

# Tracking Down Teens to Track their Driving: A Pilot Study

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# Thanks...

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➤ Richard Compton & NHTSA



# Purpose

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- 1) Choose or develop a technologic measure of teenage driving exposure
  - 2) Pilot test the technology with a small sample of teen drivers
- Scalable to large sample size?



# Technology needs

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- Accurate measure of important behaviors
  - Musts:
    - Distance
    - Duration
    - Time of day/week
    - Passengers
    - Identify driver
  - Would be nice:
    - Belt use, speed, distractions



# Technology needs

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- Other requirements:
  - Reliable
  - High storage capacity
  - Easy data retrieval/download
  - Low-cost
    - Purchase, use, data-handling



# Data logger – info via OBD2 port

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# Camera to identify driver





# Periodic Photo

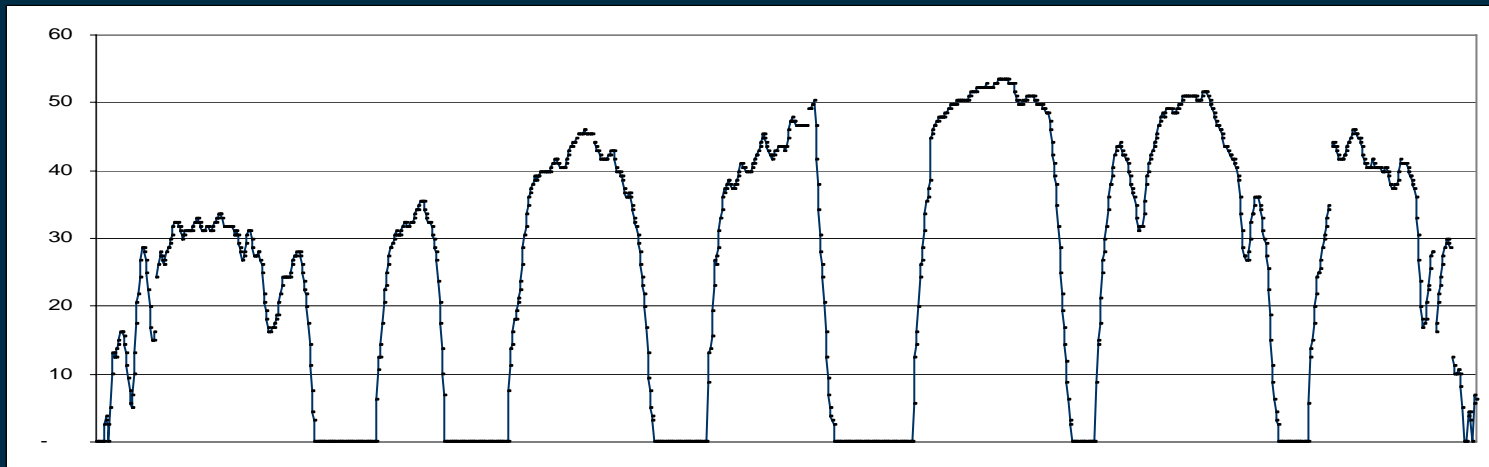
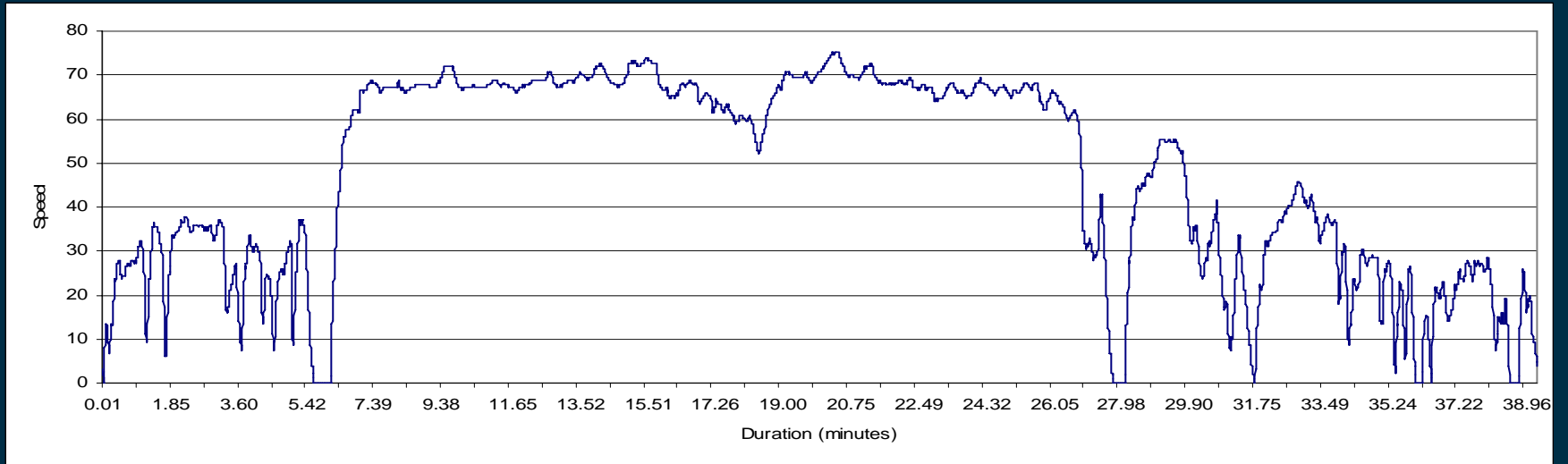
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# Datastream - Speed





# Pilot test with teens

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- 8 newly licensed teen drivers
- Data logger installed for one month
- Two recruitment approaches:
  - 1) Passive recruitment at DMV
    - Decent compliance (35%)
    - Time-consuming
  - 2) Take up residence in DMV
    - Time-intensive (4 days, 1 eligible)
    - Inefficient for recruiting rare species



# Lessons learned - Technology

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- Technology worked very well
  - Reliable
  - Data Processing relatively easy
- Only a few problems/limitations
  - Killed one battery
  - Cable issues w/one car
  - Glare obscures seat belt
  - Need infrared



# Lessons learned - Humans

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- Humans do unpredictable things
  - Drivers change w/o turning off car
  - Cars driving themselves?
  - Tell us if something happens!
- Lots of variability
  - How much teens drive
  - Car sharing
  - Family structure
- Participation is a group decision
  - Confidentiality is a big issue