Meeting Notes

**Subject** Taxi Operations in Auckland

**Time** 2:00 – 2:30 p.m. on Wednesday 17 April 2019

**Location** Andrea Raith’s office

**Attendees** Andrea Raith, Sujith Padiyara, Jade Xiao

**Taxi companies**

* Auckland Co-op Taxis (<https://www.cooptaxi.co.nz>) is the biggest taxi company in NZ.
* GPS trackers are installed in taxis but only turned on when a passenger is being transported.
* The passenger’s origin point is recorded but not their destination.
* Auckland Co-op Taxis doesn’t have a data scientist. They may be willing to give us data if we agree to perform ‘randomization’ on the data.
* Taxi companies use TomTom for GPS tracking. TomTom collects GPS data from every vehicle that uses their product and makes the data public.
* Cheap Cabs is a budget taxi company that does not do GPS tracking.
* Taxi companies probably have hourly information on how many taxis are in operation.

**Taxi driver and passenger behaviour**

* A person in Auckland CBD is more likely to walk to the nearest taxi rank than to call the call center.
* Sujith often sees 2-3 taxis idling at the petrol station opposite New Market campus.
* Taxi drivers typically prefer free parking areas, e.g. ranks, petrol stations.
* Taxi drivers have shifts.
* Taxi drivers sometimes will take short rides.

**Old policies (don’t know if still the same)**

* Taxis operated in zones, e.g. Auckland Airport zone, Auckland-Manukau zone.
* Taxis in the former zone would shuttle passengers to/from the airport and hang out at petrol stations, shopping centers, or a McDonald’s nearby to the airport.
* Nowadays, taxi operations are more fluid.
* Possibly a taxi’s home zone is just the area around the driver’s home.
* Used to be multiple call centers that broadcast passenger requests only to nearby taxis, now they broadcast to every taxi.
* Whichever taxi is quickest to accept the call gets to take the request.

**Partnership with ACC and Auckland Hospital**

* Auckland Co-op Taxis is in a partnership with ACC and Auckland Hospital.
* Some patients receive taxi vouchers for getting to/from their hospital appointments.
* Taxis will wait at a rank at the hospital.
* They will probably also wait there until the patient finishes their appointment to take them back home.
* These routes will probably come out of the GPS data so don’t need to ask for it separately.

**Partnership with schools**

* Dropping off school kids is a new business opportunity for taxis
* Schools hire taxi vans instead of buses

**Other model considerations**

* Taxi companies also operate airport shuttles which can also use the charging pads, but these are a ‘ride-share’ mode of transportation so would require a completely different model in the simulation to allow en-route drop-offs.

**Tracking options**

* GPS units are cheap now, around $100 per unit.
* Alternatively, just use a GPS logger smartphone app.
* Need the company to encourage taxi drivers to turn on tracking while driving.
* Buses have GPS units and bus drivers have a phone for emergencies.
* Smartphone tracking is a long-term plan.

**Want to know**

* GPS data of a few taxis in operation over the course of a day. If not the entire routes, then even the O-D pairs would be extremely helpful to get a picture of where people are coming from and wanting to go. We agree to sign a confidentiality agreement and perform randomization of the data to ensure security.
* How many taxis are in operation throughout the day?
* How are taxi shifts organized?
* Do taxis operate in zones?
* Do taxis operate on a rank, hail or pre-booked basis or a combination?
* Where do taxi drivers like to idle and for how long?
* Do taxi drivers have regularly scheduled lunch breaks or do they eat on the go?
* Do taxis start from a rank or from the driver’s home?
* Partnership with Auckland Hospital and local schools?