ANLY 482 AY1516 T2
Team WalkThere- Minutes of Supervisor Meeting 2

Date:	15 January 2016
Time:	0830-1000
Venue:	School of Information Systems, Level 4
Present:	Lim Hui Ting Jaclyn, Sim Peh Wuen Jeanne, Lim Hui Ting
Absent with Apologies:	Nil

Agenda:	1. Review of Project Proposal 2. Ez-Link Data 3. Other Clarifications

1.1	**Review of Project Proposal** **Team roles:** - Write component for each member – what they're in charge of **Include the objective:** (Use a title that is more reflective of the focus of the study) i.e. Extract flow information from ez-link data, understand the within town interactions using ez-link data **Motivation:** Because of earlier study. Gaps in the first round of study that you need to fill, and to fill in the gap.

2.1	**Ez-Link Data**
	About ez-link data & research based on ez-link data:
	(Understand why people take buses instead of walking)
	- Get real transaction data so as to get the bus numbers
	- LTA cuts the data for everyone to use
	- Nothing confidential about except the card number
	- Can find out the bus number, not just the bus stop number
	- Fixed at 7 **mins bus journey** – **should analyse using ez-link data the within town commuting, whats the pattern**
	  o Link everyone up based on their origin and destination and map out all the trajectory based on bus routes. If you can trace it out then you'll know the distance – how much they travel. And distance from origin to destination. (i.e. homebase to mrt, homebase to clinic.. etc)
	  o Don't mention 7 minutes at all
	  o Find out the average time, average distance that people travel
	  o If they go near the shopping mall, whats the general travel time within the town
	- **Analyse Non-peak, peak hours**
	  o We should look at the **data every 15 minutes**
	  o Group according to 15 minutes and analyse the time patterns using each period. Find out if there are more adults, elderly, students?
	  o Detect when are the actual peaks Go to work? Go to school?
	  o Morning peak hours: people are more likely to take the bus instead of walk – feeder buses to interchange- need to analyse all of these first.
	  o Based on MRT research: elderly: 11am to 1pm to pick up kids/ elderly – morning interactions? Need to find out the interaction for the elderly itself.
	  o Analyse before coming up with assumptions
	  o Then find out the peak, non-peak hours based on the analysis carried out
	  o If you separate the time, you might miss out on important information.

- For schools, there might be double sessions? Find out.

- **Analyse whole 3 months, depends on cut-off.**
  - July trend is okay, better than November and December
  - Stay with July
  - Don't pick out a holiday. 28 July 2014: Hari Raya Puasa// 7 July 2014: Youth Day Holiday (Monday, wk 2)
- **Routes:**
  - Based on the routes discovered, can roughly estimate travel time based on bus speed and travel distance
  - Count how many bus stops, and the distance between each bus stop
  - Estimate the total time taken for bus ride vs how much time for walking – find out how many percentages of people take buses instead of walking even if the bus journeys are longer than walking. If bus journey shorter, cannot do anything about the data. Figure something else out. -> in montreal they cut public transport to encourage walking
  - **PATH analysis** – Pedestrian path if you have already mapped out.
    - Walkability score
    - Trace out the shorter path
    - Apply walking speed. Aged people walking speed * walking distance
    - Some bus routes might take longer, but some people might prefer to take bus. i.e. a lot of time to kill, etc.
    - What we will want to find out, is if it is true that people tend to take bus even if it takes a longer time to get to their destination
    - If so, we need more education to educate the elderly on health benefits of walking, find out the reasons why and if there are possible infrastructures that can be implemented to encourage walkability. **Physical planning.**
- **Buffer:**
  - For every destination point, use a baseline using geospace, **50-100 metres buffer to immediately extract out the base & the attractiveness of that location.** (i.e. if there is only a school that falls into that buffer, you can assume that people go there because of a school)
  - For the hub: commercial space, take train and etc. Classify the destination, whether it is school based, community based, etc. So as to get a clearer picture.
  - Should have a **buffer for both the start point and end point**. (If the start point is home-based or non-home based.) Can have 2 clusters.
- **Students path:**
  - * Need to discover > 7 mins bus routes
  - Find out where the walk paths cut through, bus brings them wandering about.
  - Local community – should have better activities on how to walk about. Can promote to MOE. Conduct activities to encourage walking. Campaigns.
- **Resources:**
  - Trees and lamp post have to sync together – cannot be too close to each other. Find out the resources.
  - Sheltered walkways – In several newtowns, LTA is putting up sheltered walkways. Whose responsibility is it now?
  - All HDB new towns are under town council control. Technically, town council should approach relevant government organisations. Anything to do with HDB should be taken care by HDB. If walkways are next to

	the roadside (5m) and near the transport, then LTA will have to take care of it. - **Elderly path:** o Peak: ▪ Towards the industrial area. (Need to cut through PIE) ▪ Underground paths might be better for elderly. o Non-peak hours: Similar to school - **Feedbacks given by CLC:** o Under the **travelling behavior intra town**, within Tampines Planning Area ▪ Travel duration may be more than 15 minutes, but what is the ▪ **Profiling** should be done. • At 7.00 am – calculate entire journey time and path. • You'll be able to answer the variation of travel duration for peak and non-peak data, based on detailed data. • You'll know the average time and deviation. • There are paths (i.e. highways) that force people to take buses. • Expect variations! Some might be short, some might be long. o Conduct site visit after analysis. - **Moving on:** o How to conduct analysis? ▪ There is a lot of analysis that you can do with that. ▪ With reference to ez-link data, it depends on your focus. ▪ You can refine the entire study again ▪ A lot of analysis that you can do ▪ Do a more detailed analysis, GIS analysis will come with you trace out the bus routes and walk paths to compare with ez-link data analysis. • This allows you to refine existing paths and connectivity options, bus routes. ▪ For point 6 – transit, it is hard to find out if they're really transiting or going to the hub o Improve current study, refine the whole methodology ▪ It will allow you to conduct some good analysis. ▪ Upload the revision of proposal. o Just need to now the proportion of population ages (i.e. aged population has increased & will increase further) Temporarily you can try, but the focus should be from point 4-6.
3.1	**<u>Other Clarifications</u>** - **Mid term presentation:** o Update how much are done- Progress Report/ Describe process more than talking about the findings/ List Key findings

Next Step of Action:	**1. Our Proposed Objectives:** - Detect and analyse the commuter's pattern - Infer the commuter's behaviour **2. Data Preparation**