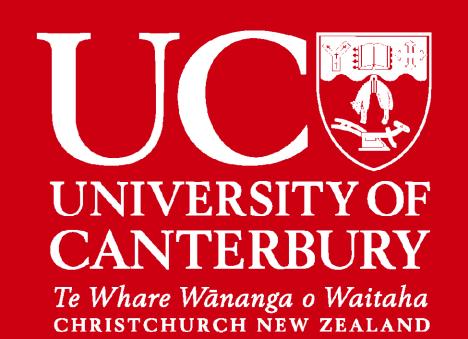
# Effect of On-street Parking on Traffic Speeds



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## Research Objectives

- To study and analyse the impact of on-street parking on local street traffic operations.
- To compare how the vehicular speeds vary for various levels of on-street parking demand in roads of different widths.

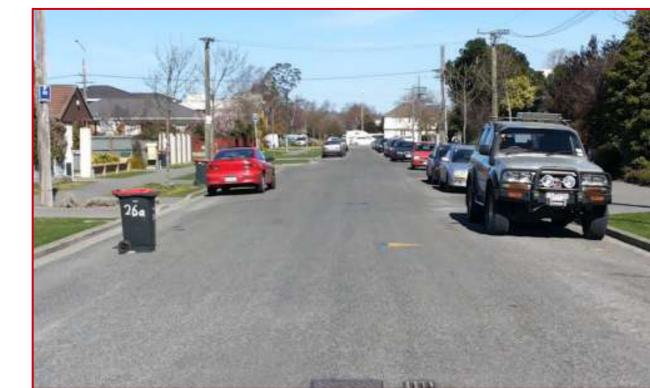
## Study Method

10 Local Streets in Christchurch surveyed



- Free speed measurements using radar gun or tubes
- Speeds monitored at different levels of parking demand



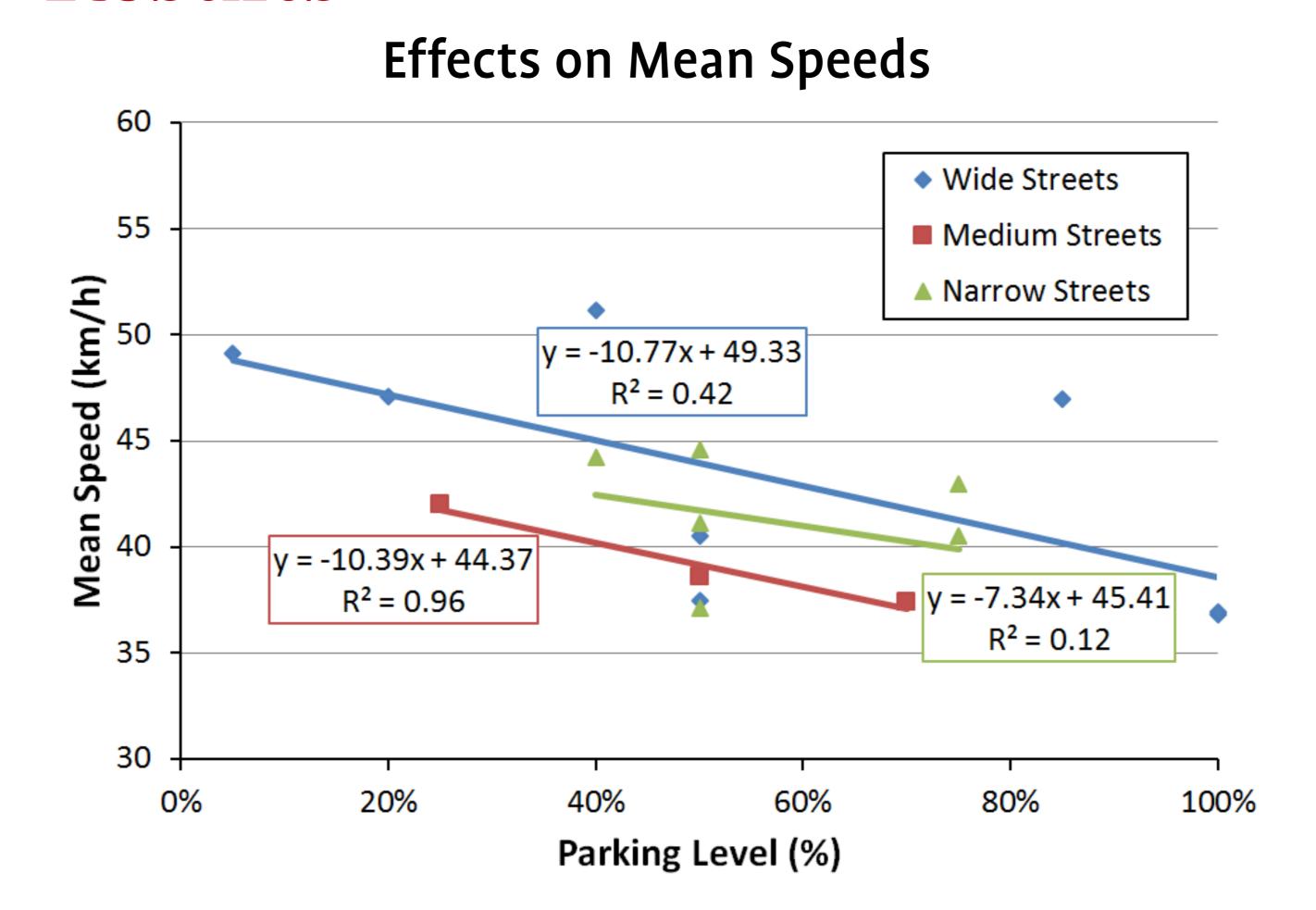


25% Parking

75% Parking

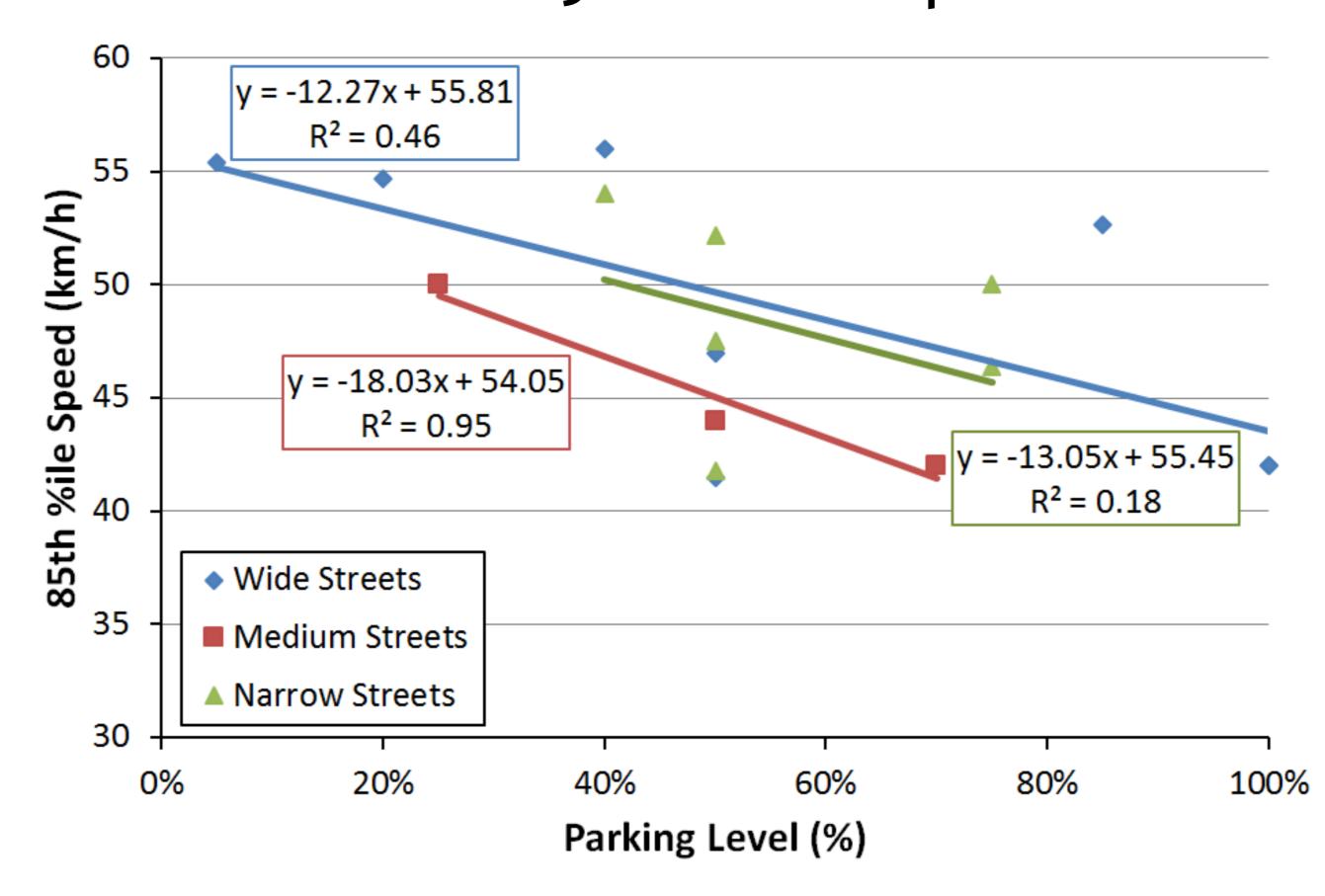
**Research Report for details:** PRABURAM, G. (2014). Effect of On-Street Parking on Traffic Speeds. Master of Engineering in Transportation (MET) research report, Department of Civil and Natural Resources Engineering, University of Canterbury

## Results

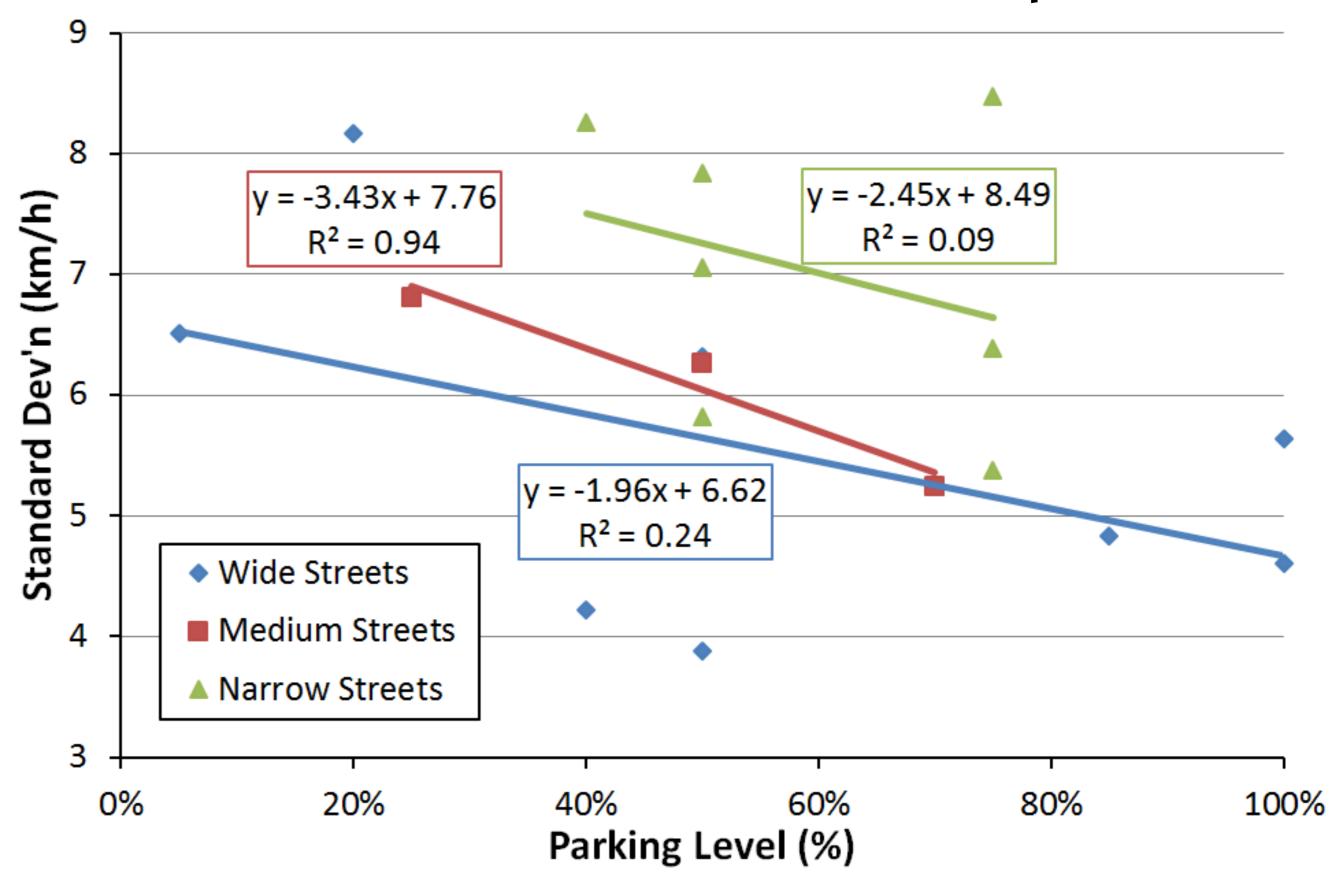


## Traffic speeds generally fell gradually with an increase in parking levels

### Effects on 85<sup>th</sup> Percentile Speeds



#### Effects on Standard Deviation of Speeds



### Conclusions

- On-street parking had a noticeable effect on traffic speeds along local streets (but not meaningful on narrow streets).
- Mean speeds fell at a rate of ~1km/h for every increase of 10% in the parking levels.
- Vehicles travelling at higher-than-average speeds were found to be affected even more greatly.
- The magnitude of fall in speed varied only slightly based on the road widths.

## Recommendations

- Policy makers should consider the role of on-street parking as part of their local area speed management strategies.
- Future national guidance on speed management and local area traffic management should highlight the role that onstreet parking can play in constraining traffic speeds.
- Increase the number of sites in each width category and choose sites that have a greater number of different parking demand levels to get more accurate/conclusive results.