

# Motor Vehicle Data Collection

## Future Considerations

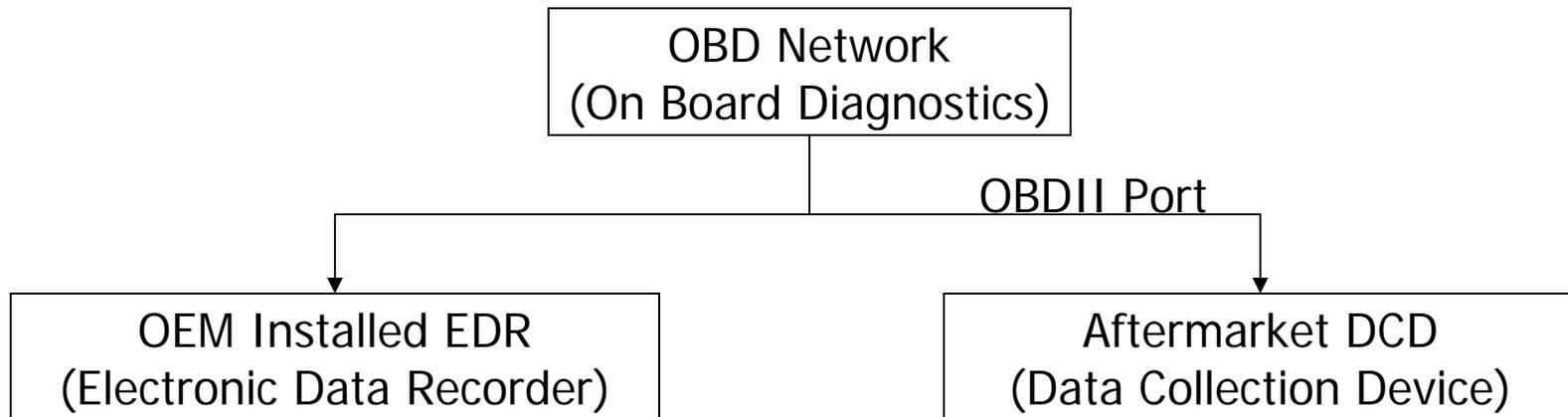
September 12, 2005

**TripSense**<sup>™</sup>  
Your driving. Your discount.



# Types Of Devices

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- Records a *recent event*
- Used to fire airbag and control vehicle functions
- Difficult to access device
- Retains 1-20 seconds of data
- Often captures multiple types of data several times per second

- Records *driving history*
- Used for maintenance assessment and driving behavior monitoring
- Easy access under dashboard
- Retains 3-12 months of data
- Commonly capture only a few types of data every 1-10 seconds



## DCDs Available Today

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Example: Road Safety International (\$280)

**“The Preferred System For Promoting Safe Driving where Seconds can make the difference between Life and Death.”**



**“For the first time, you will have control over how your teen is driving, even when you are not there!”**



## DCDs Available Today

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Example: Davis Carchip (\$139-\$199)

### Standard

- Time and date for each trip
- Distance traveled
- Speed (recorded every 5 seconds)
- Hard brakings and quick accelerations
- Diagnostic trouble codes (or DTC)
- Status of various engine parameters



### Optional

- Alarms
- Engine diagnostics
- Increased memory



# DCDs Enable Insurance Premium Reductions

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- Benefits
  - Discounts for low mileage
  - Discounts for safe driving behaviors
  - Motivating change in driving behavior
- Technology
  - Primary Named Insured (PNI) computer download
  - Automatic satellite upload
- Participants
  - Progressive (PNI computer download)
  - Aviva Canada (PNI computer download)
  - Norwich Union (Automatic satellite upload)



## Progressive Customers Choose To Participate

- Primary Named Insured (PNI) chooses whether to sign up for program during web or phone purchase
- 5% participation discount during initial term
- PNI owns TripSensor and all data on the device
- No requirement to participate in insurance contract



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# Progressive Customers Choose To Share Data

- Primary Named Insured (PNI) downloads data to home computer
- PNI views data
- PNI chooses whether to upload to Progressive
- 5% upload discount plus earned safe driving discount (up to 25% total)



Progressive will not increase rates, cancel or non-renew if PNIs choose not to upload



# PNI Is Only Person Affected By Program Participation



**Father – Primary Named Insured**



**Son – Vehicle Owner**

- Primary Named Insured
  - Decides whether to participate in program and upload data
  - As contract holder, has responsibility to pay premiums
  - Affected by choice to participate through changes in premium
- Vehicle Owner
  - Not affected by participation in program
  - Gains ability to view driving data



# What Happens When There Is An Accident?

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**Father – Primary Named Insured**



**Son – Vehicle Owner**

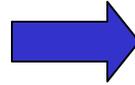
- PNI affected as rates go up due to accident
- Vehicle owner affected due to potential liability and driving record impact
- Claimant affected due to potential liability and driving record impact
- Claims Adjustment process:
  - TripSense program specifies we won't use data without PNI consent (PNI is TripSensor device and data owner)
  - New legislation will specify whether vehicle owner consent is required



# Legislative Considerations

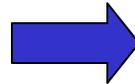
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*Acknowledge aftermarket data collection devices*



- Describe devices by function rather than installation

*Allow auto insurance safe driving programs*



- Primary Named Insured (PNI) able to sign up for data collection programs for insurance rating or underwriting purposes
- PNI able to upload data
- Allow automatic data upload (via satellite or subscription service)



## Appendix: TripSense Program Details

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### Data Collected

- Connection date & time
- Disconnection data & time
  
- Start trip date & time (engine on)
- Speed every ten seconds
- End trip date & time (engine off)
  
- VIN
- OBD protocol

### Discount Calculation

- Participation eligibility requirements
- 5% discount for sharing data
- +/- 5% discount for non-idle drive time above 75 MPH (.10%)
- 15% discount based on mileage by time of day
  - Low risk (-.85%/1000 miles)
  - Medium risk (-1.25/1000 miles)
  - High risk (-7.0%/1000 miles)



## Appendix: Discount Calculation

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<b>% of non-idle driving time spent driving more than 75 mph</b>	<b>Discount adjustment</b>
Less than .1 percent (.001)	5 percent discount given
More than .1 percent (.001) and less than .75 percent (.0075)	No discount given
More than .75 percent (.0075)	5 percent taken away from overall discount



# Appendix: Discount Calculation Support

National Highway Transportation Safety Administration Data

	<i>Weekday</i>	<i>Weekend</i>
<i>12 am – 4 am</i>	High Risk	High Risk
<i>4 am – 6 am</i>	Medium Risk	Medium Risk
<i>6 am – 9 am</i>	Medium Risk	Low Risk
<i>9 am – 3 pm</i>	Low Risk	Low Risk
<i>3 pm – 6 pm</i>	Medium Risk	Low Risk
<i>6 pm – 9 pm</i>	Low Risk	Low Risk
<i>9 pm – 12 am</i>	Medium Risk	Medium Risk

<i>High Risk</i>	<i>Medium Risk</i>	<i>Low Risk</i>
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