

NEWSLETTER no 10

Early delivery of equitable and healthy transport options in new suburbs: Critical reforms and tools



Source: Nearmap and PSP Officer

Welcome

Welcome to the tenth newsletter of the "Early delivery of equitable and healthy transport options in new suburbs: Critical reforms and tools" project. This internal newsletter is to update RMIT's project partners on activities both undertaken and planned, and to report preliminary insights. This project is funded by RMIT's Urban Futures Enabling Capabilities Platform, the Victorian Planning Authority, the City of Casey, the City of Wyndham and Stockland Corporation.

Activities this quarter

In the last few months, the project team has conducted public webinars about the project findings and has kept working on the transport scenarios. Furthermore, project team members (like many of our project partners) have taken a well-earned summer break! Work across the three work streams has included:

- Collection and aggregation of costs for transport scenarios
- Work on the benefits of the transport scenarios
- Preparing the final report and dissemination plan
- Preparing and presenting the webinars about the Transport
 Options Project together with a project on Health Impact
 Assessment and the Australian Urban Observatory

Project webinars

The project team conducted two webinars in November, one designed for a broad audience and one with a focus more particularly on local government. In those webinars Annette Kroen presented on findings from the transport options project, team member Lucy Gunn presented together with Belen Zapata-Diomedi on a project on Health Impact Assessment that is undertaken together with the Department of Transport, and team member Melanie Davern as the Director of the Australian Urban Observatory (AUO) illustrated the reasoning behind its development and how the AUO works. Around 70 people participated in the first workshop and the local government workshop had around 50 participants. Discussion, questions and feedback with regard to our project referred to transport connectivity; density and diversity of land use; temporary bus routes and ondemand services; the 20-minute neighbourhood concept; accessibility by public and active transport (where can you get to); costs and benefits of active and public transport; and the impact of the COVID-19 pandemic and the related restrictions.

The webinar included some questions to the participants via Slido. When asked about what methods they find most useful for sharing research findings, the favourite methods were short non-academic articles and summaries; infographics and statistics; and webinars. Other methods mentioned were case studies; short videos; sharing through social media (e.g. LinkedIn) and emails; resource pages on the web; newsletters; podcasts; and the media in general. The project team will take these suggestions into account for the further dissemination of results.

Recordings of the webinars can be found on the project website https://cur.org.au/project/equitable-healthy-transport-options-new-suburbs/.



Influences on travel behaviour

While many factors can influence the choice of travel mode - such as the built environment, the quality of the availability of transport options; attitudes; and social factors, such as peer group factors or intra-/inter-household interactions - habits and life change events can also have an influence.

The importance of habits, and the impact of relocation and other life change events on them, are the subject of a number of studies. The overall themes are that travel mode habits are persistent (and dependent on attitudes); that life change events can be associated with changes in habits; and that old habits can re-assert themselves over time (Verplanken et al. 2008; Thomas et al. 2016; Walker et al. 2015). While residential relocation might not be the specific trigger for the habit change, other life events that are often associated with residential relocation, such as partnership formation or dissolution, change in household size, or employment changes, can be a trigger for change (Müggenburg et al. 2015; Scheiner & Holz-Rau 2013a,b; Clark et al. 2016a,b; Oakil et al. 2011).

For example, Verplanken et al. (2008) found that participants who had recently relocated residence and were environmentally conscious were less likely to travel by car than those who (1) had recently relocated but were not environmentally conscious, or (2) were environmentally concerned but had not recently moved. Similarly, Thomas et al. (2016) found car use dropped on relocation, especially among those with 'high' environmental attitudes, but then later increased.

Clark et al. (2016a) found changes in car ownership levels were strongly associated with partnership formation or dissolution, with change in household size, and with employment changes, but only weakly associated with residential relocation. However, residential relocation was found to be significant when linked with changes in built environment such as changes in





population density or travel time (Clark et al. 2016a, b). That is, relocation itself is not a trigger for a change in commuting mode, but relocation to an area with different built environment characteristics could trigger such changes; or the relocation could be associated with a change in commuting distance, or employer, that is linked to the mode change.

Residential relocation and the window of opportunity

Studies looking at residential relocation and the time frame of changes in travel patterns support the idea that there is a window of opportunity, perhaps of around 12 months (but maybe up to 24 months) from relocation, during which individuals are most likely to change their transport mode, suggesting that if public and active mode choices are available to relocating individuals during that timeframe, they will be more likely to be taken up than if made available later.

Relevant findings include:

- Changes in commuting patterns were most observable in the 12 months after relocation (Thomas et al. 2016).
- Changes occurred for some months, and in one case almost two years, after relocation (Jones & Ogilvie 2012).
- Changes continued to occur over a 24 month study period after relocation (De Vos et al. 2018).

A shorter window, of around 3 months after relocation, was observed in a small intervention study involving delivery of environmental information to participants (Verplanken & Roy 2016). But there seems little reason to consider the window period for this kind of small intervention as relevant to a discussion for the window period for overall mode choice based on actual availability of infrastructure and service. However, similar to other behaviour changes, these changes should not be seen as fixed patterns. There is a tendency to fall back into old travel patterns.

Influences on travel behaviour - continued

Implications for growth areas

The studies discussed above support the following propositions.

- Life change events (such as change in household size or change in employment) that occur contemporaneously with residential relocation can serve as a catalyst that allows existing transport mode habits to be reconsidered and changed.
- Availability of transport infrastructure and services
 affect the take-up of public and active transport modes,
 and accordingly such infrastructure and services need
 to be available to take advantage of the possibility
 of breaking previous habits and setting new ones
 involving use of those modes.
- People, associated with choice of residential location as well as choice of mode. Availability of public and active transport options may therefore encourage those who prefer those modes to move to the relevant area. However, the importance of transport options as a factor in selection of residential location, compared to other factors such as housing availability and affordability, should not be overestimated.
- Changed travel habits may not last: there may be a drift back to old habits, or further life change events or life processes may result in the formation of new habits.
- The window of opportunity, during which transport mode habits are most likely to be changed on a residential relocation, is probably around 12 months, but perhaps up to 24 months.

References

Clark, B, Chatterjee, K & Melia, S 2016a, 'Changes in level of household car ownership: the role of life events and spatial context', Transportation, vol. 43, no. 4, pp. 565-99.

---- 2016b, 'Changes to commute mode: The role of life events, spatial context and environmental attitude', Transportation Research Part A: Policy and Practice, vol. 89, pp. 89-105.

De Vos, J, Ettema, D & Witlox, F 2018, 'Changing travel behaviour and attitudes following a residential relocation', Journal of Transport Geography, vol. 73, pp. 131-47.

Jones, CH & Ogilvie, D 2012, 'Motivations for active commuting: a qualitative investigation of the period of home or work relocation', International journal of behavioral nutrition and physical activity, vol. 9, no. 1, p. 109.

Müggenburg, H, Busch-Geertsema, A & Lanzendorf, M 2015, 'Mobility biographies: A review of achievements and challenges of the mobility biographies approach and a framework for further research', Journal of Transport Geography, vol. 46, pp. 151-63.

Oakil, ATM, Ettema, D, Arentze, T & Timmermans, H 2011, 'Longitudinal model of longer-term mobility decisions: Framework and first empirical tests', Journal of Urban Planning and Development, vol. 137, no. 3, pp. 220-9.

Scheiner, J & Holz-Rau, C 2013a, 'Changes in travel mode use after residential relocation: a contribution to mobility biographies', Transportation, vol. 40, no. 2, pp. 431-58.

---- 2013b, 'A comprehensive study of life course, cohort, and period effects on changes in travel mode use', Transportation Research Part A: Policy and Practice, vol. 47, pp. 167-81.

Thomas, GO, Poortinga, W & Sautkina, E 2016, 'Habit discontinuity, self-activation, and the diminishing influence of context change: evidence from the UK understanding society survey', PloS one, vol. 11, no. 4. Verplanken, B & Roy, D 2016, 'Empowering interventions to promote sustainable lifestyles: Testing the habit discontinuity hypothesis in a field experiment', Journal of Environmental Psychology, vol. 45, pp. 127-34

Verplanken, B, Walker, I, Davis, A & Jurasek, M 2008, 'Context change and travel mode choice: Combining the habit discontinuity and self-activation hypotheses', Journal of Environmental Psychology, vol. 28, no. 2, pp. 121-7.

Walker, I, Thomas, GO & Verplanken, B 2015, 'Old habits die hard: Travel habit formation and decay during an office relocation', Environment and Behavior, vol. 47, no. 10, pp. 1089-106.





Resident Interviews - Grocery Shopping

Shopping habits are influenced by the availability of supermarkets and other shops but also by the household structure, food preferences and so on. Some interview participants – particularly in Allura where supermarkets and shopping centres are further away than in Selandra Rise – have changed their shopping habits to shop less frequently. They state that they tend to do a large weekly shop, often on the weekend because they can expect less traffic on the way to the supermarket. Some interviewees use click and collect or delivery for groceries as well as other online order options.

"So once a week, at the weekend because there's less traffic. And I either go 4 km up the road to Tarneit, or I think it's 3 km to Williams Landing. Both ways can take anywhere up to 20 minutes to get to." (BM -Allura)

"Sometimes I do the Coles Online delivery. (...) Yeah, because I'm not really happy going to the shopping centres. So might as well just get it delivered home." (EG - Allura)

"Most of the time I either do online, click and collect. So \$50 or over, I go to Coles and I do a collect service." (RT - Allura)

However, an interviewee in Selandra who lived in another growth suburb before has made the opposite change and goes to the shops more often now as the nearest supermarket is now only a 5-minute walk away.

"So we were in Cranbourne East. (...) And obviously yes, access to all these shopping marts were restricted. We needed a car. I mean walking was not an option. But today yeah, we don't need a car we just... a two minute walk and we have Woolies." (BK – Selandra Rise)

Similarly, some of the interviewees in Allura believe that they would change their shopping habits if they had shops closer.

"I think I'd go more often. Yeah, just to get more fresh fruit and veg. I probably don't because I'm like, 'Is this going to last the full week." (BM – Allura)

"So I could go from school, walk to the shop, pick up your bread and milk, and then walk home. That could be ideal." (KI - Allura) Interviewees that have lived in Selandra Rise from the beginning also mention that it was difficult in the beginning when no shops were close by.

"It's definitely gotten easier because when we first moved, this wasn't here. We had to go into Cranbourne for everything, whereas now, we can sort of stay, especially day to day. Like groceries, that sort of thing, we can do more local." (LC – Selandra Rise)

"As I said, when we first came here it was really hard. But now everything is available. So it's pretty much easy now." (VS- Selandra Rise)

Interview participants that do several shopping trips a week generally use the car for the weekly 'bulk' shop and walk for smaller shops during the week.

"Yeah, so usually we'll shop here and we would, if we're doing a big shop, we'll drive, but otherwise we just walk up." (CM – Selandra Rise)

"Do a big shop once a week and then I usually will have to pop in for fruit and stuff. (...) So I'll usually pick my son up from the bus then I'll come here and get some stuff." (OZ – Selandra Rise)
In comparison to public transport the car is generally more time-efficient and also easier for transporting bulk shops, so most interviewees use the car (or walk if possible). The people who use public transport seem to be mainly captive users (not able to drive) or long-time public transport users who are retired and have more time available.

"But look, it's not that far, so we hop in the car. And that's the thing; it's not that far and the time you wait for a bus or wait for a train or whatever, you'd be there in the car. And that's the convenience of the car." (HM – Allura)

For interview participants the availability of ethnic food stuff also influences where they go shopping.

"And similar sort of shopping centres are built by Coles in another two, three kilometre radius, but they were sort of incomplete for me, because they did not have the Indian groceries shops, so I had to come all the way to Wyndham Village Shopping Centre." (KS – Allura)

"And then there's one in the Casey Central, that particular shopping centre has Asian grocery, so particular thing that we need then we get there." (US – Selandra Rise)

"Next to the Woolies is a Sri Lankan shop. (...) Before the supermarkets arrived, we had to go to Dandenong for a Sri Lankan shop there I guess." (VP – Selandra Rise)

While they would prefer to have a shopping centre close, one interviewee comments that they're happy to drive for shopping if that means that their house was cheaper when they bought it. Others also don't mind the distance.

"So it doesn't feel difficult. We are just used. We are sort of like, 'This is how it is here. It's not going to change.' So that's the sort of mentality here, it's like I can live at other places where I have more convenience, but then there'll be more mortgage, full stop." (KS – Allura)

Resident Interviews - Trackless Trams

The interviews also discussed the concept of trackless trams for the growth areas with trackless trams as a bus on a specified route providing more frequent and direct transport options to certain destinations. The interviewees who assessed the concept positively liked or hoped that the trackless trams could bring new routes, higher frequencies, faster and more direct connections, and their potential to alleviate 'traffic'.

"It would be useful because... I would say when you bring such things the frequency definitely improves. Right?" (BK – Selandra Rise)

"If it's faster, if it's more straight forward, I would definitely say, less space, I'll definitely say it would." (CM – Selandra Rise)

"Absolutely. I mean, something like that would be good, because, especially in the outer suburbs, there are a lot of straight roads. So it's not like city where you have a lot of criss-cross, and you have to take turns. There are a lot of straight roads, and even in the estate as well, there are a lot of straight road, and it would be easier for people (...) who don't drive, and then it would be easier for them as well." (QF – Allura)

They are seen as options between larger destination nodes, e.g. activity centres or train stations.

"Well, I'll say yeah, if it's available here going off to Berwick or to Cranbourne and then, yeah, you would easily take those than drive." (KF/LF – Selandra Rise)

"I reckon something like that running down Clyde Road, running down there in Cranbourne Road, the main roads. (...) Even down the Monash, if it was something like that running down beside

the Monash, I reckon that that could alleviate a lot traffic." (LF/KF – Selandra Rise)

The interviewees who were not convinced of the concept said that they prefer smaller shuttles that can go into the smaller roads, rather than trackless trams which would mainly work on the larger arterial roads. In a way this speaks to the tensions between a more direct patronage-oriented and a coverage-oriented network.

"Not really. Again, because the longer the vehicles, they can only really run on the longer, bigger roads. You want a bus to be close to your own home, which is in the smaller thing. So you want the buses to go through the smaller streets. (...) Those trams would only be good for longer distances between city hubs or something. Like if you're going from one major area to another." (DL – Allura) "No, because I think in Wyndham there's lots of small streets and I think buses should go round more of the small streets so people don't have to go a long way towards where the bus thing is and there should be more of them. So a lot more smaller buses going round more often would be a good thing here." (KB – Allura) Trackless trams having their own lane was seen as positive by some and negative by others, at least if that would take

away a lane for cars.
"No, just lane by itself? So, no car would be in front of it- So, it's

good. So, it's no traffic." (US - Selandra Rise)

"That's fine but is that at a cost of lanes of the [cars]?" (RT – Allura)
The aspect that trackless tram can be driverless was not a
central topic in the interviews.

Planned activities

- Finalise work on costs and benefits of the transport scenarios and discuss with project partners
- Prepare the final project report
- · Prepare project partner workshop

- Dissemination of findings (e.g. through webinars and articles)
- Project Advisory Group: 23 February 2021 2-4 pm as an online meeting.

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