

Applicability of Driver Assessments in Commercial Auto Insurance

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A blurred background image of a car's interior, showing the steering wheel on the left and the dashboard with air vents on the right. The lighting is warm and golden, suggesting sunlight coming through the windshield.

Aon's Assessment Solutions

Implementing Assessment for Reducing Behavioral Risk

Contents

1. Background and Introduction

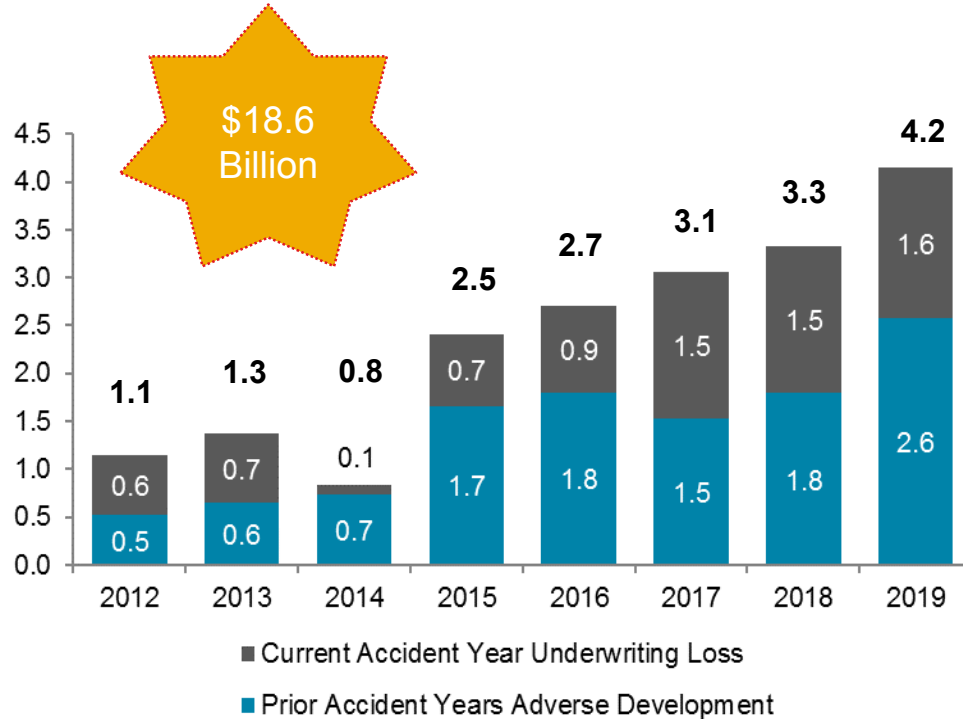
2. Why Assess?

3. Reducing Behavioral Risks

4. Attributes of Good Assessments

5. Path to Implementation

Continued Net Underwriting Losses in Commercial Auto Liability



- Commercial Auto Liability has experienced significantly challenged results for a prolonged period of time
- Commercial Auto Phys Dam represents another \$1.2B of net UW loss during this time frame (although there are net UW gains for this line in CY 2018 & 2019)
- These results are poor despite increasing rates during this timeframe (rates in 2019 are up nearly 50% since 2012 on average)

Source: Annual Statement and Council of Insurance Agents and Brokers

Poll Question #1:

What factor is most responsible for the stubbornly poor observed commercial auto underwriting results?

- Rate inadequacy
- Externalities (distracted driving, un-anticipated loss trends, etc)
- Risk-misclassification
- Subsidies from other parts of commercial package policies allow it
- Other

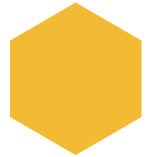
Potential Areas of Focus

What are the best ways for Commercial Auto Insurers to better manage underwriting risk?



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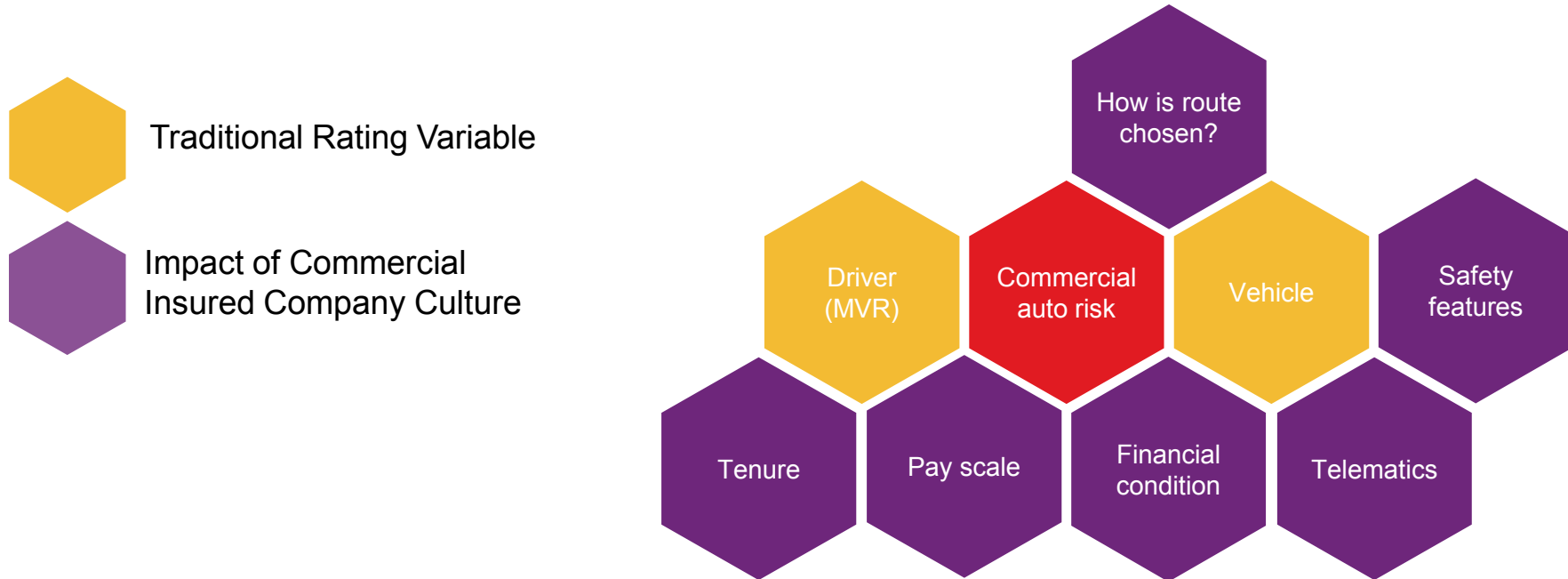


Traditional Rating Variable



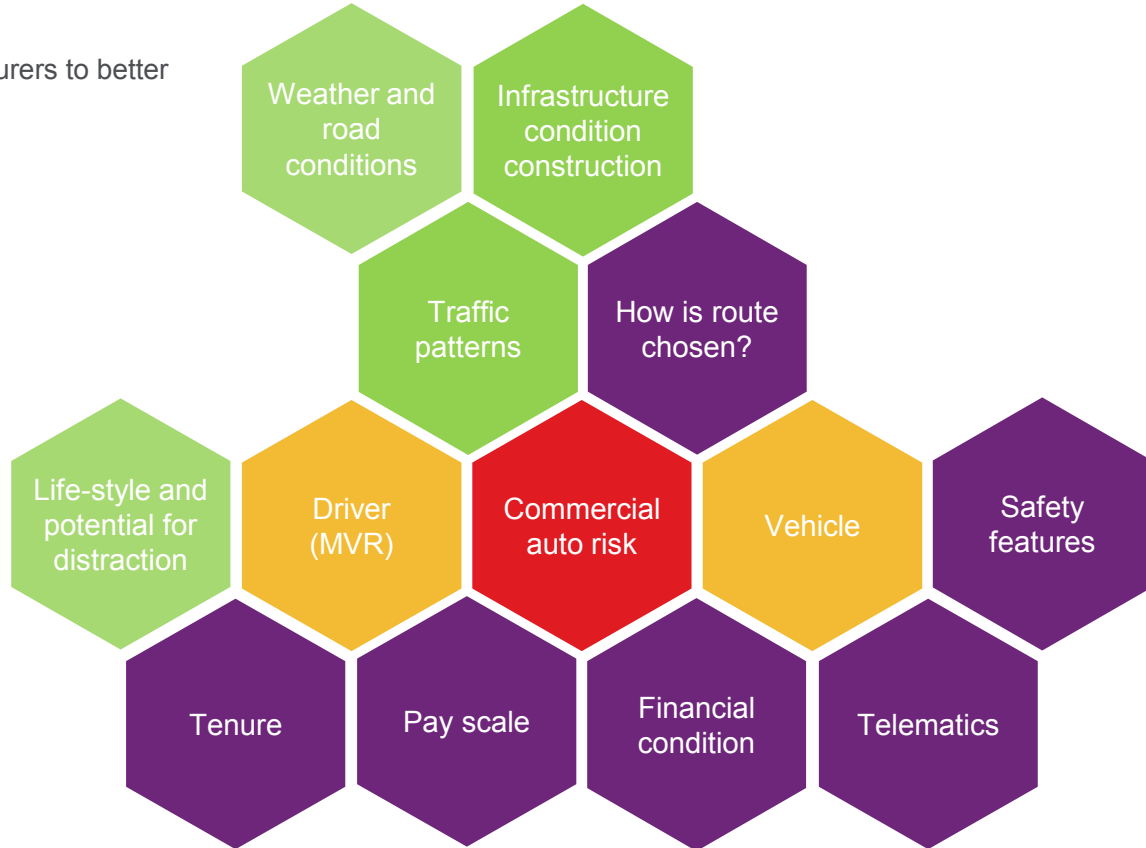
Potential Areas of Focus

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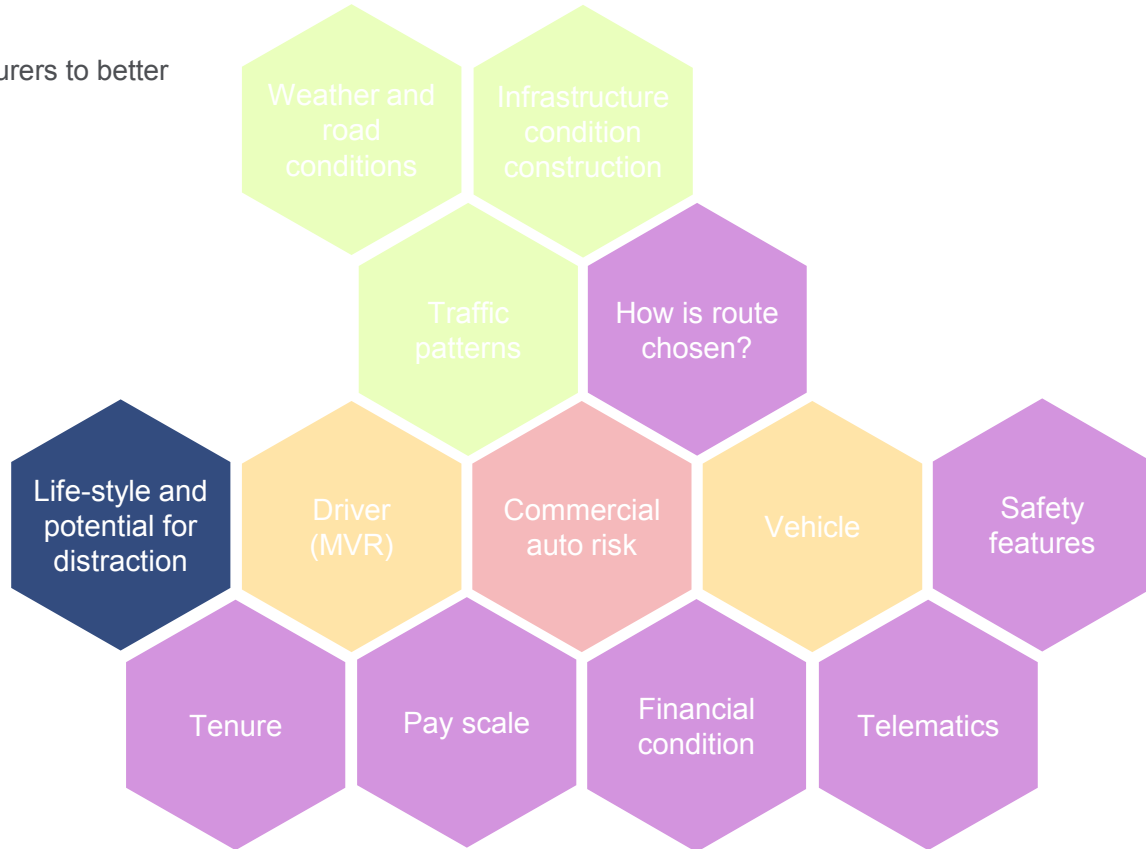
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Potential Areas of Focus

What are the best ways for Commercial Auto Insurers to better manage underwriting risk?



Poll Question #2:

What is the biggest obstacle to making changes to commercial auto underwriting?

- Identifying right elements to change
- Costs involved
- Resistance from distribution channel and / or policyholders
- Lack of operational flexibility (or inertia)
- Other

The Virginia Tech Transportation Institute naturalistic driving study method involves equipping vehicles with unobtrusive instrumentation, including an advanced suite of radars, sensors, and cameras. The method continuously collects real-world driver performance and behavior.

Drivers increase their crash risk nearly tenfold

when they get behind the wheel while observably angry, sad, crying, or emotionally agitated...

”

...**double their crash risk** when they choose to engage in distracting activities that require them to take their eyes off the road, such as using a handheld cell phone, reading or writing, or using touchscreen menus on a vehicle instrument pane.

”

For the current research, transportation institute researchers considered 905 higher severity crashes involving injury or property damage in the data set and found that, overall, driver-related factors that include fatigue, error, impairment, and distraction **were present in nearly 90 percent** of the crashes.

”

Traveling well above the speed limit **creates about 13 times the risk**, and driver performance errors such as sudden or improper braking or being unfamiliar with a vehicle or roadway have an impact on individual risk.

”



Why Assess?

The Benefits of Assessment

Behavior Drives Risk and We Can Predict Behavior!

All jobs involving vehicles are **risky**. But risk can be **minimized**. It is nothing new to insurers that reduction of risk is profitable.

Driving vehicles and operating machines are challenging jobs in which inattentiveness, fatigue, cognitive impairment, stress and aggression can easily cause serious or fatal injuries.

Reducing risks associated with driving can **reduce costs** and more importantly **save lives** – both operators' and others.

Using claims statistics we can answer several key question to reduce risk and occurrence:

Why do incidents which lead to claims occur?

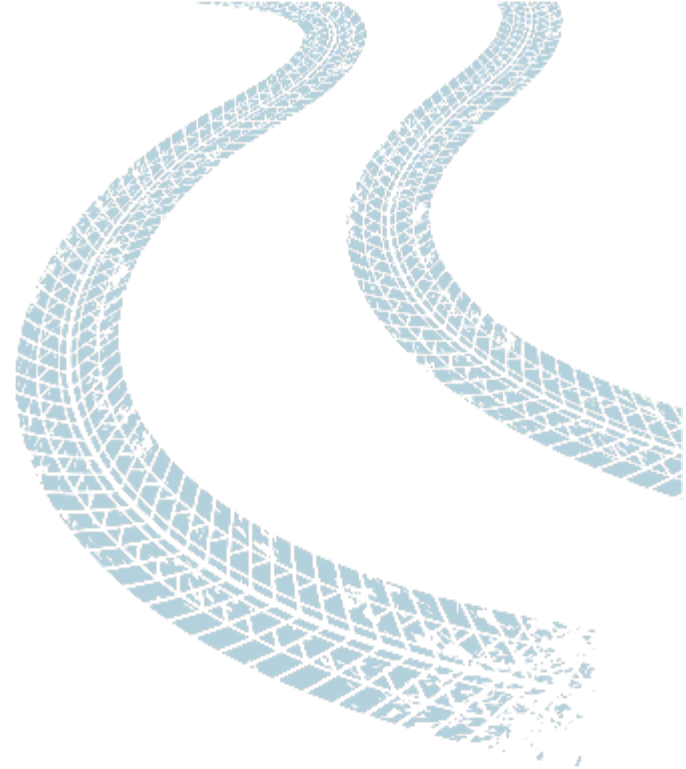
Is it the people or is it the way of working?

Can we see any connections?

Causation vs correlation?

Aon has in-depth expertise in assessing **human behavior**. We offer assessments, screenings and training to ensure the recruitment of the best candidate possible and that training is done on the relevant behaviors linked to risk.

This means a **win-win** for both insurance companies (carriers) and our clients .





Reducing Behavioral Risk

Commercial Drivers and Machine
Operator Suite

The Risk and Safety Model

The overall Risk and Safety Score in the Drivers Suite is composed of **Safety Orientation and abilities tests** relevant to driving performance. Safety Orientation is based on Aon's Risk & Safety Model and contains the following components:

Impulse Control

Able to resist the temptation to engage in counterproductive behaviors that have negative downstream consequences, despite being immediately gratifying.

Discipline	Able to resist temptation well; hardworking; not easily distracted; knows the rules and adheres to them.
Cautious	Has a good sense of risks; acts very carefully; does not get bored easily.

Ethical Awareness

Able to rationally analyze situations by weighing morality, consistency, and how their actions affect other people.

Empathetic	Can see others' perspectives; considers interrelation of others' needs; cooperates well.
Honest	Open and honest; sticks to what has been promised.

Those who score **in the top 25%** on the Trustworthiness assessment were:

- **2.46 times** *less likely* to engage in counterproductive work behaviors
- **2.09 times** *less likely* to engage in reckless behaviors
- **1.88 times** *less likely* to engage in risk-taking behaviors

Drivers Suite: Assessments

- Mobile Enabled
- Short & Engaging
- Face Valid

- Valid & Reliable
- Adaptive
- Cheat & Faking Resistant

- Branded
- International & Local Benchmarks

Drivers Suite

Our drivers assessment suite includes behavioral and cognitive assessments.

ADEPT-15, our behavioral assessments, measures trustworthiness, customer focus, effective communication, teamwork and resilience.

ADEPT-15

Competency-based personality questionnaire

Time to complete: 10 minutes

scales nav

Measures sense of direction and orientation

Time to complete: 1 minutes

scales e3+

Measures the ability to concentrate

Time to complete: 2 minutes

scales rt-drv*

Measures reaction speed

Time to complete: 3 minutes

scales mt-drv

Measures multi-tasking ability.

Time to complete: 5 minutes

scales mem-drv*

Measures observation/ information retention

Time to complete: 1 minute

* Optional Component

Reducing Accident Rates

Can we categorise the drivers accurately?



High scoring **drivers are involved in fewer incidents**

- ✓ Comparing green drivers to drivers with low scores, the high scoring drivers are, on average, involved in **40% fewer incidents**
- ✓ Looking only at the drivers that had incidents, the high scoring drivers still had **25% fewer incidents**

Reducing Costs

What are the costs?



High scoring drivers **do not cost as much** as low scoring drivers in claims

- ✓ Comparing high scoring drivers to low scoring drivers, the green drivers have, on average, **50% lower claims** costs
- ✓ Looking only at the drivers that had incidents, the high scoring drivers' claims values were still **37% lower**

Experience in Action: Validation Study



A **safety score** from our Drivers Suite was shown to predict **lower accident rates** at a transportation company as part of a bursary funded project.



Drivers with high safety scores outperformed the drivers with low safety scores on several metrics:

- Of the low scoring drivers **71%** had been in at least one driving related accident. For the high scorers this number was **15%**.
- Driving related accidents per hour was **69% lower** for the high scoring group.
- Non-driving related accidents per hour was **43% lower** for the high scoring group.



Drivers with high safety scores have **78% lower accident probability**.



Attributes of Great Assessment

User Experience, Predictive Quality,
and Defensibility

Attributes of Great Assessment Programs

● Rooted in Science...

○ Grounded in Your Job Requirements

○ Predictive of Job Relevant Outcomes

○ Fair and Inclusive

● Enable the Right Outcomes

○ A Great Candidate Experience

○ Integrated Into Your Technology

○ Enable Diversity

○ Impact Business Metrics That Matter



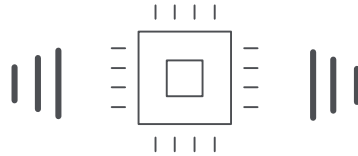
Implementation Pathways

Alignment, Integration, Support &
Refinement

Key Components for Implementation



Align assessment model,
tools and user
experience to your goals



Integrate assessment
tools and reporting to
your technology
environment



Support and refine
over time

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