Using Data for Behaviour Change

Recommendation

That the Board:

i. Note the attached report outlining the results of the Onewa Road *Using Data for Behaviour Change* trial that took place in August 2018.

Executive summary

1. Auckland roads are highly congested at peak times. One of Auckland Transport's goals is to shift people out of their vehicles and onto different modes of transport, into carpool arrangements, or to change their travel patterns away from absolute peak times. The Using Data for Behaviour Change (UDBC) trial was set up to test whether using personally relevant journey-specific data could influence the choice of travel mode and travel time by the Onewa Road commuters, and whereby consequently congestion
2. Using data captured from Closed Circuit Television (CCTV) feeds and video analytics, travel times for both T1 and T3 (bus) lanes were presented on roadside Variable-Message Signs (VMS) to the commuting public, allowing them to assess their travel options whilst stuck in morning peak traffic. A campaign was also created targeted at commuters from the nearby suburbs.
3. An evaluation survey and review conducted at the end of the trial assessed the effectiveness of the VMSs', advertising, and attitudes towards use of the alternatives promoted via the trial. The key points were:
    a. 43% of the respondents recalled seeing the VMS signs, compared with 26% who recalled seeing the advertising campaigns
    b. One in ten of those who saw the signs said they did something different to their commute, i.e. acted on the message
    c. Bus patronage increased 3.5% in the trial period compared to the same period the year before
    d. Peak T1 lane journey time during the trial fell ~4% to 23.4 minutes, from 24.5 minutes in June
    e. Early morning (7:00am) T1 lane journey time increased to 13.0 minutes, from 11.3 minutes in June
4. The key question that the Onewa Road UDBC trial sought to answer was: Could data be used to change behaviour, and reduce congestion? Analysis of the results indicated the following:
    a. Overall, the VMSs created awareness of travel time differences, and led to some car users changing their transport behaviour (as demonstrated by the increase in bus patronage).

b. The increase in T1 journey times early in the morning indicated that some motorists changed their normal departure time by commuting earlier.

c. The reduction in T1 journey times during peak hour demonstrated the success of the trial, as it showed that congestion on Onewa Road during peak hour decreased.

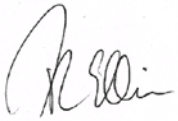
Next steps

5. At the request of the Travel Demand team, Business Technology has now installed its Automatic Number Plate Recognition (ANPR) journey time technology on the heavily congested Esmonde Road, Manukau Road / Pah Road, and Constellation Drive, ready for future UDBC projects. The team is also working on the feasibility of deploying the journey time technology on other roads, such as Tamaki Drive.

Attachment

Attachment Number	Description
1	Using Data for Behaviour Change report

Document ownership

Submitted by	Chris Creighton **Group Manager Business Technology Solutions**	
Recommended by	Roger Jones **Executive General Manager Business Technology**	
Approved for submission	Shane Ellison **Chief Executive**	

Glossary

Acronym	Description
CCTV	Closed Circuit Television (Camera)
VMS	Variable-message Sign
ANPR	Automatic Number Plate Recognition
UDBC	Using Data for Behaviour Change