

Reducing Road Noise

Union Township Environmental Commission
Road Noise Subcommittee

Scope

- » Which Roads?
 - » Interstates (I-78)
 - » State Highways
 - » Local roads
- » What noise?
 - » Truck engine braking
 - » Tire-road noise

Tire-road noise

- » SUCCESS!: Funds were found to repave RT 78 between exits 11 and 18 this summer using a low-noise asphalt!!!
 - » 7 db reduction in road noise anticipated
 - » Plans for a sound wall along RT 295 in Lawrence Twp. were cancelled after this road was repaved with low-noise asphalt
- » FYI: On interstates, the New Jersey Transportation Authority (NJTPA) makes the final decisions and doles out the money
 - » Freeholder Matt Holt sits on the NJTPA and represented our interests on this project-
THANKS MATT!

What is engine braking?

- » Also known as “Jake Braking” (brand name)
- » Almost all trucks now have engine brakes
- » Helps trucks to stop and reduces brake wear
- » The driver engages the engine brake by flipping a switch located on the gearshift.
- » This activates a separate cam that allows the energy (and noise) from compressed engine gases to be exhausted directly to the exhaust pipe. This energy is thus dumped to the exhaust system rather than recovered on what would normally be the power stroke.
- » For trucks with poor mufflers, this results in a loud explosive-like noise similar to a jackhammer but 10-20 times louder.

Many trucks have ineffective or NO mufflers

- » Why? They like the noise...?
- » One study showed 5.3% of trucks had ineffective mufflers and 2% had NO mufflers (straight pipe exhausts)
- » At 300 trucks per hour, that's 16 trucks with ineffective mufflers every hour that create excessive noise!!

Normal Muffler



Heat shield +
Muffler +
Exhaust and tailpipe are same
diameter

(Or, could this be one of those
“fake mufflers”, with a
straight pipe inside???)

Oversized tail pipe



Oversized tail pipe welded to muffler outlet

Creates a deeper sound that truckers like

Legal or not??

NO MUFFLER (STRAIGHT STACK)



Only a heat shield, no muffler

When his engine brakes were on,
we could
hear this truck from far away!!

He turned off the brakes when he
saw our camera.

What needs to be done?

- Local municipalities:
 - CAN adopt and enforce local engine braking ordinances
 - enforceable only on local and State Highways
 - Union, Clinton, Hope, Hopewell, etc. have done so
- Federal Highways
 - There is no enforcement of federal noise regulations by the EPA
 - Only federal laws can be enforced on Interstate Hwys
 - Fines under federal law are very low to non-existent
 - NJDEP is responsible for all noise laws in NJ
 - Therefore, NJDEP needs to adopt the federal noise regulations!!

What are WE doing?

- » Preparing a NJ State resolution directing the State to aggressively enforce applicable laws and to increase the fines for “unmuffled engine braking” to \$500 per occurrence
 - » Same approach as was taken in Colorado, Montana, Wyoming, Utah and Washington
- » Note: We are NOT banning the use of engine brakes!

How can you help?

- Ask your town council and mayor to approve a local ordinance
- Ask your town council and mayor to sign our proposed State ordinance and send it to NJ Assemblypersons and Senators
- Let the media know you are supporting this quality of life initiative, not just for Hunterdon residents, but for all the people in NJ
- We CAN make this happen!!