

# Pricing the “NEW” Economy



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# Polling Question 1

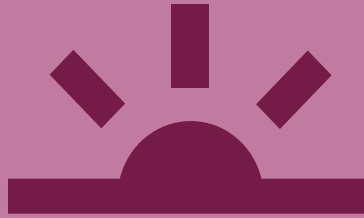
**What is your current role:**

- a) Traditional pricing/product
- b) Traditional reserving
- c) New-economy/insurtech space
- d) Looking to transition into new/insurtech space

## Polling Question 2

**Is your company interested in expanding into the insurtech space?**

- a) Yes
- b) Yes, already in this space or looking to expand
- c) No



*“What’s needed to price  
a new risk?”*

# *Binbin's* list of MUST-HAVEs | Insured's Perspective

Gather + Organize + Interpret Historical Data

Partner with Risk Mgrs, Claims, DS, Eng/IT, and... Product

Evaluate Insurance Structure + Coverage Election

Set Timeline and Pricing Expectations

Attitude!

Find a Paul :)

## *Paul's* list of MUST-HAVEs | Carrier's Perspective

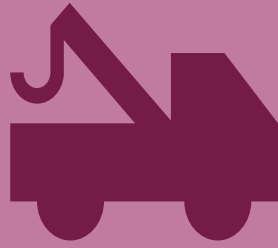
Clear Communications

Willingness to Share Information

Commitment to Common Goals

Balance of Grounded Actuarial Techniques and Creativity

Sense of Pride and Sense of Humor

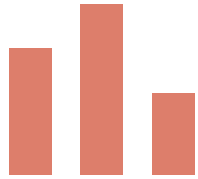


# Insurance Structure



# Why Quota-share Risk Transfer?

In addition to de-risking for the insured and top-line growth for the carrier..



Data Synergy

Responsible **sharing of industry benchmarks** (both from perspectives of insurer and insureds)



Mutual Stakes

Ensuring both insurer and insured have **"skin-in-the-game"**  
Promotes **cross-organizational conversations** across claims, product, actuarial



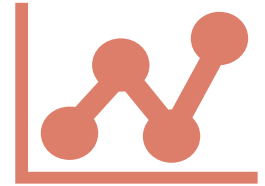
Insights on Risk Segmentation

Key to **loss cost mitigation** and ensuing insured business decisions



Unlocking Product Innovation

**Integration of safety** into insured's product features



Develop Industry Best-Practices

Unlocks ability to evaluate carriers across **claims and actuarial metrics** and establish industry best-practices



# Challenges: The “Obvious”

Data/Benchmark Scarcity

Bringing Undeveloped Losses to Ultimate

# Data/Benchmark Scarcity

## Bodily Injury - Industry Severity Trend

ISO BI Severity Trend <i>Incurring Total Limits 12mo.</i>	ISO BI Severity Trend <i>Paid Total Limits 12mo.</i>	YOY BI Severity Increase <i>180-day settlement as of Jan. 2021 from LexisNexis</i>
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## Material Damage - Industry Severity Trend

YOY PD Severity Increase <i>As of Q1'21, from Conning P&amp;C Q3'21 Rpt</i>	ISO PD Severity Trend <i>Paid Total Limits 12mo.</i>	YOY PD Severity Increase <i>30-day settlement as of Jun. 2021 from LexisNexis</i>
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Claims frequencies in the first nine months of 2021 were higher for all coverages, including property damage (twelve to thirteen percent range), bodily injury (thirteen to fourteen percent range), personal injury (sixteen to seventeen percent range) and collision (twenty-one to twenty-two percent range). Average claims severities in the first nine months of 2021 were higher for property damage coverage (four to five percent range), collision coverage (thirteen to fourteen percent range) and bodily injury coverage (ten to twelve percent range). Ultimate claim loss estimates for prior years' loss events were reduced approximately \$1.2 billion in the first nine months of 2021, which produced corresponding reductions in losses and loss adjustment expenses. The effects of changes in estimates for prior years' loss events were relatively insignificant in the first nine months of 2020.

Obtain industry-relevant trends and aggregate loss experience from **statistical agencies most similar to "new" risk**. i.e. ISO public line for rideshare pricing and trends under COVID

**Seek benchmark data from carrier of interest**, i.e. commercial auto and PPA loss experience

**Identifying differences in risk profile** from industry:

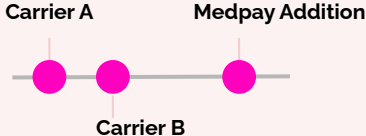
- EV-ramp up in rideshare and impact with fleet of ADAS-equipped vehicles
- Variable exposure base in rideshare scaling with miles traveled
- The additional rider-component

# Bringing Undeveloped Losses to Ultimate

Amidst TPA and coverage changes and undeveloped prior accident periods

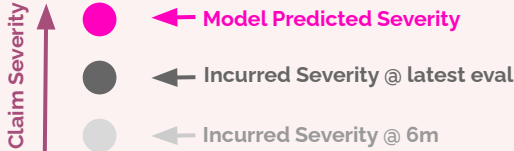
**Clearly communicate TPA + cvg changes |**

Allowing prospective partner to on-level for differences in claims practices



**Internal Claims Audit on Open Claims |** Validate and align on tail factors

**Claims Level Modeling |** GLM-based model used to estimate severity of a cohort of claims with similar characteristics and achieve reserving adequacy with risk mix-shift



**Stochastic Reserving |** Focus on tail-risk and distribution of risk



# Challenges & Opportunities: We learned...

Mix-Shift

COVID Trends

Exposure Forecast

Product Innovations

Coverage Changes and Pricing Impacts

Clear Timeline and Pricing Intake Expectations

# Mix Shift

## Examples of important mix-shift to call out in pricing considerations:



Shifts in key variables and incremental risk contribution on loss cost (i.e. Driver, Route, Environmental)

API

[Insured] Insights on expected future business decisions and product featurings with likely impact to risk segmentation



[Carrier] Insights on industry trends and determine if and magnitude of impact on insured.

## Recommend furthering conversations on how to approach mix shift:

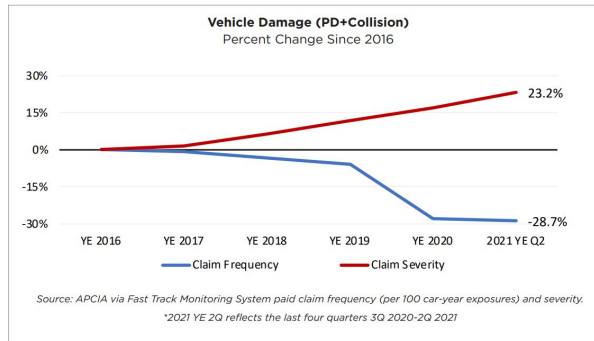
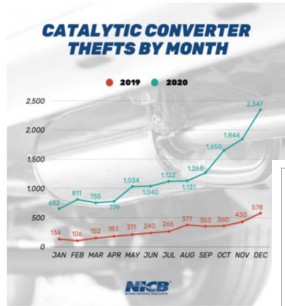
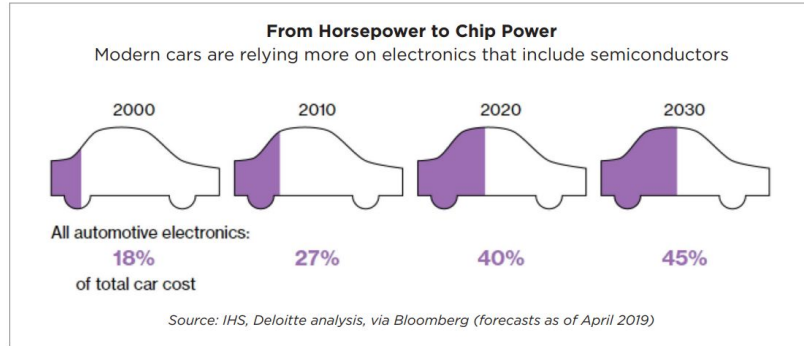


Add Segmentation



On-leveling to agreed-upon mix-shift for non-segmented pricing **Very Important!**

# COVID Trends | Example 1 - Auto Physical Damage



**Transparency** on outsized impacts and unexpected trends  
APD FREQ and SEV trends under COVID

**Investigate** for potential causes  
Different mix in vehicle type/age composition in rideshare. Rating by miles vs Car-Yr

**Share insights** on exogenous changes impacting losses  
Severity Impacts: Cost inflation, Auto Theft, More aggressive driving

**Adjust pricing** to reflect prospective mix-shift  
Determine how much of the recent historical trends are expected to extend into prospective period.

# COVID Trends | Example 2 - Bodily Injury

BI  
Frequency  
Emergence

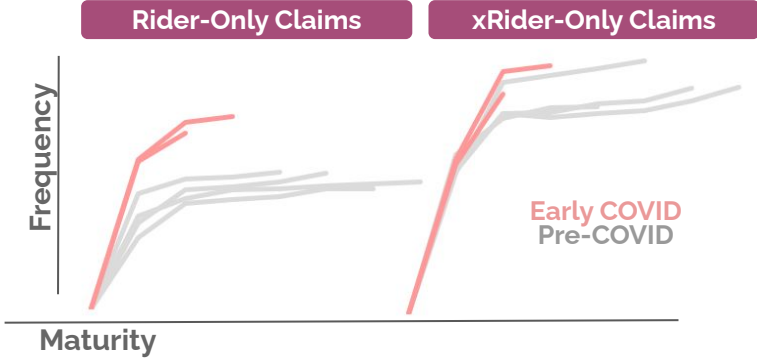
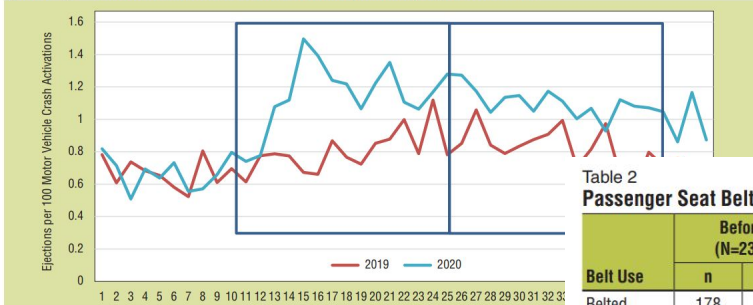


Figure 3  
Ejections per 100 motor vehicle crash EMS activations by week of year, 2019 and 2020



Note: Boxes delineate Q2 and Q3.  
Source: NEMESIS

Table 2  
Passenger Seat Belt Use

Belt Use	Before (N=236)		During 1 (N=98)		During 2 (N=105)	
	n	%	n	%	n	%
Belted	178	75.4	58	59.2 <sup>A</sup>	70	66.7
Unbelted	58	24.6	40	40.8 <sup>A</sup>	35	33.3

<sup>A</sup>Significantly different than Before period,  $p < .05$ .  
Before = 09/10/19 – 03/16/20  
During 1 = 03/17/20 – 07/18/20  
During 2 = 07/19/20 – 09/30/20

**Transparency** on outsized impacts and unexpected trends  
Elevated BI Frequency at start of COVID

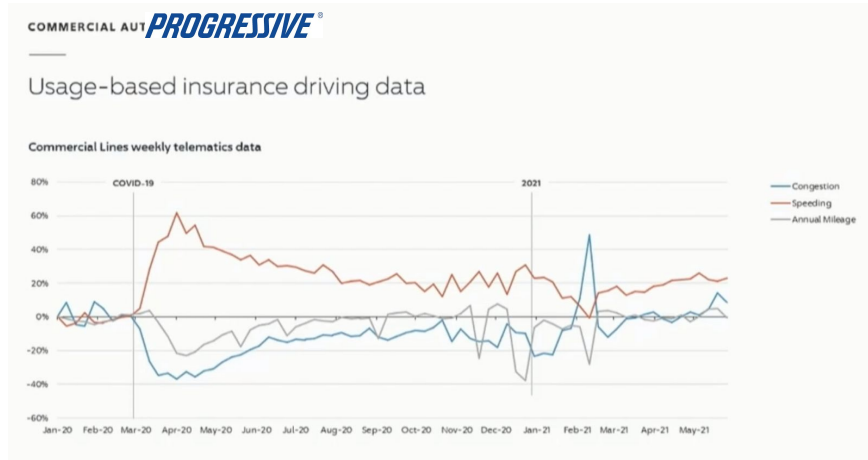
**Investigate** for potential causes  
Frequency elevation driven by rider-only claims

**Share insights** on exogenous changes impacting losses  
Industry-observed increases to aggressive driving/speeding, coupled with rider's potential loosening safety awareness may lead to elevated rider-only claims such as whiplash, injury at pick-up/drop-off

**Adjust pricing** to reflect prospective mix-shift  
Adjust pricing to reflect driving behavior change and resulting impact on frequency (and explore severity differences in claimant-type)

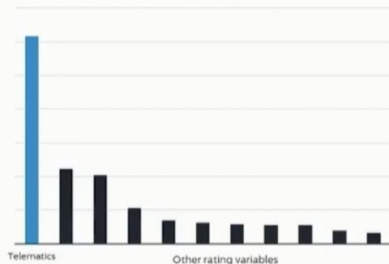


# COVID Trends | Example 3 - Telematics



Telematics is our strongest rating variable

Predictive power



**Transparency** on outsized impacts and unexpected trends

Driving behavior deteriorated post Pandemic. While congestion and VMT are returning to pre-COVID, speeding has not

**Investigate** for potential causes

Telematics events frequency elevated post COVID, i.e. speeding

**Share insights** on exogenous changes impacting losses

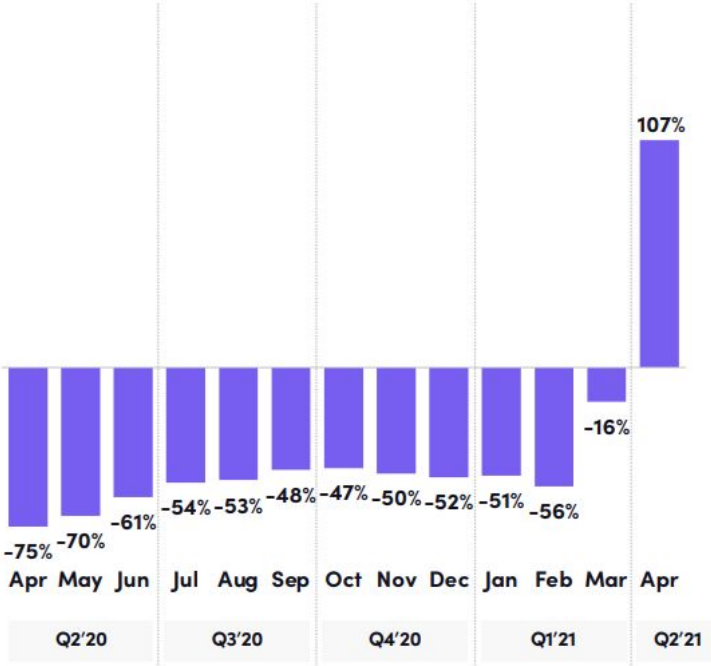
Similar observations across industry and observed in Progressive's internal commercial lines results (reflects over 10B miles of data)

**Adjust pricing** to reflect prospective mix-shift  
Consider pricing by telematics

# Exposure Forecast

## Rideshare Recovery

Change in rideshare rides (year-over-year)



Note: Year-over-year change is based on total number of rides on the Company's rideshare platform.

### Insured

Partner with FP&A team to re-forecast responsively to the latest trends and manage communication with carriers on in quoting:

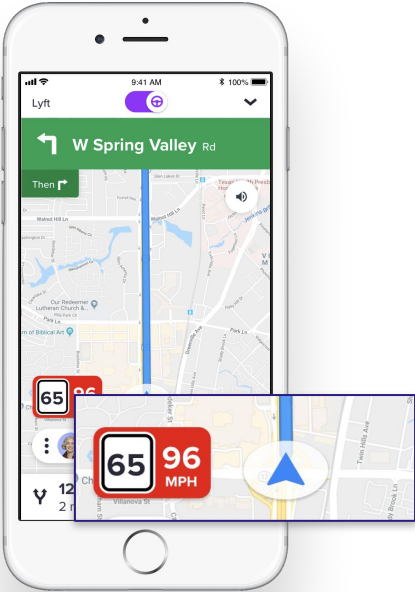
- Ride Recovery
- Rides mix-shift (period shift, miles per ride shift, ride type mix)

### Carrier

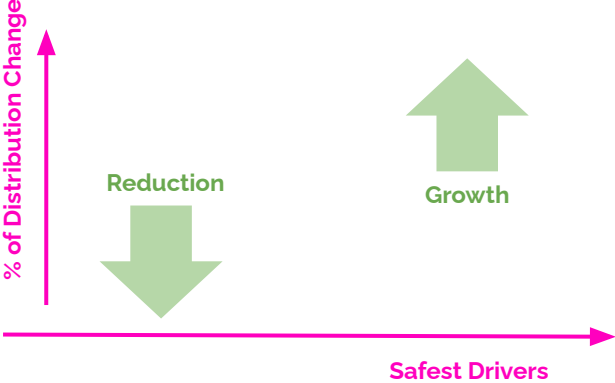
Partner with insured to gauge prospective exposure base in determining projected written premium volume. Key in determining expense load

# Product Innovation

## Embedding Safety



## Evidencing Favorable Mix-Shift

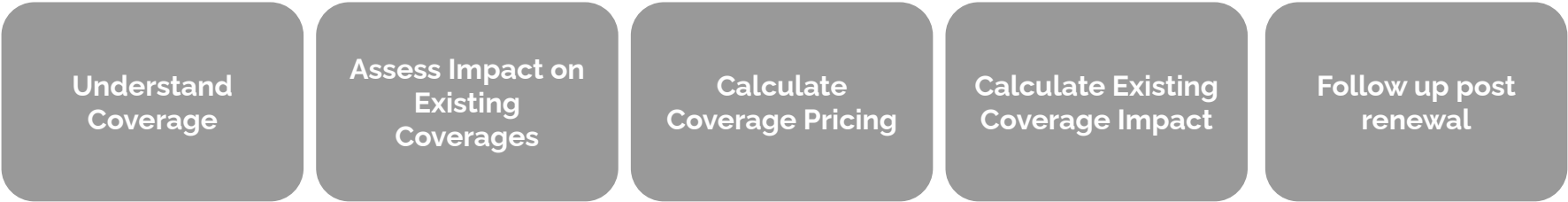


## Setting Rates

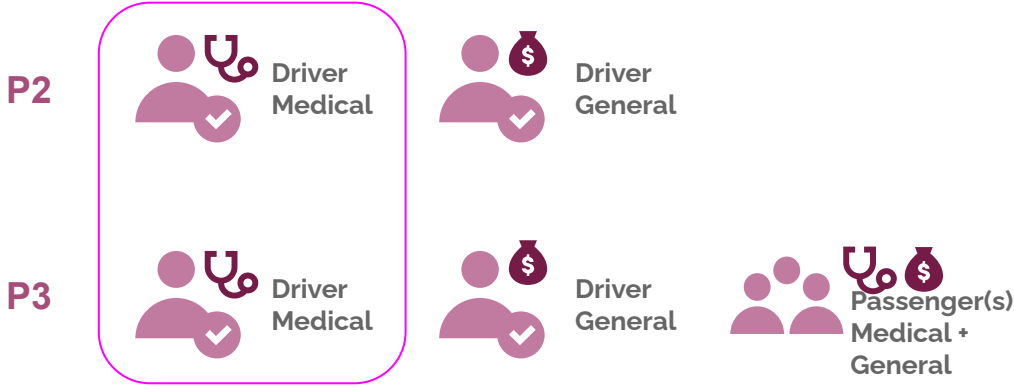
Reflecting demonstrated shifts in risk profile in prospective pricing

# Coverage Changes and Pricing Impacts

## Mandatory OccAcc Coverage in CA post Prop 22



OccAcc coverage for CA drivers in passenger mode



Potential OccAcc Offset to UM

Align with both OccAcc and Primary Auto carriers post change to assess expectation vs actual experience

# Quoting and Renewal Timeline Expectations



**Q&A**