SEA Modeling for Acoustic Prediction

- Roush performs noise and vibration (NVH) product design and development using Statistical Energy Analysis (SEA).
- This powerful tool allows us to guide product development decisions at an early stage in the design.
- SEA allows our engineers to make analytical estimates of a product/treatment’s noise and vibration performance before any hardware has been built.
- Targets can be set and treatments designed in advance.
- SEA output of Power Flow data allows the identification of the key noise sources and paths. This also provides valuable insight into which parts of the design could benefit from noise treatment.

Sedan SEA Model Results, Driver’s Right Ear Response

Fig 4: Study of Various Design Changes