

IIHS virtual testing research review

HBM4VT + VIRTUAL workshop at IRCOBI

September 13th, 2022



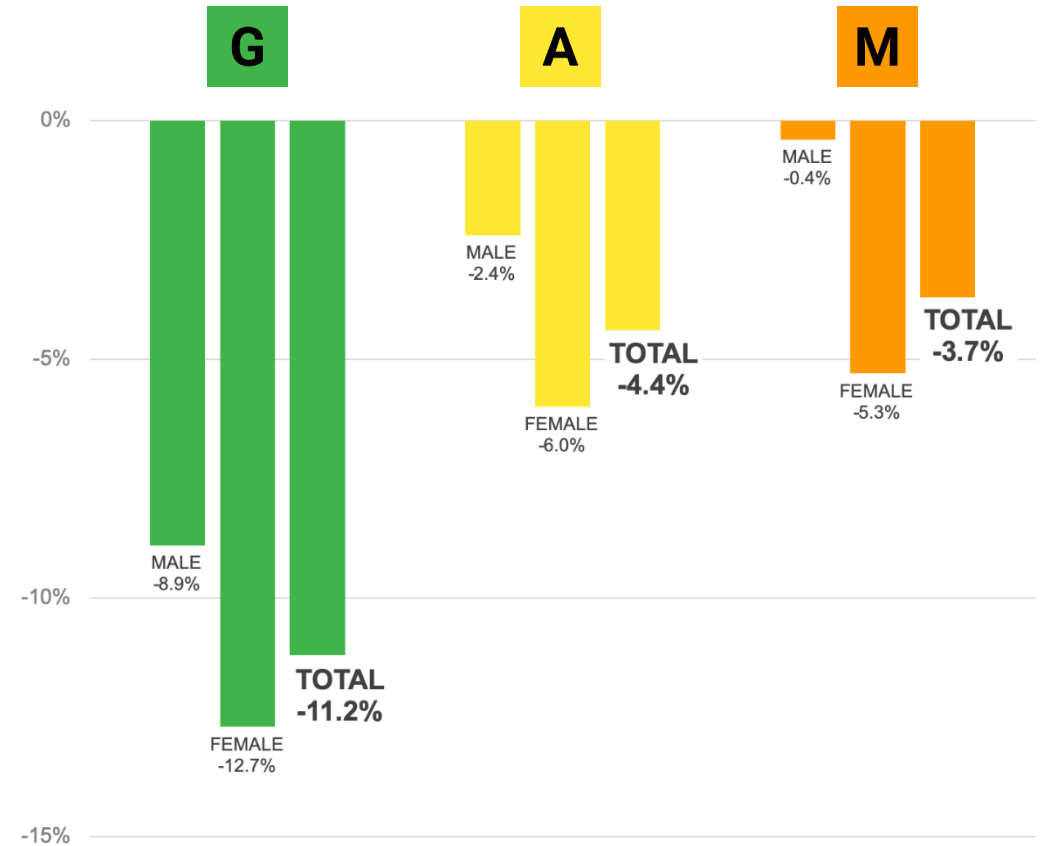
Daniel Perez Rapela
Research Engineer

Marcy Edwards
Senior Research Engineer



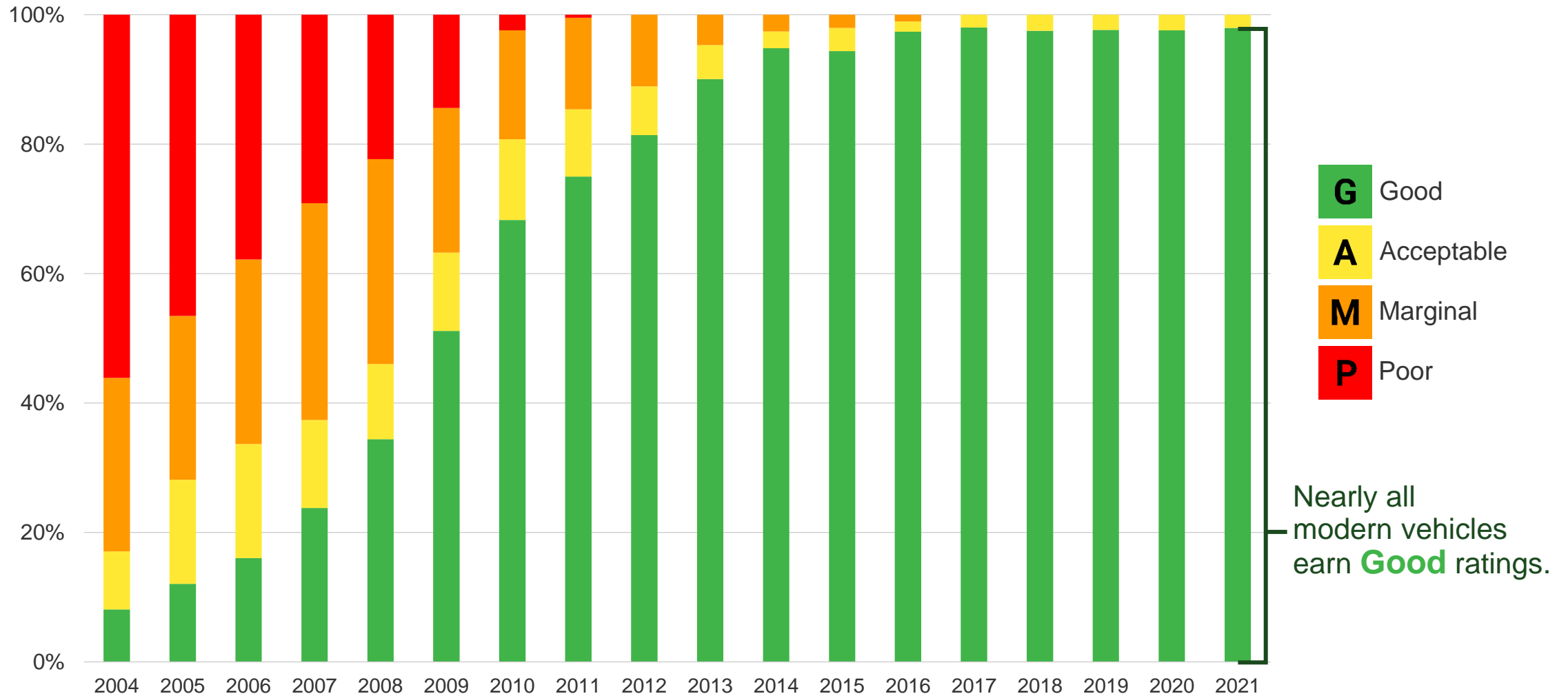
IIHS whiplash evaluation

Percent reduction in injury claim rates vs. poor-rated seats



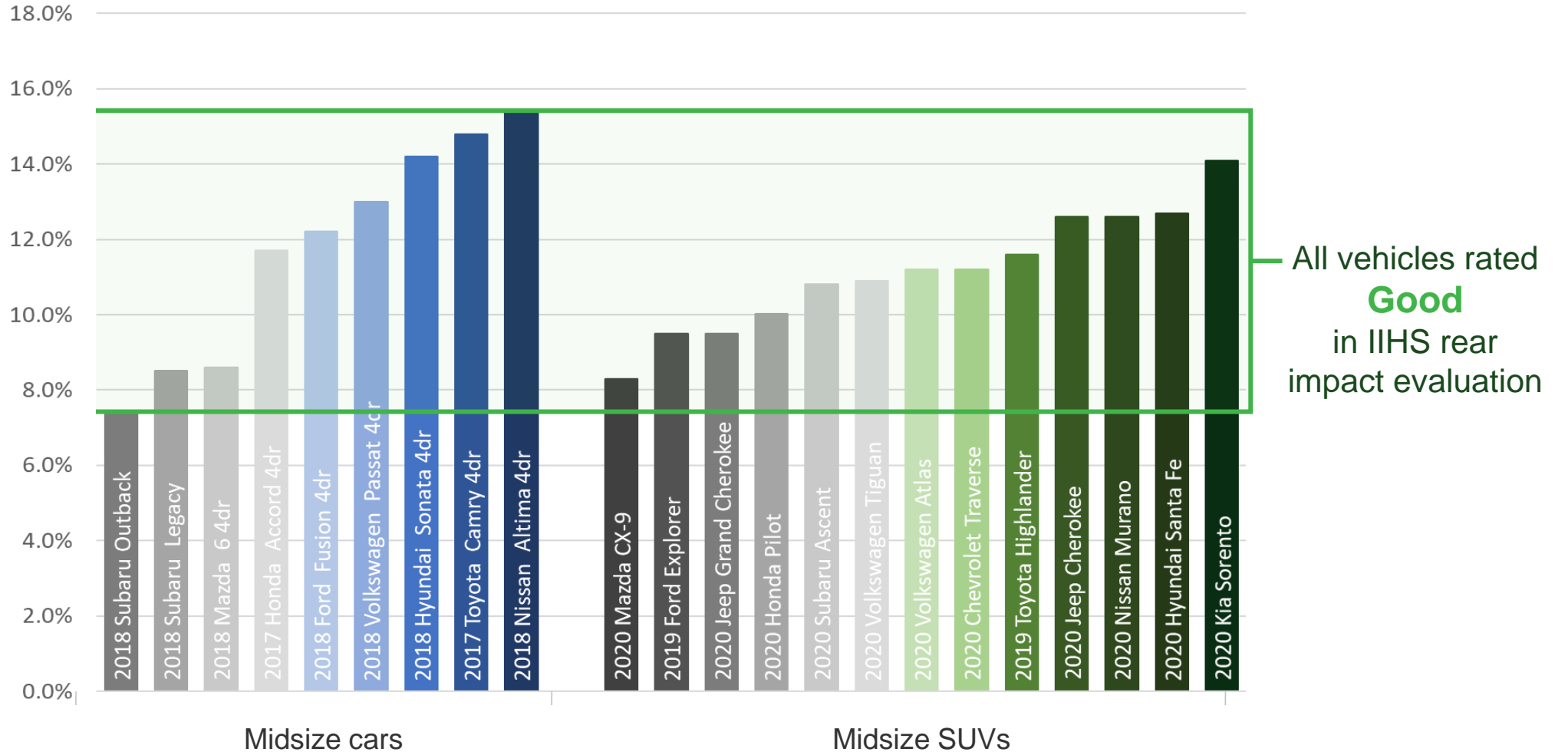
Head restraint ratings by model year

As of October 5, 2021



Current IIHS ratings vs. real-world data

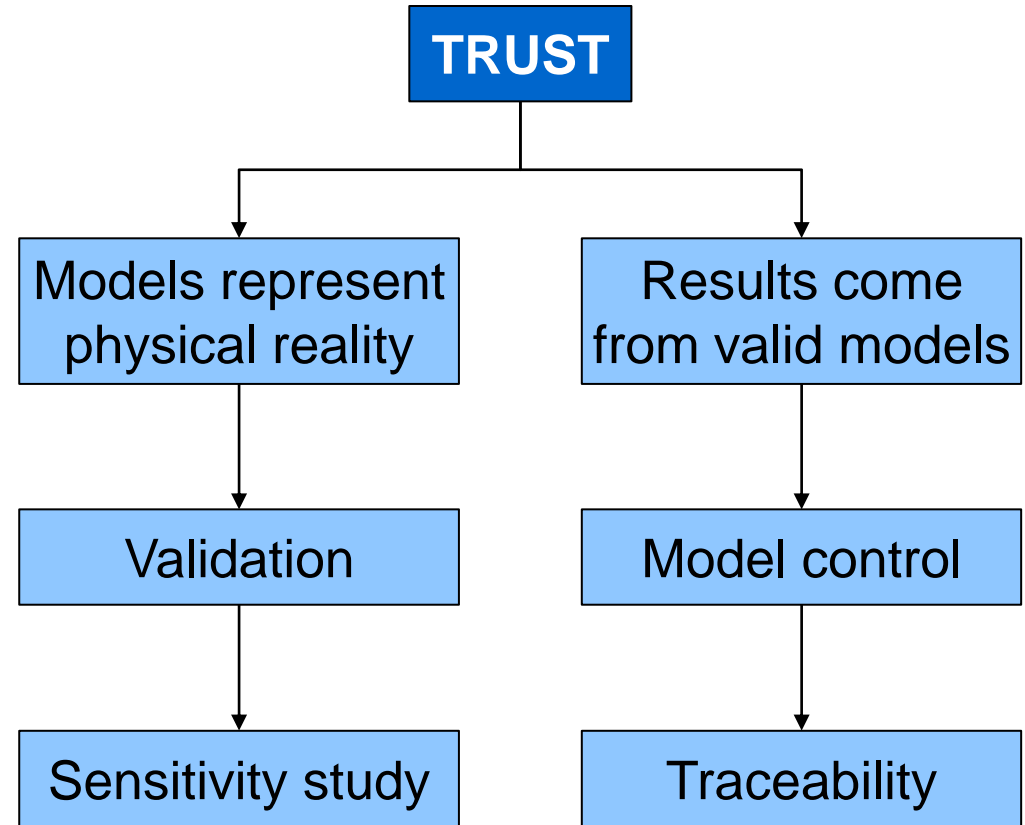
Insurance injury claim rates (PIP/PDL by class and vehicle)



Big picture on VT

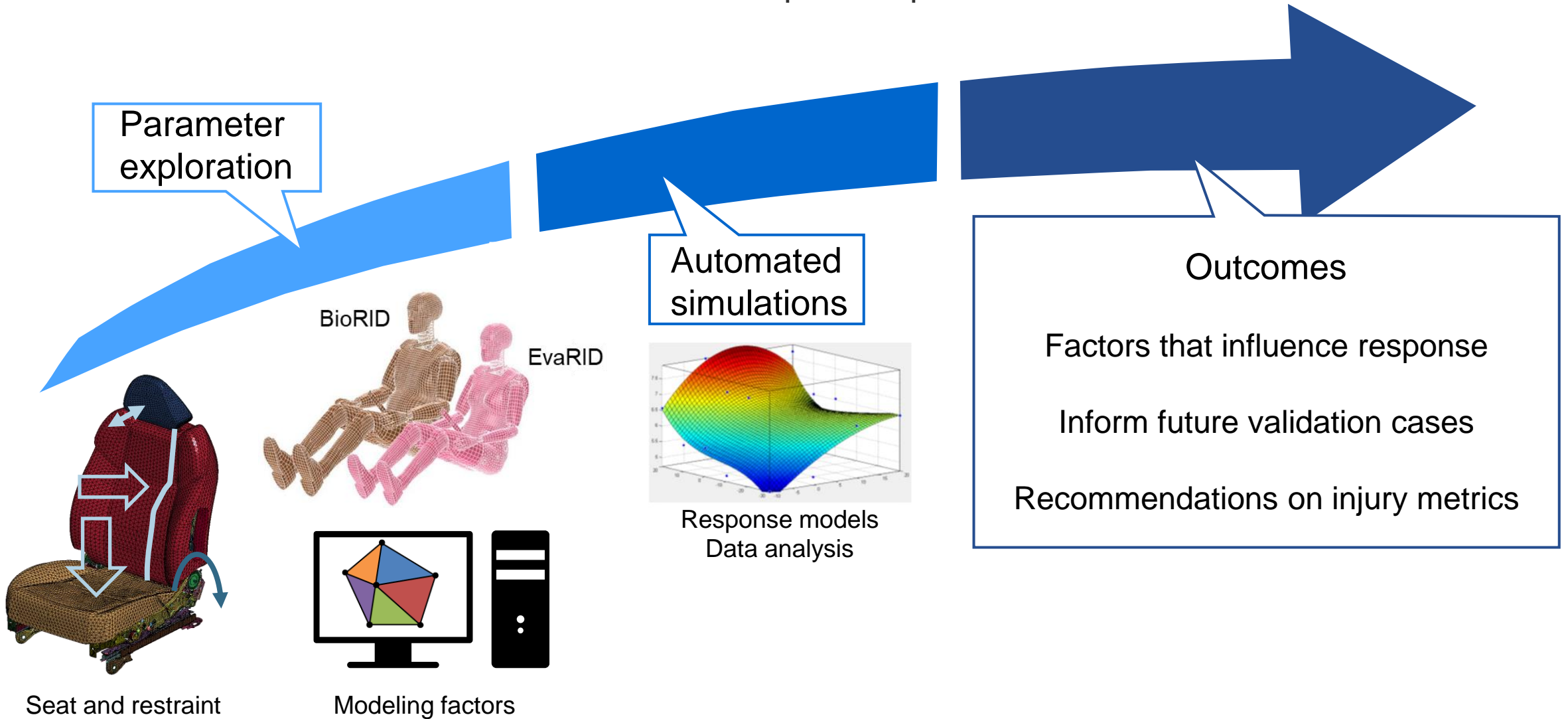
Where to start

- VT adds value without the use of HBMs.
- The necessary methods to kickstart VT programs can be developed while we work on methods for HBMs.
- HBMs are complex research tools. If we wait for HBM methods to be developed before deploying VT programs, we may be missing an opportunity to make an impact sooner.
- We want to develop VT methods first and then introduce HBMs, if it adds value.



Research Item 1 – Sensitivity study

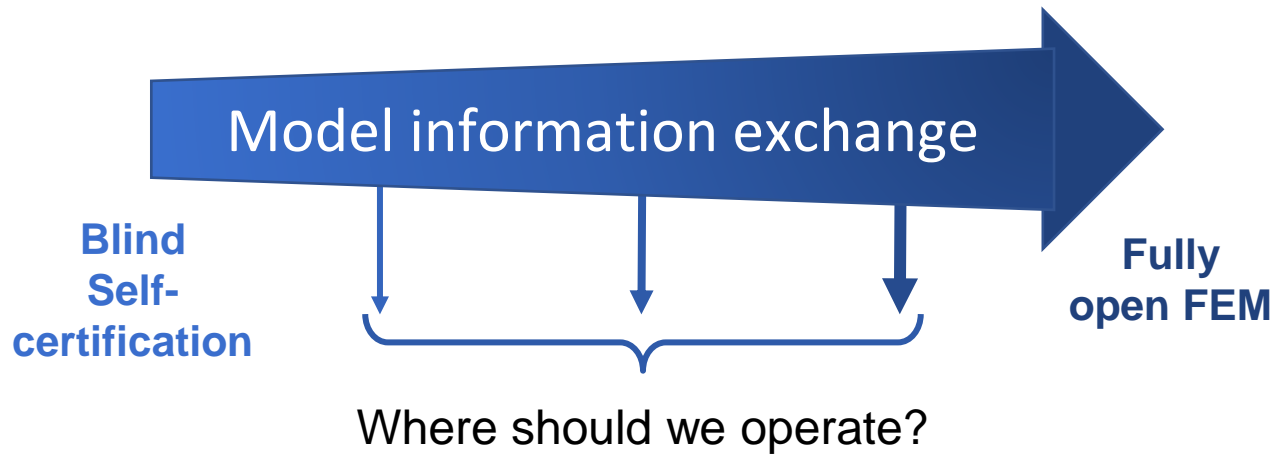
What affects rear impact responses?



Research Item 2 – Model traceability

Sharing information without compromising IP concerns

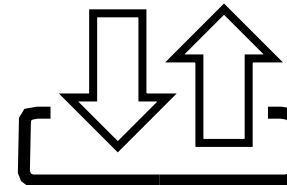
How much information needs to be exchanged?



How do we protect IP concerns?

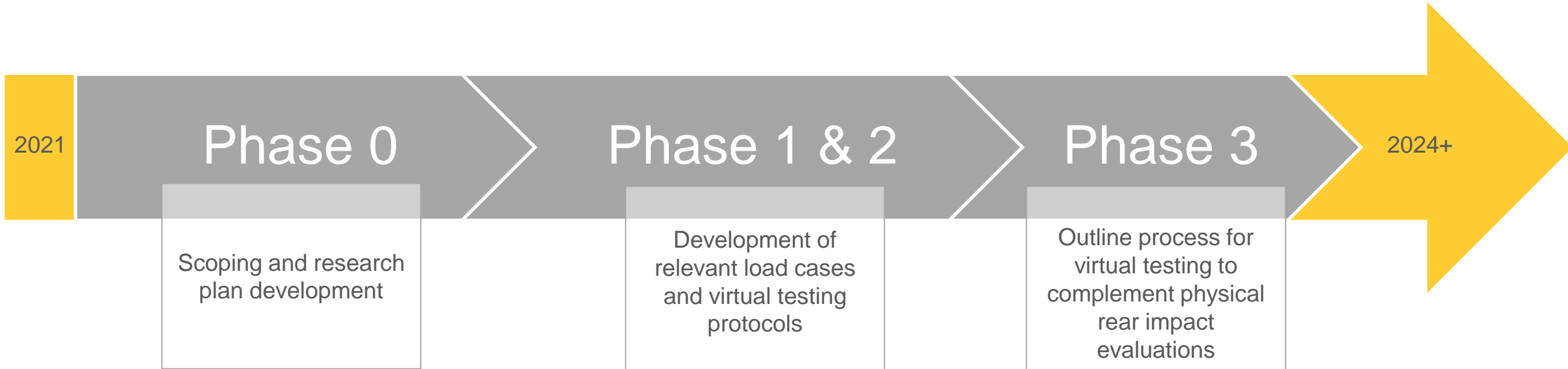


Fingerprinting



Input-output checker report

Virtual testing research timeline



Insurance Institute for Highway Safety
Highway Loss Data Institute

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/company/iihs-hldi

THANK YOU



Daniel Perez Rapela

Research Engineer
dperezrapela@iihs.org

Marcy Edwards

Senior Research Engineer
medwards@iihs.org