distinct from typical ambient recreational sound.

II. NATURE OF SUPPLEMENTAL MEMORANDUM AND AUTHORITY

Complainant seeks leave to file the following Supplemental Memorandum and three supporting materials:

A. Supplemental Memorandum on Statutory Interpretation

Complainant's Supplemental Memorandum on Statutory Interpretation addresses the scope and application of the Section 25 sporting activity exemption under the Illinois Environmental Protection Act. The Memorandum provides additional legal analysis of whether open, drop-in public pickleball play constitutes an "organized amateur or professional sporting activity" within the meaning of Section 3.310, 415 ILCS 5/3.310, applying canons of statutory construction, legislative history, and the Board's own regulatory framework. The Memorandum does not introduce new claims or alter the legal theory advanced in the Complaint or the Response to the Motion to Dismiss, but provides the Board with a more detailed statutory analysis of an issue central to the pending Motion. Filed herewith as a companion document.

B. Published Peer-Reviewed Proceedings Paper (February 3, 2026)

Kathleen M. Romito & Jamie Banks, *A Survey of the Community Impact of Pickleball Noise: A Pilot Study*, Proc. Mtgs. Acoust. 60, 040001 (2026). Attached hereto as **Exhibit A**.

This publication, presented at the 189th Meeting of the Acoustical Society of America (Honolulu, December 2025) and published February 3, 2026, reports survey data from 440 respondents across 264 communities regarding the health, psychological, and residential impacts of chronic pickleball impulse noise exposure. The paper documents that a substantial percentage of respondents report interference with sleep, daily functioning, and emotional well-being, and describes the impulsive, repetitive nature of pickleball noise as acoustically distinct from typical ambient recreational sound.

A companion paper by Romito & Fink (2025), *Pickleball Noise: The Physiological and Psychological Effects on Nearby Residents*, Proc. Mtgs. Acoust. 56 (2025), was filed with the initial Complaint on January 5, 2026, and is already part of the record. The present study extends that earlier research with a larger dataset and broader community scope.

This publication was not available in final published form at the time Complainant filed his Complaint or his Response to the Motion to Dismiss.

C. Correspondence from USA Pickleball Association Counsel (August 15, 2024)

Letter from Jonathan B. Potts, Bryan Cave Leighton Paisner LLP, on behalf of USA Pickleball Association. Attached hereto as **Exhibit B**.

In this letter, counsel for USA Pickleball Association expressly states that USAP does not select locations for courts, approve locations, determine suitability, construct courts, or remove courts, and that all such decisions rest exclusively with local public and private entities. The letter further confirms that acoustic assessment resources are available

through USAP and that the organization recognizes a quiet equipment category for noise-sensitive locations.

This correspondence directly addresses issues raised in Respondent's Motion concerning control, discretion, and responsibility for the placement, operation, and noise mitigation of local pickleball courts.

D. Physician Advisory Correspondence Regarding Municipal Liability and Health Impacts (October 13, 2025)

Email from Kathleen Romito, M.D., Scientific Advisory Council, Quiet Communities, Inc., addressed to the elected officials of the Village of Lisle and the Director of the Lisle Park District. Attached hereto as **Exhibit C**.

Dr. Romito is a physician-researcher, co-chair of the Acoustical Society of America session on pickleball noise, and member of the National Task Force to Address Pickleball Noise. In this correspondence, Dr. Romito references more than 200 legal cases nationally related to pickleball courts sited within 250 feet of residences, discloses a \$1.6 million settlement with the City of Boise, Idaho in an analogous case involving courts 57 feet from a residence, identifies documented health concerns including PTSD-like symptoms and phantom auditory perception among residents within 100 feet of courts, and recommends that courts within 100 feet of homes either be relocated or require mandatory use of foam balls with supervised enforcement.

This correspondence was addressed to both the Village of Lisle's elected officials and the Lisle Park District's Director, placing both governing bodies on direct notice of the health risks, legal exposure, and available mitigation measures associated with the operation of pickleball courts in close proximity to residences.

III. RELEVANCE TO THE MOTION TO DISMISS

Respondent's Motion to Dismiss asserts that the Complaint fails as a matter of law. The Supplemental Memorandum and supplemental authority submitted herewith do not introduce new claims or alter the legal theory advanced by Complainant.

Instead, the Supplemental Memorandum and these materials are relevant to:

- (a) The nature and character of the alleged environmental intrusion, including the acoustic distinction between impulsive pickleball noise and general recreational sound;
- (b) The foreseeability of harm from chronic impulse noise exposure in residential settings, as documented in peer-reviewed research and communicated directly to Respondent;

- (c) The allocation of decision-making authority and responsibility to local entities for court siting, noise mitigation, and equipment standards, as confirmed by the national governing body's own legal counsel; and
- (d) The broader regulatory, legal, and scientific context in which the Complaint arises, including documented national litigation and settlement outcomes in analogous cases; and
- (e) The proper construction of the Section 25 sporting activity exemption under the Illinois Environmental Protection Act, including whether open, drop-in public pickleball play qualifies as an “organized amateur or professional sporting activity” within the meaning of Section 3.310, 415 ILCS 5/3.310.

Complainant submits the Supplemental Memorandum and these materials solely to assist the Board in evaluating the legal sufficiency of the Complaint in light of the full statutory framework, the context surrounding residential pickleball impulse noise impacts, and municipal responsibility.

IV. INTERESTS OF JUSTICE

Because the Motion to Dismiss remains pending and no ruling has been issued, granting leave to file the Supplemental Memorandum and supplemental authority will not prejudice Respondent. The materials are limited in scope and directly responsive to arguments raised in the Motion.

Respondent will have a full opportunity to respond to these materials should the Board grant this Motion.

Illinois practice favors decisions made on a complete and accurate record, particularly where jurisdictional and statutory interpretation issues are implicated.

WHEREFORE

Complainant respectfully requests that the Board grant leave to file the attached Supplemental Memorandum on Statutory Interpretation and supplemental authority (Exhibits A, B, and C) for consideration in connection with Respondent’s pending Motion to Dismiss, and for such other relief as is just and proper.

Respectfully submitted,

Vitautas Matulyauskas

Complainant, Pro Se

6282 Timberview Dr.

Lisle, Illinois 60532

Date: February 13, 2026

CERTIFICATE OF SERVICE

I, Vitautas Matulyauskas, hereby certify that a true and correct copy of the foregoing Complainant's Motion for Leave to File Supplemental Memorandum and Authority, together with the Supplemental Memorandum on Statutory Interpretation and attached Exhibits A, B, and C, was served upon counsel for Respondent and upon the Clerk of the Board by electronic mail on the date indicated below, addressed to:

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and upon the Clerk of the Board:

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Vitautas Matulyauskas

Complainant, Pro Se

Date: February 13, 2026

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**SUPPLEMENTAL MEMORANDUM ON STATUTORY INTERPRETATION
THE SECTION 25 SPORTING ACTIVITY EXEMPTION
DOES NOT APPLY TO PICKLEBALL AT ABBEYWOOD PARK**

I. Issue Presented

Whether open, drop-in public pickleball play at Abbeywood Park qualifies as an “organized amateur or professional sporting activity” within the meaning of Section 3.310 of the Illinois Environmental Protection Act, 415 ILCS 5/3.310, such that it is exempt under Section 25, 415 ILCS 5/25.

It does not.

II. The Statute Requires Organized or Controlled Sporting Events

Section 25 provides a limited exemption for “organized amateur or professional sporting activities.” Section 3.310 defines that term to include:

(i) rifle and pistol ranges, licensed shooting preserves, and skeet, trap or shooting sports clubs in existence prior to January 1, 1994; (ii) public hunting areas operated by a governmental entity; (iii) organized motor sports; and (iv) sporting events organized or controlled by school districts, units of local government, state agencies, colleges, universities, or professional sports clubs offering exhibitions to the public.

415 ILCS 5/3.310 (P.A. 92-574, eff. 6-26-02).

Although the statute uses the phrase “includes, but is not limited to,” that language does not permit boundless expansion. Under the canon of *ejusdem generis*, general language is limited to activities of the same kind as those specifically enumerated. *Paris v. Feder*, 179 Ill. 2d 173, 177 (1997); *In re M.I.*, 2013 IL 113776, ¶ 18.

The enumerated activities share defining characteristics: dedicated facilities designed for the activity, institutional governance by recognized organizations, structured events with defined participants and schedules, and active operational oversight. The statute does not contain a general exemption for recreational activity conducted on public property.

III. Pickleball Is Absent from the Illinois Statutory Framework

The General Assembly has demonstrated its practice of naming specific sports when it intends to provide them with regulatory or institutional treatment. The Illinois Commission on Amateur Sports Act, 20 ILCS 4107, enumerates fifteen sports by name—including baseball, basketball, gymnastics, football, golf, hockey, soccer, softball, swimming, volleyball, cheerleading, wrestling, and tennis—each with a designated seat on a Governor-appointed commission. The Youth Sports Concussion Safety Act, 410 ILCS 145, similarly identifies specific sports by name in its definition of “sponsored youth sports activity,” including basketball, tennis, football, soccer, and more than twenty others. The School Code, 105 ILCS 5, references basketball tournaments by name and imposes structural requirements on their organization.

Pickleball does not appear in any of these statutes. It is not referenced in the Environmental Protection Act, the Park District Code (70 ILCS 1205), the Sports Wagering Act (230 ILCS 45), or any other provision of the Illinois Compiled Statutes. No Illinois statute defines pickleball, recognizes it as a sport, regulates its conduct, or references it in any context.

This is not an inadvertent omission. When the legislature intends to recognize a sport, it does so expressly. The complete absence of pickleball from Illinois law is consistent with the sport’s absence from the institutional framework that characterizes the activities enumerated in Section 3.310. Pickleball is not sanctioned by the Illinois High School Association, which governs competitive athletics across nearly 40 sports for over 760 member high schools. It is not recognized by the NCAA as a collegiate sport. No professional sports league organizes pickleball exhibitions. The institutional bodies the legislature specifically referenced in subsection (iv)—school districts, colleges, universities, professional sports clubs—have not integrated pickleball into their organized athletic programs in any meaningful way.

IV. “Organized or Controlled” Requires Active Institutional Governance

Subsection (iv) requires that sporting events be “organized or controlled by” the listed entities. The legislature did not use the terms “permitted,” “allowed,” or “occurring on property owned by.” It used operative terms requiring affirmative action.

“Organized” implies structured coordination—scheduling, management of participants, direction of activity. “Controlled” implies active supervision—authority to enforce rules, regulate participation, and direct or halt operations.

Ownership of land is not synonymous with organizing or controlling activity conducted on it. If the General Assembly intended to exempt any recreational activity occurring on park district property, it could have written: “any recreational activity conducted on property owned or operated by a unit of local government.” It did not. Courts must give effect to the words chosen. *Solon v. Midwest Medical Records Ass’n*, 236 Ill. 2d 433, 440 (2010).

V. The Activity at Abbeywood Park Is Not Organized or Controlled

The record establishes that pickleball at Abbeywood Park lacks the structural features required by the statute. There is no scheduling or reservation system. There are no rostered teams. There are no structured competitions. There is no supervision or enforcement presence. There is no participant registration. There is no capacity management.

The Park District’s own officials have acknowledged that posted voluntary guidelines are “an exercise in futility” and that rules are not enforced. That is not control.

Players routinely overflow onto an adjacent tennis court that is not lined or designated for pickleball when the marked courts are full. No authorization is sought. No supervision prevents it. No enforcement addresses it. An entity that cannot control which courts the activity occurs on cannot plausibly claim to “organize or control” the activity itself.

This is open public recreation. It is not a sporting event organized or controlled within the meaning of Section 3.310(iv).

VI. No Institutional Governing Body Exercises Control

A. USA Pickleball Disclaims All Local Authority.

USA Pickleball (“USAP”), the sport’s national governing body, has formally stated through legal counsel that it disclaims all local authority over court siting, design, construction, and removal. (Letter from Jonathan B. Potts, Bryan Cave Leighton Paisner LLP, on behalf of USA Pickleball Association (Aug. 15, 2024), filed herewith as Exhibit B to Complainant’s Motion for Leave to File Supplemental Memorandum and Authority.) Specifically, USAP’s counsel stated:

“USAP does not control any aspect of your local decision-making process, which rests exclusively with your local public and private organizations. First, USAP does not select the locations for pickleball courts throughout the country. Second, USAP does not approve the locations or architectural design of those pickleball courts. Third, USAP does not decide the suitability of potential locations and architectural designs. Fourth, USAP does not build pickleball courts. Finally, USAP does not destruct pickleball courts.”

In every activity enumerated in Section 3.310, an identifiable governing body exercises meaningful authority over facility standards and operations. NASCAR certifies tracks. The NRA publishes range design standards. The NCAA sets facility requirements for collegiate athletics. USAP offers no comparable framework. It does not certify courts, does not approve locations, does not require compliance with any standard, and exercises no authority over local operations.

B. USAP's Own Admissions Confirm the Sport's Regulatory Immaturity.

USAP's counsel further stated: "USAP can provide virtual and on-site analyses of potential pickleball locations concerning acoustics, if requested. That request was not made with respect to your local court." (Exhibit B.) This confirms that the sport's own governing body recognizes that pickleball installations require acoustic evaluation—a service that exists because the sport generates noise impacts demanding professional assessment. The Lisle Park District installed courts 45–55 feet from occupied residences without availing itself of this available resource.

USAP's counsel also stated: "USAP's creation of a Quiet Category and Noise Reduced Category reflects that some communities believe that those categories of pickleball may be more consistent with their local needs." (Exhibit B.) The creation of formal quiet equipment categories is an institutional acknowledgment that standard pickleball equipment generates noise levels incompatible with some community settings. No other recreational sport has quiet equipment categories—no "Quiet Category" basketball, no "Noise Reduced" tennis—because no other sport generates noise requiring this institutional response. The Park District has not adopted the Quiet Category or mandated noise-reduced equipment.

C. The Result Is a Complete Vacuum of Institutional Oversight.

The national governing body disclaims operational authority. The local governing body admits it does not enforce meaningful control. No school, university, league, or professional sports club organizes events at Abbeywood Park. Both the national body and the local body have disclaimed meaningful control. The statutory prerequisite of organized or controlled activity is not merely unsatisfied—it is affirmatively negated by the admissions of the only two entities that could conceivably meet it.

VII. The Exemption Cannot Be Expanded by Analogy

Respondent may argue that pickleball is simply another "sport," analogous to tennis or basketball. But Section 3.310 does not exempt sports generally. It exempts specifically defined institutional categories.

Courts do not expand statutory exemptions by analogy. They apply the text as written. *Greer v. Illinois Housing Development Authority*, 122 Ill. 2d 462, 491 (1988) ("Courts may not depart

from the plain language of the statute by reading into it exceptions, limitations, or conditions not expressed by the legislature”).

Even if pickleball is recreationally similar to tennis, similarity is not the statutory test. The test is whether the activity constitutes a sporting event organized or controlled by the specified entities. The record demonstrates it does not.

Moreover, the analogy fails on its own terms. Basketball and tennis are recognized by name across multiple Illinois statutes, sanctioned by the IHSA and NCAA, and governed by established institutional frameworks. Pickleball is recognized in none, sanctioned by neither, and governed by a national body that disclaims all local authority. And the acoustic profile is fundamentally different: pickleball generates impulse noise with a 1–2 millisecond onset at peak frequencies of 900–1,800 Hz—the range where human hearing is most sensitive—which the acoustical engineering firm Spondiarian & Willis categorizes as “highly impulsive sound, in the same category as metal or wood hammering, small arms gunfire, pile driving, and pavement breaking.” No other recreational court sport produces noise with these characteristics. The legislature’s exemption was designed for activities whose noise profiles were known and managed through established facility design. Extending it to an activity producing a fundamentally different and documented form of environmental harm would exceed any reasonable interpretation of legislative intent.

VIII. Respondent’s Interpretation Creates an Unreviewable Regulatory Gap

The practical consequences of Respondent’s interpretation warrant the Board’s attention. Under the reading advanced by the Park District, any unit of local government may unilaterally convert an existing recreational facility to a completely new use generating a fundamentally different noise profile—without zoning approval, environmental review, acoustic assessment, or input from affected residents—and then claim blanket immunity from the Board’s noise provisions simply by virtue of owning the land and posting voluntary rules. Under that interpretation, there is no regulatory checkpoint at any stage of the process—not before installation, not during operation, not after complaints—that protects adjacent residents from noise of any magnitude emanating from any new activity a park district chooses to introduce.

That is precisely what occurred here. The Lisle Park District converted tennis courts to pickleball courts approximately 45 feet from occupied residences without conducting any acoustic study and without availing itself of the acoustic analysis services that USA Pickleball’s own counsel confirmed were available. (Exhibit B.) The Park District’s own staff subsequently acknowledged that usage far exceeded expectations, that the noise impact on neighbors was unreasonable, and that staff recommended pursuing new courts at a more suitable location. Yet the activity continues without enforceable abatement. Under Respondent’s interpretation, the Board would lack jurisdiction to address this demonstrated harm—not because the legislature intended that

result, but because the Park District claims that any sport played on public land is exempt from review.

The absence of control is further illustrated by the activity's own lack of containment. Players at Abbeywood Park have been observed not only overflowing onto the adjacent tennis court—a surface not lined or designated for pickleball—but also playing pickleball on the basketball court located outside the fenced pickleball court enclosure entirely. An entity that cannot confine the activity within the physical boundaries of the designated facility cannot credibly claim to “organize or control” the sporting events occurring on its property. The absence of control is not a matter of degree; it is visible, documented, and acknowledged by the Park District's own officials.

The legislature did not intend to create a regulatory vacuum in which no remedy exists for demonstrated environmental harm. Statutes are not to be interpreted to produce absurd or unjust results. *People v. Boyce*, 2015 IL 117108, ¶ 17. Notably, the legislature itself recognized the need for siting limitations when it restricted the rifle and pistol range exemption in Section 3.310(i) to facilities “in existence prior to January 1, 1994.” The legislature understood that certain noise-generating activities require geographic constraints. Respondent's interpretation would grant a sport with no legislative history, no statutory recognition, no institutional framework, and a documented record of environmental harm broader immunity than the activities the legislature specifically enumerated and constrained. That result is neither supported by the text nor consistent with the purposes of the Act.

IX. The Absence of Peer-Reviewed Research Reflects Regulatory Immaturity, Not the Absence of Harm

Respondent may suggest that the limited body of peer-reviewed research on pickleball noise health effects undermines Complainant's position. The Board should reject that inference. History demonstrates, with remarkable consistency, that regulatory science lags behind emerging environmental hazards by decades—and that the absence of a fully developed research base at the time of an activity's rapid expansion is not evidence of safety but evidence of precisely the kind of regulatory immaturity that disqualifies pickleball from the Section 3.310 exemption.

A. The Historical Pattern Is Consistent and Well-Documented.

The lag between the emergence of an environmental hazard and the regulatory response to it is one of the most thoroughly documented patterns in public health history. In every major case, the trajectory is the same: an activity generates harm; early evidence is dismissed or ignored; institutional actors resist regulation; the scientific evidence eventually becomes undeniable; and regulation follows—decades later.

Secondhand smoke followed this trajectory over approximately fifty years. The Surgeon General first systematically reviewed evidence on secondhand smoke health effects in 1972. The landmark 1986 Surgeon General's report conclusively linked secondhand smoke to lung cancer and respiratory disease in nonsmokers. Yet more than forty years after the Surgeon General first identified potential health risks in 1971, and nearly thirty years after the 1986 report stated that secondhand smoke causes lung cancer and other diseases, comprehensive protections for all workers remain incomplete. The tobacco industry actively suppressed and disputed evidence throughout this period, and the U.S. Environmental Protection Agency did not classify environmental tobacco smoke as a human carcinogen until 1992—two decades after the initial evidence.

Lead paint presents an even more protracted example. As early as 1904, the paint manufacturer Sherwin-Williams reported in its own publication the dangers of lead-containing paint, noting that a French expert had deemed lead paint “poisonous in a large degree, both for the workmen and for the inhabitants of a house painted with lead colors.” France banned lead carbonate in paint in 1909. In the United States, lead use in residential paint was unregulated until the paint industry adopted a voluntary standard in 1955, and a federal ban did not take effect until 1978—seventy-four years after the hazard was documented by the industry itself. In 1991, the Secretary of Health and Human Services called lead “the number one environmental threat to the health of children in the United States.” There is no safe level of lead exposure. The regulatory response lagged the known science by generations.

Radon illustrates the pattern over more than a century. The health effects of high radon exposure in mines were recognized as early as the sixteenth century in descriptions of a wasting disease among European miners. The causal role of radon in lung cancer among underground miners was established in the 1950s. Yet the discovery of extremely high indoor radon levels in the northeastern United States did not occur until 1984, and the International Agency for Research on Cancer did not classify radon as a human carcinogen until 1988. Definitive evidence linking residential radon exposure to lung cancer was not confirmed until 2005. The World Health Organization did not identify radon as the second leading cause of lung cancer globally until 2009—more than fifty years after the occupational hazard was established.

Chronic Traumatic Encephalopathy in professional football demonstrates that even highly visible, heavily resourced institutions resist emerging science. Dr. Bennet Omalu published the first findings of CTE in an NFL player's brain in 2005. The NFL's Mild Traumatic Brain Injury Committee attacked his report and demanded retraction. For over a decade, the NFL denied any link between football and degenerative brain disease, with committee members stating publicly that “no NFL player” had ever suffered chronic brain damage from repeat concussions. The NFL did not formally acknowledge the link between football and CTE until 2016 and agreed to a settlement initially valued at \$765 million with approximately 5,000 former players. A 2023

study by the Boston University CTE Center found CTE in 345 of 376 deceased former NFL players examined.

Hockey helmet safety followed a similar trajectory. In 1968, Minnesota North Stars player Bill Masterton died after hitting his head on the ice during an NHL game—the only on-ice death in NHL history. The NHL did not mandate helmets for incoming players until 1979, eleven years later, and grandfathered in existing players who preferred to play without head protection. The last helmetless player did not retire until 1997—twenty-nine years after Masterton’s death.

B. Pickleball Noise Research Is in Its Earliest Stage.

The current state of peer-reviewed research on pickleball noise health effects is precisely where secondhand smoke science stood in approximately 1972: the first physician-led analyses are only now being published, early findings are alarming, and the researchers themselves are calling for the kind of epidemiological, longitudinal, and physiological studies that do not yet exist.

A 2025 physician-led content analysis published in the Proceedings of Meetings on Acoustics—the first study to explore the non-auditory health effects of chronic exposure to pickleball noise on the general public—identified 246 mentions of health effects among residents living near courts. Physical health effects represented almost half (45.9%) of all mentions, of which 46.0% involved the nervous system and 25.7% the heart. Psychological health effects represented 54.1% of all mentions, with over half describing severe distress or using the term “torture,” and two mentioning suicidal thoughts. Nearly a quarter (23.9%) reported trauma or PTSD-like symptoms. The study’s authors noted that these findings “highlight a need for further research into the complex acoustical characteristics of pickleball noise and its health effects.”

A community survey presented at the 189th Meeting of the Acoustical Society of America found that 92% of respondents reported some type of health effect related to pickleball noise, and seven out of ten reported unusually strong physical or emotional reactions in their homes—ranging from anxiety, tension, and irritability to elevated heart rate. Nearly six out of ten reported concerns about “phantom pops”—hearing the noise even when no one is playing—sometimes waking them at night or occurring weeks after moving away. Residents more than 500 feet from courts reported being unable to enjoy their homes.

The only peer-reviewed measurement study, published in a 2024 otolaryngology journal, recorded average peak sound levels (LC_{peak}) of 112–115 dBC at courtside and acknowledged that “prolonged noise exposure and ambient noise pollution may have other health implications and warrant further investigations.” The researchers confirmed that standard pickleball play generates impulse noise characteristics that conventional decibel-averaging measurements may not adequately capture.

The researchers studying pickleball noise have themselves stated plainly: “While impulse noise has been studied in military and construction settings, our study is the first to explore its health effects on the general public. Long-term exposure to impulse noise wasn’t a public concern until pickleball courts were built near homes.” This is not an activity with a known and managed noise profile. This is an activity whose environmental impact is only now beginning to be understood.

C. The Sport’s Own Governing Body Has Acknowledged the Problem.

The institutional acknowledgment of pickleball’s noise problem is already underway—from the sport’s own governing body. USA Pickleball’s creation of formal “Quiet Category” and “Noise Reduced Category” equipment classifications is an institutional admission that standard pickleball equipment generates noise levels incompatible with residential settings. No other recreational sport has been compelled to create quiet equipment categories. No “Quiet Category” basketball exists. No “Noise Reduced” tennis equipment classification has been necessary. The existence of these categories is itself evidence that pickleball generates a form of noise that the sport’s own national body recognizes as problematic—yet the Lisle Park District has neither adopted the Quiet Category nor mandated noise-reduced equipment at Abbeywood Park.

D. The Board Should Not Equate the Absence of Research with the Absence of Harm.

The activities enumerated in Section 3.310—rifle ranges, motor sports, NCAA athletics—share a common feature beyond institutional governance: decades of operational history during which their environmental impacts were identified, studied, and addressed through established facility design standards, siting requirements, and regulatory frameworks. Their noise profiles are known. Their mitigation strategies are developed. Their institutional oversight is mature.

Pickleball has none of this. The sport’s rapid expansion—with more than 18,000 new courts built nationwide in 2024 alone—has outpaced any scientific understanding of its environmental impact. The first peer-reviewed health studies were not published until 2024 and 2025. The research is, by the investigators’ own admission, preliminary and urgently in need of expansion. The sport is generating an estimated 200 legal claims across the country related to noise. Communities nationwide are engaged in conflict over court siting.

The Board should interpret the paucity of peer-reviewed pickleball noise research not as evidence that no harm exists, but as evidence that the sport is too new, too rapidly expanding, and too inadequately studied to qualify for an exemption designed for activities whose impacts were understood, managed, and governed through established institutional frameworks. The historical record establishes that regulatory science consistently trails emerging hazards by decades. Granting statutory immunity to an activity at this stage of its development—when the first health studies are only now emerging and the sport’s own governing body has acknowledged the noise problem—would repeat the errors that led to generational harm from secondhand smoke, lead, radon, and unregulated contact sports.

X. Conclusion

Section 3.310 defines a limited class of institutional sporting activities. Under *ejusdem generis*, subsection (iv) must be read consistently with the structured, supervised activities specifically enumerated.

The activity at Abbeywood Park is not organized. It is not controlled. No institutional governing body exercises operational authority. The sport is not recognized in any Illinois statute. Passive land ownership does not satisfy the statutory requirement. The absence of peer-reviewed research on the health effects of pickleball noise does not establish safety—it confirms the sport’s regulatory immaturity and reinforces why it falls outside the statutory exemption.

Accordingly, the Section 25 exemption does not apply, and the qualitative noise prohibition of 35 Ill. Adm. Code 900.102 remains enforceable.

Respectfully submitted,

Vitautas Matulyauskas
Complainant, Pro Se

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Lisle, Illinois 60532

Date: February 13, 2026

CERTIFICATE OF SERVICE

I, Vitautas Matulyauskas, hereby certify that a true and correct copy of the foregoing Supplemental Memorandum on Statutory Interpretation was served upon counsel for Respondent and upon the Clerk of the Board by electronic mail on the date indicated below, addressed to:

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Vitautas Matulyauskas
Complainant, Pro Se

Date: February 13, 2026

FEBRUARY 03 2026

A survey of the community impact of pickleball noise: A pilot study

Kathleen M. Romito ; Jamie Banks



Proc. Mtgs. Acoust. 60, 040001 (2025)

<https://doi.org/10.1121/2.0002238>



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Noise: Paper 1pNSc5

**A survey of the community impact of pickleball noise: A
pilot study**

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As pickleball grows in popularity, pickleball noise in residential settings is increasingly recognized as a potential acoustic intrusion and health hazard to neighbors. Current recommendations for appropriate mitigation are currently based on expert opinion from sound professionals and industry leaders. While expert recommendations have provided valuable guidance, a lack of publicly accessible data—particularly from those living near the courts—can present a challenge for local decision makers, who must balance the harm resulting from pickleball noise with the interests of a growing player base. This study aims to help fill that gap through a survey of residents living within 1000 feet of public, club-operated or homeowners association (HOA)-managed pickleball courts. Survey questions gathered data on the number of courts, exposure duration across time, sound levels, the existence of mitigation means, and the respondents' current levels of annoyance, disturbance, and/or other harms. This research on the lived experience of communities is essential to evidence-based decision making that protects the health and well-being of the neighboring residents while also providing the desired access to pickleball recreation.



1. INTRODUCTION

Pickleball is an increasingly popular racquet sport played with hard paddles and plastic balls that produce loud “pops.” These repetitive impulse sounds introduce a new and distinctive source of unwanted and potentially harmful noise in residential environments, exposing residents living near busy courts to thousands of sharp “pops” each day. An audio recording of the noise from 4 pickleball courts can be heard at <https://doi.org/10.5281/zenodo.15566001> (1).

In 2024, 18,455 new courts were built in an estimated 4,000 new locations (2). As new courts are constructed, pickleball noise is disrupting the soundscape in residential areas, leading to conflicts and complaints. One Google Map identifies more than 500 pickleball noise hotspots across North America (3). The issue has been covered in hundreds of news reports, generated countless social media posts, and led to approximately 200 legal claims in the United States (4).

Although local decision makers and acoustic professionals responsible for decisions regarding court locations usually understand the health and social benefits of pickleball recreation, they are less likely to be familiar with the potential harm to residential neighbors who are chronically exposed to pickleball noise. A previous content analysis of self-reported health concerns linked to pickleball noise found significant issues amongst residents exposed to chronic pickleball noise, including trauma-like symptoms, phantom sounds (pops), and severe psychological distress (5).

This pilot study aims to better understand the impacts of pickleball noise on the lives and health of community members who are exposed and to inform guidelines for court locations and noise mitigation strategies.

2. METHODS

A. SURVEY DEVELOPMENT

An eighteen-question online questionnaire was developed using Survey Monkey (SurveyMonkey Inc, San Mateo, CA; www.surveymonkey.com). The survey questions were drafted based on scientific literature on the effects of noise and on impacts reported by affected community members. The draft survey underwent face validation with a focus group, was revised accordingly, and submitted to an ethics committee for approval.

The first ten questions focused on the respondent’s zip code location and details of the physical arrangement of the courts located nearby, including geographic features and existing noise mitigation measures. Participants were instructed to estimate the distance between their residence and the courts using Google Earth or by pacing the distance, with each step approximating three feet. The remaining eight questions addressed the nature and severity of the impacts experienced, as well as respondents’ concerns about their noise exposure. Free text comments were permitted in Questions 3, 6, 7, and 10-18 without restrictions on the number of comments. Open-ended responses for questions 11 & 12 were analyzed using thematic analysis. Responses were coded, grouped into categories, and synthesized into higher-order themes reflecting common experiences and perspectives. No demographic information was requested from respondents.

B. SURVEY SAMPLE AND DISTRIBUTION

The survey was open for three weeks in September–October 2025. The survey was directed at individuals who currently live, formerly lived, or anticipate living within 1000 feet of pickleball courts. “Exposed” individuals are defined as those respondents who currently live or have lived near courts and who hear or have heard chronic pickleball noise. Respondents were instructed to submit one survey only. Duplicate responses from the same device were not allowed and IP addresses were scanned for multiple responses.

To recruit neighbors with both ongoing concerns as well as successfully resolved concerns, two acoustic firms that regularly address pickleball noise were invited to share the survey with past clients. Four community advocates were invited to distribute the survey link to community members who had previously reached out to them regarding pickleball noise. The survey was also posted on two Facebook groups: Pickleball Noise Relief (focused on affected neighbors) and Pickleball Sound Mitigation (administered by an acoustic firm, focused on finding technical solutions). The author also posted messages in each group soliciting successful noise mitigation experiences.

C. ANALYSIS

For this paper, survey responses were analyzed using descriptive statistics only. A detailed statistical analysis is underway to determine the contribution of co-variates, such as distance from courts and duration of noise exposure, on the impacts of pickleball noise on the lives and health of the surrounding residents.

3. RESULTS

A. SURVEY RESULTS

Within the three-week open survey period, 440 responses were received from 264 communities, 229 of which were from the United States, evenly distributed across the North, South, East, and West. In four zip codes, there were two distinct locations (i.e., sets of courts) where noise concerns occurred. International responses came from 29 postal codes in Canada, and from one postal code each in Australia and New Zealand.

Three hundred eighty-six of the 440 surveys received were from community members who were exposed to pickleball noise in their neighborhood, either presently or in the past. Thirty-three of the survey participants reported that courts were planned nearby, 11 reported they had never lived near existing or planned courts, and 10 declined to state whether they had lived near courts (Question 2). Overall, 87.7% of respondents met the study's definition of "exposed" individuals. Fifteen submissions were received from respondents living more than 1000 feet from courts and their responses are included in the results.

Results from exposed respondents were analyzed and described in the following tables: the physical characteristics of courts (Tables 1–2), amount of exposure (Table 3), acoustic and non-acoustic factors affecting the experience of the sound (Table 4), annoyance (Tables 5, 6, 7), interference with daily activities (Figures 1–5), consideration of moving (Figure 6), and health concerns (Figure 7). The remainder of the questions were analyzed using all community responses.

The physical characteristics of the neighborhood courts are shown in Table 1 and the presence of noise mitigation currently in place is shown in Table 2.

Table 1. Characteristics of pickleball courts

| Q3. Type of courts (n=365) | | Q4. # of courts (n=383) | | Q5. Setback distance (n =385) | | Q6. Geography (n=302) | |
|----------------------------|-------------|-------------------------|-------------|-------------------------------|-------------|-------------------------|-------------|
| Public | 220 (60.3%) | 1 | 23 (6.0%) | <100 ft | 167 (43.4%) | Home above courts | 139 (46.0%) |
| HOA* | 92 (24.9%) | 2-4 | 229 (59.8%) | 100-300 ft | 119 (30.9%) | Body of water | 15 (5.0%) |
| Private/Club | 33 (9.0%) | 4-8 | 92 (24.0%) | 300-500 ft | 46 (11.9%) | Geography focuses noise | 65 (21.5%) |
| Neighbor | 21 (5.8%) | >8 | 39 (10.2%) | 500-1000 ft | 38 (9.9%) | None | 114 (37.5%) |
| | | | | >1000 ft | 15 (3.9%) | | |

*Homeowner Association

Table 2. Existing noise mitigation (n=374)

| | | | |
|----------------------------|-------------|-------------------------|------------|
| Thick vinyl sound barriers | 57 (15.2%) | Mesh netting | 70 (18.7%) |
| Limited hours, recommended | 66 (17.7%) | Limited hours, enforced | 31 (8.3%) |
| Quiet paddles, recommended | 54 (14.4%) | Quiet paddles, enforced | 5 (1.3%) |
| Quiet balls, recommended | 45 (12.0%) | Quiet balls, enforced | 6 (1.6%) |
| No mitigation in place | 172 (46.0%) | | |

*Multiple responses allowed

Qs. 8, 9. What is the duration of exposure to pickleball noise? While some courts are used only occasionally, many public courts—due to pickleball’s popularity—are in near-constant use from daybreak to sunset. The addition of lights, in some situations, can extend the hours of play into the late-night hours. Pickleball is a relatively new sport and most respondents have less than 5 years of exposure to the noise. See Table 3.

Table 3. Exposure to pickleball noise

| Hours per week, courts open (n=379) | Responses (%) | Years of exposure (n=382) | Responses (%) |
|-------------------------------------|---------------|---------------------------|---------------|
| <30 hours per week | 32 (8.4%) | < 1 year | 41 (10.9%) |
| 30-50 hours per week | 50 (13.2%) | 1-3 years | 162 (43.1%) |
| 50-70 hours per week | 76 (20.1%) | 3-5 years | 119 (31.6%) |
| >70 hours per week | 221 (58.3%) | >5 years | 54 (14.4%) |

Q10. Which of the following can be used to describe your experience with pickleball noise? While 2/3 of respondents described the noise as loud, almost 90% described the noise as repetitive pops or clicks. Almost 3/4 of participants reported being able to hear the noise inside their home or office and almost 2/3 reported being exposed to nighttime pickleball noise. Nearly half of all residents reported experiencing harassment from pickleball players after raising concerns about the noise. Several respondents further described incidents involving “assault,” “threats,” or “being accosted,” and at least three indicated that police involvement was required.

Table 4: Acoustic and non-acoustic factors affecting residents’ experience of the sound (n=384)

| Acoustic Factors: How Residents Describe the Sound | Responses (%) | Non-Acoustic Factors: How Residents Experience the Sound | Responses (%) |
|-------------------------------------------------------|---------------|-------------------------------------------------------------|---------------|
| Repetitive (e.g., pops, clicks) | 377 (88.1%) | Noise heard inside home or office | 316 (73.6%) |
| Chronic | 286 (66.8%) | Being ignored by decision makers | 280 (65.4%) |
| Loud | 282 (65.9%) | Courts visible from home | 275 (64.3%) |
| Unpredictable | 254 (59.4%) | Noise during the night, 6 pm-8 am | 274 (64.0%) |
| Intermittent | 189 (44.2%) | Harassment from pickleball players | 203 (47.4%) |

*Multiple responses allowed

Q11. Does the word “annoyance” adequately describe your experience of pickleball noise? (n=358)

While the term “annoyance” is used by acousticians to define a sound problem that requires a remedy, lay people, including local decision makers, more often use the term to describe an irritant, without the implied need to remedy the situation. More than half of respondents reported “no” when asked if the word “annoyance” was adequate to describe their experience. Of the twenty-eight (7.5%) respondents who skipped the “yes/no” question, 26 left comments describing their experience as more than an annoyance using phrases such as “tortuous”, “unbearable”, and the “popping sound triggers PTSD from the military”. Their responses are included as “no” in the table below. See Appendix, Table A1.

Table 5. The word "annoyance" adequately explains the experience of pickleball noise (n=386)

| The word "annoyance" adequately explains the experience | Respondents (%) |
|---------------------------------------------------------|-----------------|
| Yes | 157 (40.7%) |
| No | 229 (59.3%) |

A total of 206 respondents provided an open comment to the question about the adequacy of the term “annoyance,” with nearly 2/3 of them communicating severe psychological or emotional distress, mirroring the 26 comments from those who did not answer the structured question. See Appendix, Table A2.

Q12. How often does the issue of pickleball noise interfere with your ability to do the following activities? Most respondents reported that pickleball noise either often or constantly interferes with the ability to be mindful, enjoy their home, communicate at home, or work productively (Fig 1-4). Almost half report it often or constantly interferes with sleep (Fig. 5)

How often does the noise affect your ability to:

Fig.1 Be mindful, rest, be calm or think (n=377)

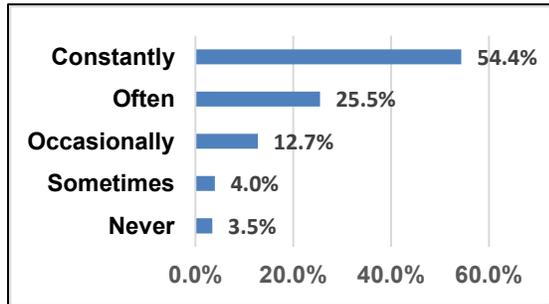


Fig.2 Enjoy indoors/outdoors at home (n=374)

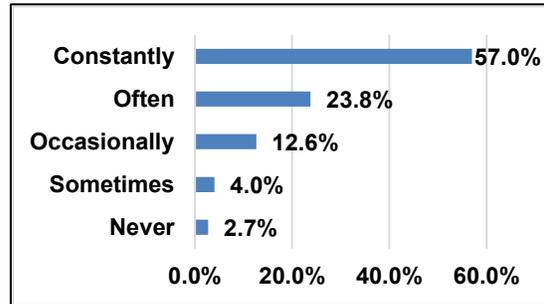


Fig.3 Talk, socialize, do activities at home (n=368)

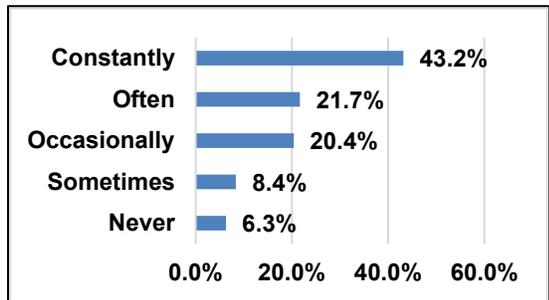


Fig.4 Concentrate or work productively (n=364)

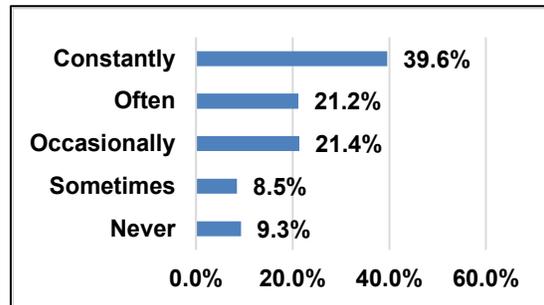
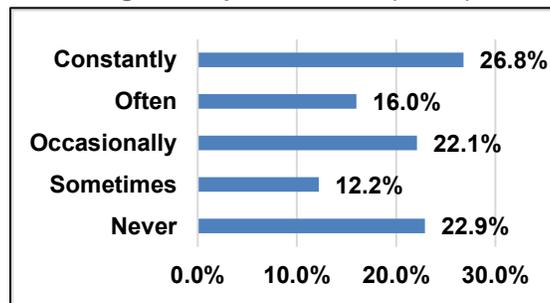


Fig.5 Sleep undisturbed (n=362)

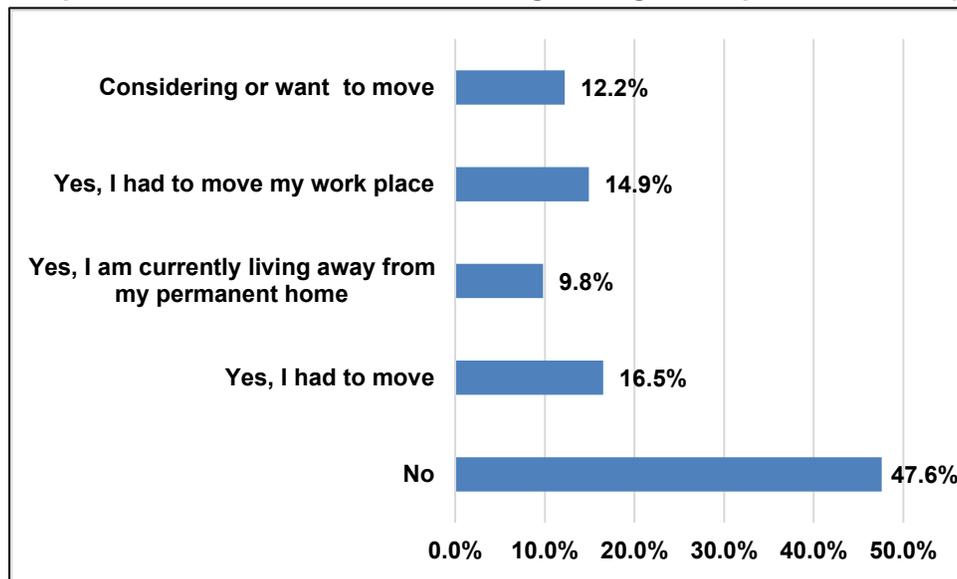


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Open ended comments from 84 respondents further describe disruption of rest, well-being, and quality of life among those exposed to pickleball noise. See Appendix, Table A3.

Q 13 Have you had to significantly modify your life because of pickleball noise? 226 of 386 participants responded to the given response options. Of the remaining 160 (41.5%), 31 provided open-ended comments that expressed a desire to move with some unable to and others considering or preparing to move. These responses are included in the results below. More than half of the respondents reported either having to move or wanting to move. See Figure 6.

Fig 6. Proportion who moved or are considering moving due to pickleball noise (n=257)



Q14. What feelings best describe your response to pickleball noise? Almost all respondents reported at least one type of negative emotional response to pickleball noise. Frustration, feeling anxious/agitated, stress, and feelings of powerlessness were all reported by more than 2/3 of respondents. See Table 6.

Table 6. Emotional responses to pickleball noise (n=418)

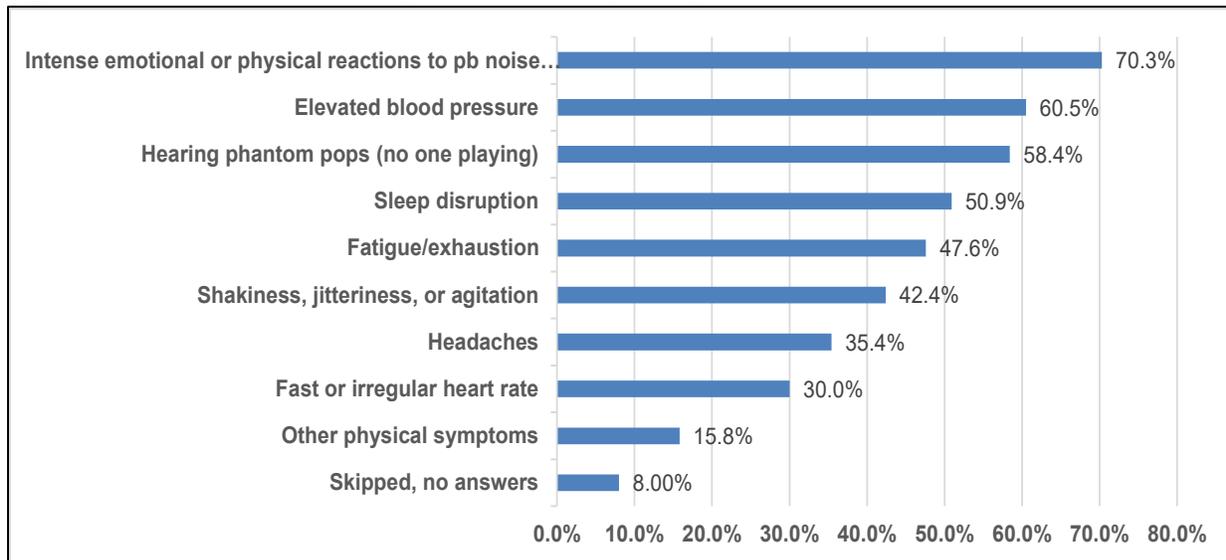
| Feelings | Responses (%) |
|--------------------------|---------------|
| Frustration | 343 (82.1%) |
| Stress | 312 (74.6%) |
| Feeling of Powerlessness | 302 (72.3%) |
| Anxious/Agitated | 302 (72.3%) |
| Anger/Rage | 269 (64.4%) |
| Resentment | 265 (63.4%) |
| Hopeless | 186 (44.5%) |
| Depressed | 151 (36.1%) |
| Fear | 75 (17.9%) |
| No strong feelings | 19 (4.6%) |

*Multiple responses allowed

65 respondents left additional comments, reflecting the above themes. One commenter reported “feeling suicidal” and another was so enraged they thought they would “end up in prison due to violence”. Many reported trauma-like responses using descriptive terms such as “trauma”, “torture”, and “PTSD.” One respondent commented, “It honestly made my PTSD from my military service much worse. The constant high pitch in a random and irregular pattern was just nerve-wracking all the time inside and outside my home”.

Q15 What concerns do you have about the possible effects of pickleball noise on your health or that of your family members? More than 90% of all respondents reported at least one health concern. More than 2/3 of respondents reported intense emotional or physical reactions to pickleball noise or its reminders. See Figure 7.

Figure 7. Health concerns from pickleball noise (n=393)



*Multiple responses allowed

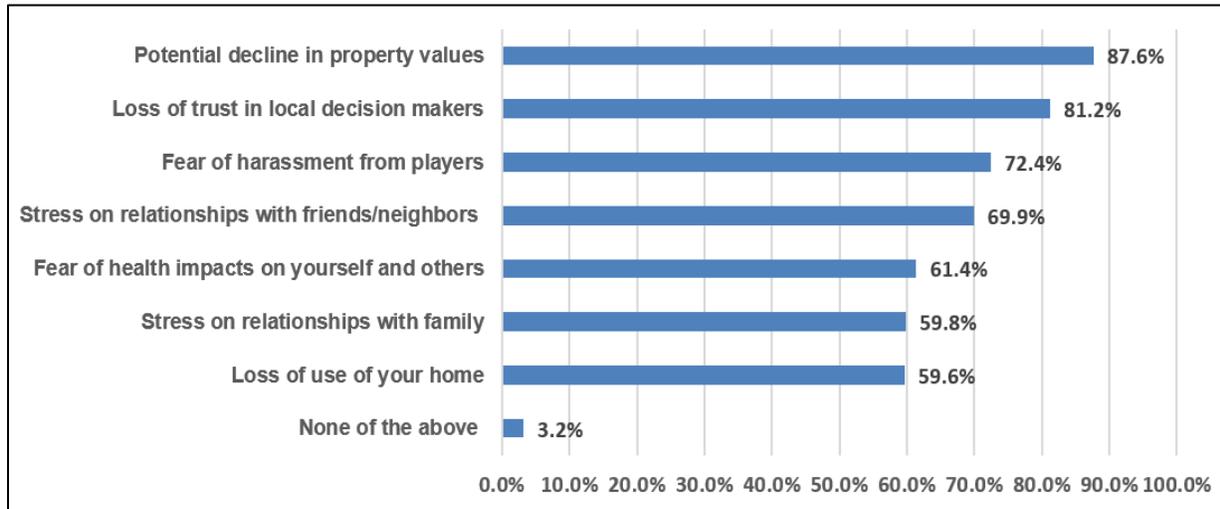
Q16. How concerned are you about the impacts of pickleball noise on your community? More than half of the community reported being extremely concerned about the impact on each of the following: children or infants, seniors, veterans or others with PTSD, and people with learning disorders, neurologic disorders, or other disabilities. See Table 7.

Table 7. Level of concern about specific impacts on community from pickleball noise (n=430)

| Answer choices | Not concerned | Not very concerned | Moderately concerned | Very concerned | Extremely concerned |
|----------------------------------------------------------------------------------------------------------|---------------|--------------------|----------------------|----------------|---------------------|
| Impact on children or infants | 42 (11.7%) | 25 (7.0%) | 56 (15.6%) | 50 (13.9%) | 186 (51.8%) |
| Low income and/or minority populations | 87 (26.1%) | 36 (10.8%) | 61 (18.3%) | 38 (11.4%) | 111 (33.3%) |
| Effect on environmental quality and ecosystems | 29 (7.9%) | 20 (5.4%) | 59 (16.1%) | 69 (18.9%) | 189 (51.6%) |
| Impact on seniors, especially those with pre-existing conditions | 20 (5.4%) | 9 (2.4%) | 36 (9.7%) | 66 (17.7%) | 242 (64.9%) |
| Impact on veterans or others with PTSD | 22 (6.2%) | 15 (4.3%) | 36 (10.2%) | 47 (13.3%) | 233 (66.0%) |
| Children and adults with learning and/or neurological disorders, e.g., autism, sensory deficit disorders | 27 (7.7%) | 18 (5.1%) | 43 (12.2%) | 56 (15.9%) | 208 (59.1%) |
| Children and adults living with disabilities | 34 (9.6%) | 16 (4.5%) | 52 (14.7%) | 53 (15.0%) | 198 (56.1%) |

Q 17. What other impacts of pickleball noise concern you? Property values, fear of harassment and health impacts and stress on relationships both with family members and within the community were all areas of significant concern to the respondents, with more than 60% of respondents indicating a concern for each issue. See Figure 8.

Figure 8. Other concerns about impact of pickleball noise (n=435)



*Multiple responses allowed

Q18. Are there any other details about your experience that you think are important to know? 280 open-ended responses to this question were received and mirrored the hundreds of other open-ended responses received to the above questions.

B. SURVEY RESULTS ON NOISE MITIGATION STRATEGIES

Physical sound barriers, quiet paddles and balls, and setbacks from homes are often recommended by acoustic professionals. The authors have not found any published research regarding the effectiveness of these strategies that include input from residents living near courts. A limited descriptive analysis is provided below. A detailed statistical analysis is underway to determine the contribution of co-variates, such as noise mitigation strategies and duration of noise exposure, to the impacts of pickleball noise on the well-being of the surrounding residents and will be the subject of a separate manuscript.

I. VINYL SOUND BARRIERS

Sixty-seven respondents reported that their local courts have thick vinyl sound barriers with setbacks ranging from less than 100 feet to more than 1000 feet. Sixty-one of these respondents provided comments, of which almost all (n= 59, 96.4%) suggested the barriers are not adequately addressing the noise problem.

II. SETBACKS

About 1 in 8 respondents (53) report living more than 500 feet from courts. A significant proportion of this group reports a notable impact on their ability to be mindful (n=31, 62%), enjoy being indoors/outdoors at home, (n=31, 62%), or communicate/socialize at home (n=22, 46%). Almost half of this group said the term “annoyance” is not adequate to describe their experience of pickleball noise (n=24, 49%). Almost 2/3 of this group report concerns about intense emotional or physical reactions to pickleball noise or its reminders (n=27, 65.9%) and almost half report concerns about high blood pressure (n=20, 48.8%).

III. QUIET EQUIPMENT

Six respondents reported that playing with quiet balls was enforced at their neighborhood courts. All six had homes located within 100 feet of courts. Only one commented “no impact on daily activities”. The other five reported “a nightmare”, “tortuous”, “it has ruined the enjoyment of our home”, “unbearable annoyance”, and “abusive noise”.

4. DISCUSSION

The results of this pilot survey show that pickleball noise has a substantial impact on the health and well-being of people in the nearby community.

A. ACOUSTIC AND NON-ACOUSTIC FACTORS

Characteristics other than decibel levels can affect human response to noise; for example, frequency (in Hz), number of noise events, and impulsivity (6,7,8,9). Pickleball courts can generate up to 900 pops per court per hour, with four busy courts producing over 35,000 pops per day in irregular patterns at ~1,200 Hz—a frequency to which the human brain is highly sensitive. Respondents highlight that it is “not just decibels.” A higher percentage of respondents described the sound as *repetitive pops* compared with *loud* (88% vs 66%, respectively).

More than 3/4 of respondents reported possible exposure to the noise for more than 50 hours per week. Although courts may not be in constant use, residents emphasized the uncertainty of when play might begin, an anticipatory stressor that prevents relaxation. Nearly 90% have lived near active courts for more than one year. While it is commonly believed that noise tolerance increases with continued exposure, research suggests that in some situations, annoyance increases with extended exposure (10).

Non-acoustic factors unrelated to the physical, measurable characteristics of a sound, such as social context and stress have been found to explain up to 1/3 of the variance in noise annoyance (11). Examples from this survey include being able to hear the noise inside one’s home, reported by almost 3/4 of respondents. Another is the harassment from pickleball players after speaking up about the noise, reported by nearly half of all respondents. These results underscore the importance of considering factors other than decibels when evaluating the human response to pickleball noise.

B. IMPACTS ON DAILY LIFE

For many respondents, the noise has severely disrupted daily life and caused significant stress. Most residents report being impacted constantly or very often. People report being unable to enjoy their homes, gardens, or outdoor spaces, and many have altered routines or even relocated to avoid the noise. Comments frequently describe an ongoing sense of intrusion— “*I cannot think, I cannot concentrate, I can’t do anything in my house*” and a feeling that they are being driven indoors or away from home.

Some report major life decisions such as delaying retirement or giving up hobbies, because of the noise. Over half of respondents have either already moved, want to move, or have moved part time from their home, due to the noise. These experiences are clearly very stressful and clearly meet common definitions of an environmental nuisance: interference with the comfortable enjoyment of life or property.

C. HEALTH CONCERNS AND PHYSIOLOGIC STRESS RESPONSE

The high level of concern over the impact of pickleball noise on health and the reports of specific impacts, e.g., elevated blood pressure, sleep disturbance, anxiety and jitteriness, are consistent with extensive scientific evidence on the ability of noise to trigger the body’s stress response. Noise stimulates the amygdala and activates the autonomic nervous system leading to inflammation and oxidative stress, resulting in damage to the vascular endothelium (12). Chronic activation of the stress response increases the risk of cardiovascular, cerebrovascular, and metabolic harms as well as of mental health disturbances like anxiety and depression (13,14). In addition to these non-auditory impacts, the reported concern by well over half of respondents over “phantom pickleball pops,” i.e., hearing sound in the absence of play, may represent a trauma-related reactivity or a form of noise-induced tinnitus. It is reported that these

phantom sounds may cause sleep disruption and, for some, have lasted for weeks or months after moving away (5).

The potential for pickleball noise to trigger trauma-like responses warrants further consideration. Previous research found that a self-reported sense of trauma, feeling tortured, and/or severe distress was noted frequently by people who spoke publicly about their concerns with pickleball noise (5). More than 2/3 of survey respondents reported intense emotional or physical reactions to pickleball noise or its reminders—a measure designed to assess trauma-like symptoms. Evidence for this possibility is further supported by the finding that 2/3 of respondents expressed extreme concern about the effects of pickleball noise on veterans and individuals with PTSD, the highest concern among all vulnerable groups. Such trauma-like responses may arise when individuals or communities face persistent, uncontrollable, and distressing noise that overwhelms coping capacity, leading to chronic distress, hypervigilance, or sleep disruption.

D. COMMUNITY LEVEL IMPACT

Significant community and social disruption was reported in relation to pickleball noise, with a majority reporting stress on relationships with neighbors, friends, and relatives. Fear of harassment from pickleball players and a loss of trust in local decision makers, reported by most respondents, are factors that exacerbate disruption of community and social relationships.

Beyond individual effects, respondents describe broader concerns for the community. Significant majorities expressed concern for other vulnerable groups, including children and infants, children and adults with disabilities including neurologic and cognitive issues, as well as the elderly.

E. ROLE OF MITIGATION

Current guidance, based on expert opinion, has suggested that full relief is unlikely within 100 feet of active courts, and significant multi-faceted mitigation is needed within 400 feet (5). Most respondents in this survey live within 300 feet of courts which might suggest that the impacts are greater closer to courts.

However, preliminary results suggest that while proximity may increase the percentage of people affected, meaningful impacts persist for residents living at even greater distances from the courts. Initial results also suggest that current implementation of various mitigation techniques, including quiet paddles/balls or sound barriers, may not provide adequate relief in many situations.

Further statistical analysis is needed to better understand the multifactorial relationships between setbacks, geography, mitigation, and duration of exposure and how these factors affect the significant impact currently being reported by many residents.

F. LIMITATIONS

Purposeful sampling, used in this pilot study, is commonly used in exploratory and early-stage environmental health research to document the existence of a new problem and characterize the range of responses. Given inherent response bias, typical in surveys of this type, participation was likely weighted toward those most impacted. Additionally, two experienced acoustics firms were invited to share the survey with their clients to solicit examples of successful implementations. One firm declined to participate, although it allowed the survey to be posted on its Facebook page. As a result, the pool of potential success cases may have been reduced, which may have increased bias. Random sampling is not included in this methodology but can be used in subsequent studies to help measure the prevalence of concerns.

The survey underwent face validation but no other psychometric testing. The study relied on self-reported data, and no objective measurements were collected to validate respondents' estimates of factors such as distance from courts, duration of exposure, or noise intensity.

Statistical analyses are ongoing and not included in the current paper; the lack of demographic data (e.g., age, gender, time spent at home) prevents assessment of potential variation across population subgroups.

G. POLICY IMPLICATIONS

As pickleball continues to grow in popularity, acoustic professionals and local policy makers must be made aware of the potential negative impacts on pickleball noise on the daily lives, health, and well-being of surrounding community members. For many, the effects extend beyond simple annoyance. Decisions about appropriate court locations must rely on factors that are meaningful to the lived experience of communities. In addition to assessing loudness (e.g., decibels), other characteristics of the sound must be considered including impulsivity, number of noise events/day, and total duration of exposure. It is equally critical to account for non-acoustic factors that shape human perception of noise such as the intrusion of sound into the interior of the home and the presence of social conflict. A framework for planning and zoning that incorporates these considerations has been proposed (15), but further development and broader dissemination of evidence-based guidelines for court siting and mitigation strategies are needed.

5. CONCLUSION

Survey responses from 264 communities show that pickleball noise has a substantial impact on nearby residents. Residents describe both loss of enjoyment of home and property from chronic noise exposure and significant health concerns consistent with a physiological and psychological noise-induced stress response. Municipalities and local leaders tasked with providing opportunities for pickleball recreation are also responsible for protecting the well-being and health of neighbors living in proximity to pickleball courts. Evidence-based guidelines are needed to help guide these decisions.

6. ACKNOWLEDGEMENTS

The authors gratefully acknowledge the assistance of Rob Mastroianni, Nalini Lasiewicz, Lance Willis, and Pickleball Sound Mitigation.

7. APPENDIX

Table A1. Comments from the respondents who skipped the “annoyance” question (Q.11, n=26)

| | | |
|----------------------------------------------------------|-----------------------------------------|---------------------------------------|
| <i>The popping sound triggers PTSD from the military</i> | <i>Racquet noise and yelling</i> | <i>Tortuous</i> |
| <i>Aggressive, oppressive</i> | <i>Irritating, impulsive</i> | <i>Anxiety trigger</i> |
| <i>Daily torture</i> | <i>Disturbing</i> | <i>Constant nightmare</i> |
| <i>I flinch</i> | <i>Unwanted noise</i> | <i>Nuisance against our covenant</i> |
| <i>Unbearable</i> | <i>Obnoxious</i> | <i>Noise piercing</i> |
| <i>Worse than annoyance, health risk</i> | <i>Unbearable</i> | <i>Absolute torture</i> |
| <i>Annoyance + health impact</i> | <i>Tortuous</i> | <i>Extremely annoying, disruptive</i> |
| <i>Torturous</i> | <i>Difficult to have a conversation</i> | <i>Drives a person crazy</i> |
| <i>Stressful</i> | | <i>Enjoyment, exercise</i> |

Table A2. All open comments to the question about “annoyance” (Q.11, n=206)

| Category | % of total | Representative Comments |
|-----------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Severe psychological distress emotional distress | 65.0% | <i>“Psychologically damaging is more like it!”, “auditory assault”, “Sonic harassment or torture”, “Absolute torture”, “CRIMINAL ASSAULT”, “soul destroying”, “abusive”</i> <i>“Painful, PTSD inducing, nails on chalkboard”.</i> |
| Impacted quality of life | 23.3% | <i>“It sounds dramatic, but it affects my quality of life.”</i> <i>“It has ruined the enjoyment of our home”,</i> <i>“It is impossible to live in our home”, “I think nuisance is better word.”</i> <i>“I would call the sound maddening. Have to go inside.”</i> |

| | | |
|---------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Impacted health | 8.7% | "We both have been diagnosed with health issues due to the noise", "Documented health risk affecting each family member differently "Mental health and overall well-being was extremely affected to the point of a breakdown." |
| Positive or neutral | 2.9% | "Joy, fun", "Enjoyment, exercise" |

Table A3. Open comments to question about interference with daily activities at home (Q12, n=84)

| Category | % of responses | Representative comments |
|------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Impacted daily activities | 58.3% | "Stopped playing outside with my child", "I cannot think, I cannot concentrate, I can't do anything in my house", "We are retired so forced to leave our house on a daily basis multiple times a day", "Interferes with my ability to read, converse with my spouse, work in my yard, use the front half of my house for anything at all" |
| Stress and/or health effects | 13.1% | "Anger", "Blood pressure risen", "Hallucinations", "It's nerve wracking and it's impossible to relax" "I'm now triggered just by the mention of the P word" |
| Sleep disturbed | 11.9% | "We cannot sleep in the master bedroom". "Even when they are not playing, you wake up in the night thinking you hear it" |
| Coping | 8.3% | "Fighting court expansion near my home is a part time job", "You man up and do what you have to" |
| Other | 8.3% | "Traffic" |

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August 15, 2024

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Via email at vmatulis@gmail.com

Dear Mr. Matulis:

This Firm represents the USA Pickleball Association ("USAP"). This letter follows correspondence you sent in July and August of this year to certain USAP employees and officers. Based on your correspondence, it appears that you are dissatisfied with the amount of noise emanating from your local pickleball court. While this is regrettable, your complaints should be directed toward your local leaders, including appropriate government officials, not USAP.

USAP believes strongly that pickleball is an important asset to local communities. Pickleball provides important health and recreational benefits to millions of people throughout the country. At the same time, like any sport, not every community member will agree with every decision about the construction of pickleball courts. These local decisions rest in the discretion of local leaders, who are best suited to balance the needs of their community.

A level of disagreement is a common issue in recreational sports. When a community builds a baseball diamond with lights for evening games, some members of the community may object to those lights. Major League Baseball, however, is not responsible for the operation of the lights or the hours of operation. When a community builds a new high school football stadium, some people may object to the crowd noise. The National Football League, however, is not responsible for the noise or the days on which games are played.

By the same token, when a local community builds recreational pickleball courts, USAP is not responsible for their acoustics. Instead, there are many opportunities for members of the community to engage with local leaders before construction whether by participation in the democratic process, or by voicing your concerns at zoning board meetings so that local leaders can address any concerns raised by members of the community.

In short, USAP does not control any aspect of your local decision-making process, which rests exclusively with your local public and private organizations. First, USAP does not select the locations for pickleball courts throughout the country. Second, USAP does not approve the locations or architectural design of those pickleball courts. Third, USAP does not decide the suitability of potential locations and architectural designs. Fourth, USAP does not build pickleball courts. Finally, USAP does not destruct pickleball courts. All of these actions are taken by local public and private leaders, interacting with their local government agencies, such as zoning and permit boards. If you believe that there are local zoning issues, they should be addressed with local zoning officials, who are well-versed in these issues.



USAP can provide virtual and on-site analyses of potential pickleball locations concerning acoustics, if requested. That request was not made with respect to your local court. More broadly, USAP and its Ambassadors encourage communities to conduct feasibility studies and acoustic assessments, to promote a spirit of cooperation between local leaders and members of their community. At the same time, please do not confuse the Ambassadors with the local leaders who have actual control over the details of your local pickleball courts. Furthermore, after the construction of local courts, USAP does not provide suitability opinions, as any subsequent decision-making rests in the hands of local leaders. It appears that you have already located a different organization that was willing to provide certain opinions regarding the acoustics of your local courts.

USAP's creation of a Quiet Category and Noise Reduced Category reflects that some communities believe that those categories of pickleball may be more consistent with their local needs. When communities choose to move in that direction, USAP provides equipment standards consistent with those needs. But again, USAP is not involved with the decision to pursue that category of pickleball. Moreover, these categories do not consist of nationwide guidelines or opinions on the right or wrong way to construct pickleball courts. Your community may decide to move in that direction, but that is not USAP's decision.

Finally, to the extent your correspondence contains a veiled threat to sue USAP, I want to be firm but clear: any such lawsuit would be frivolous, and we would treat it as frivolous. This means that, on behalf of USAP, we will not hesitate to file a motion for sanctions and ask the Court award USAP any unnecessary costs and expenses, including reimbursement of USAP's legal fees, if USAP is drawn into unnecessary and frivolous litigation. We hope that you do not pursue that route.

We wish you the best as you engage with your local leaders in the hope of finding a mutually agreeable solution regarding your concerns.

Very truly yours,

Jonathan B. Potts

Jonathan B. Potts
Partner

JBP



Vitas Matulis <vmatulis@gmail.com>

Pickleball Noise and Health

1 message

Kathleen Romito <kathleen@romitoresearch.org>

Mon, Oct 13, 2025 at 2:42 PM

To: "electedofficials@villageoflisle.org" <electedofficials@villageoflisle.org>, "dgarvy@lisleparkdistrict.org"

<dgarvy@lisleparkdistrict.org>

Cc: Vitas Matulis <vmatulis@gmail.com>

Dear Mayor Mullens and City Leadership of Village of Lisle,

I am writing regarding the leadership's hesitancy to address pickleball courts located within 100 feet of private residences.

I am on a physician/researcher on the Scientific Advisory Board for Quiet Communities, Inc. and am co-chairing the upcoming session on pickleball noise at the Acoustic Society of America meeting. I'm also on the National Task Force to Address Pickleball Noise, which has leading non-industry funded researchers, sound professionals, and municipal leaders from the country working to address the current conflicts with pickleball noise. Our goal is to support the growth of pickleball while preventing harm to the nearby neighbors.

You are most likely aware that there are more than 200 legal cases across the country, almost all related to courts within 250 feet of homes. Recently, the City of Boise settled a \$1.6 million case filed by my husband and me, who lived 57 feet from 6 public courts. The legal exposure for municipalities must be considered as data accumulates about the harm to health from pickleball noise.

Recent research has linked exposure to pickleball noise to PTSD-like symptoms and even suicidal thoughts, because people cannot escape the noise in their own homes (when located within 100 feet). Additionally, almost 70% of people living within 100 feet of courts are reported concerns about "phantom pickleball pops" or hearing the pops even when no one is playing. Researchers are increasingly concerned about this for two reasons. 1) These may represent a form of noise-induced tinnitus, with neuroplastic changes in the brain and an association with dementia. 2) Or these may represent a trauma-induced response, more often seen with severe trauma and or PTSD.

Pickleball is completely different from other types of recreational noise, as I'm sure you are aware. I also recognize that there is a great deal of political pressure often exerted by avid pickleball players.

The longer the harm goes on, the longer the potential liability for cities as they hesitate in moving forward. I strongly urge you to either 1) relocate the courts within 100 feet of homes or 2) REQUIRE foam balls. If used, the foam balls MUST BE REQUIRED, with supervision ensuring they are used. Without foam balls, there are no reliable sound professionals who recommend keeping courts within 100 feet of homes.

If you'd like more information, please don't hesitate to reach out.

Kathleen Romito, M.D.

Scientific Advisory Council, Quiet Communities

RomitoResearch.org.