AFTERMARKET MUFFLER SOUND IMPACTS

BACKGROUND



Over the years, aftermarket mufflers and modified exhaust systems have raised concerns due to their loud noise output, disruption to neighborhoods, and impact on public safety by creating driver distractions and reducing emergency audibility. These modifications contribute to noise pollution linked to stress, sleep disruption, and reduced community well-being. Modifying a car's exhaust to make it louder than the original muffler is illegal in most states, including Virginia.

Despite widespread acknowledgment of the negative effects, enforcement remains difficult, and local governments continue to struggle to address these growing noise concerns.

ADDRESSING ENFORCEMENT CHALLENGES

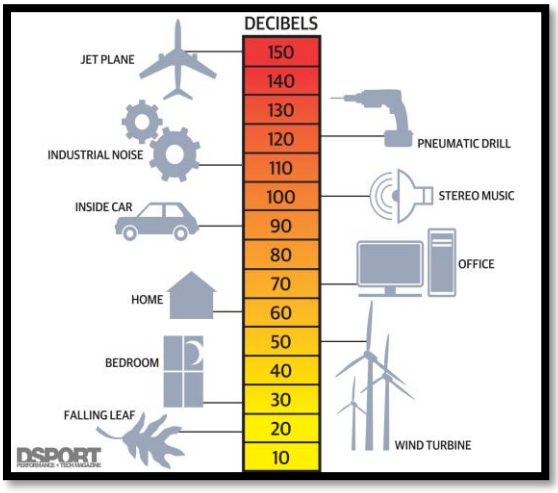
Local governments continue to work to address the proliferation of loud aftermarket exhaust systems. One tool being considered is the use of acoustic monitoring devices equipped with microphones to detect vehicles that exceed pre-set decibel limits.

✓ In Knoxville, Tennessee, an acoustic device recorded nearly 500 excessive noise events over two months.

As of 2023, 30 U.S. states have regulations in place to curb excessive vehicle noise, with several local jurisdictions exploring innovative technologies to enhance enforcement and reduce noise pollution.

FAIRFAX COUNTY'S LEGISLATIVE POSITION

Under current Virginia Code § 46.2-1049, exhaust systems must be in good working order to prevent excessive or unusual noise. Law enforcement agencies are authorized to use equipment approved by the Virginia Division of Purchases and Supply to measure decibel levels.



However, local governments currently lack the authority to deploy acoustic monitoring devices to address noise infractions independently.

Given the growing evidence linking excessive vehicle noise to diminished quality of life, heightened stress, and public safety risks, the General Assembly should act to empower localities by passing legislation that authorizes pilot programs in Planning Districts 8 and 16 for using acoustic devices. Because this technology is new and has not yet been implemented in Virginia, a small pilot program could prove informative, revealing both challenges for this type of enforcement as well as potential benefits to quality of life.

These programs could serve as cost-effective and efficient solutions to reduce vehicle noise pollution, protect community well-being, and improve enforcement efforts statewide.

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