

Conclusions from WP5



- Reducing the unsprung mass is the single most important design change. Other parameters may be important in a limited frequency range
- Depending on vehicle type, a 15-35 % reduction of the mass is feasible giving a reduction of up to 3 dB
- The wheel out-of-roundness has a significant influence on the excitation of ground-borne vibration. Based on OOR levels assessed in RIVAS a 3 dB reduction of the vibration level can be expected
 - The relation between wheel maintenance and reduction of vibration need to be assessed for each case of vehicle fleet and track.
- The relation between vehicle design and OOR growth need further investigation
- Difficult to mitigate low-frequency vibration (< 20 Hz) by vehicle design