

# Lessons learned from the New Zealand Household Travel Survey – 7 day online GPS



# We tried something new – how did it go and what did we learn?

- ▶ 7 days
- ▶ Online
- ▶ GPS
  - ▶ Unit or app



# How, when, where and why people travel:

## National travel survey

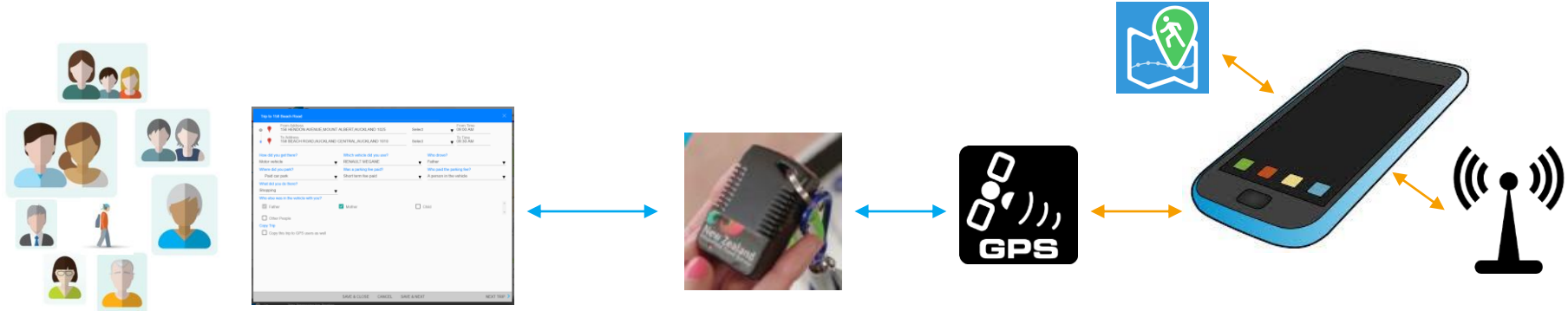
### ► 1989/90, 1997/98 and 2003-2014

- Face to face recruitment, 2 day travel diary, personal interview

### ► 2015-2018

- Face to face recruitment, 7 day online travel diary, with option of GPS memory prompt

### ► Maintaining core data requirements



# What has worked well



## 40% of eligible households have everyone fully complete the survey

61% response rate including households with at least 1 person fully completing the survey

- ▶ *Good by international standards – just not as good as NZ historical...*

## High uptake of GPS device

- ▶ *88% of eligible people used GPS logger on at least 1 travel day*
- ▶ *On any given survey day, about 77% of trips legs recorded have trip data from a GPS unit*
- ▶ *Low loss rate*

## High rate of willingness to participate in further surveys

- ▶ *86% of fully completing people aged 15 years and older ok for us to keep contact details and invite to participate*

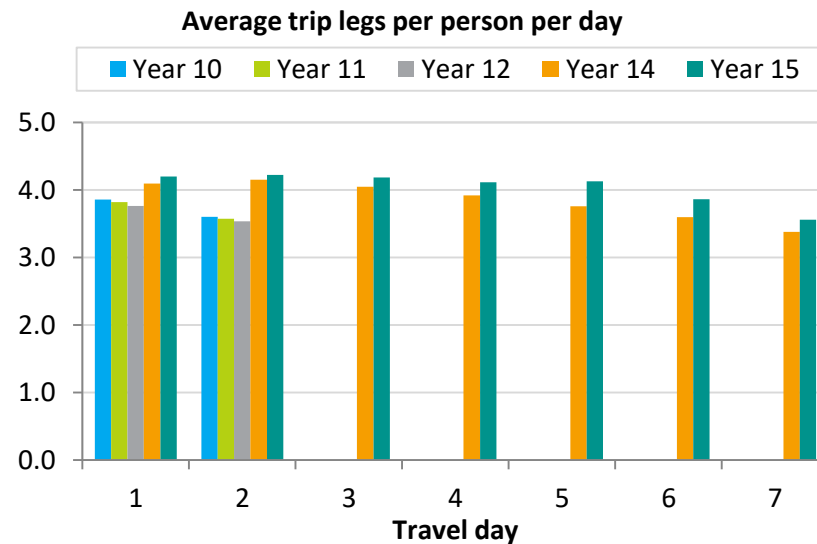
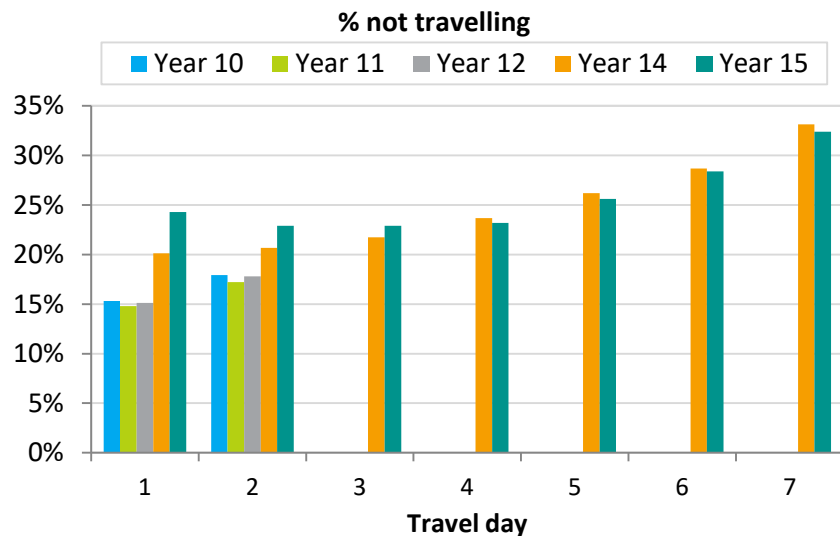
## Over 70% of people asked said they would be willing to do the survey again

# What hasn't worked so well

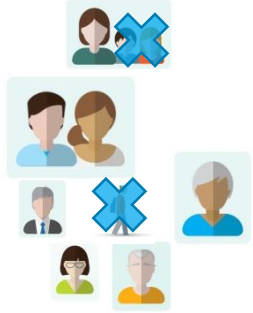
## 7 days

Once people start, generally complete, but high rate of refusal initially

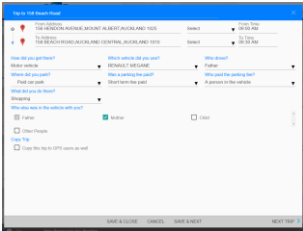
- ▶ 65% complete 7 days of travel
- ▶ 31% pull out before the travel days start or do not agree to take part
- ▶ Rest drop out, most often in the first few days
- ▶ *Increased rate of non-travel as a function of travel day*



# Other issues



- ▶ **Low response rate for children**
  - ▶ *Burden for parent completing as proxy*
- ▶ **3rd party recruitment of rest of household by person recruited in person**
  - ▶ *Higher rate of partial completion by households*
  - ▶ *Lower response rate*



- ▶ **Self complete online an issue**
  - ▶ *>75% of participants requiring phone assistance at some point*
  - ▶ *Only 41% of trips self coded*
- ▶ **Lack of overlap with historical methods**
  - ▶ *Difficulty in understanding calibration/time series issues/differences*
  - ▶ *Delays in calibration/data time series release*

# People and technology...



## Smart phone app

- ▶ Trial invite to those 18+ to download app and use
- ▶ Only 25% of households were willing
  - ▶ Less people...

## Why?

- ▶ **Concerns about**
  - ▶ Privacy
  - ▶ Data use
  - ▶ Battery drain
  - ▶ How to use
- ▶ **Practicalities**
  - ▶ Download fail
  - ▶ No space on phone
  - ▶ Forgot app store password...

# Where to from here

- ▶ **Mid 2018 onwards**
  - ▶ Back to (after testing):
    - ▶ *2 days*
    - ▶ *Face to face interview to complete diary*
- ▶ **Keeping the GPS units**
- ▶ **2015-2018 data to be released in December**
- ▶ **Local government expansions**
  - ▶ Tauranga/Western Bay of Plenty
  - ▶ Auckland



[www.transport.govt.nz/travelsurvey](http://www.transport.govt.nz/travelsurvey)

Thank you

