Research plan

|  |  |
| --- | --- |
| Stakeholders | City of Norwalk Transportation, Mobility and Parking Team |
| Heinz team | Deepak Chawla (Technology Specialist), Devraj Kori (Data Specialist), Mansi Panchamia (Lead Researcher), Patrick Campbell (Project Manager) |
| Dates covered | 9/15/19 to 10/15/19 |
| Recruitment | Goal of at least 3 professors + 3 non-profit advocates |

# Goal

Describe what you’re attempting to accomplish by completing the research. Restate the problem you’re attempting to solve by conducting this research.

Goals & Objectives

To provide the residents and visitors of Norwalk a one stop mobility service to enable them to move more efficiently around the city. Streamlining WayFinding, analysing and suggesting what can be improved upon. Devise a system that allows residents to park outside the urban core and rely solely on multi-modal transit options to get into and around the city. If possible, integrate, with bike share and microtransit. Devise strategies to promote this tool. Creation of a template for user research was also suggested (see problem 3).

Problem Statement

How can the City of Norwalk streamline wayfinding and improve transportation related communication so that residents and visitors can more easily and cost-effectively get to where they want to go without leaving underserved residents behind?

## Measuring success

Describe how you’ll know if you’re successful. If you’re testing an MVP, it might be whether or not you can complete a set of tasks. If you’re trying to get information about your project, it might be whether or not you can address unanswered questions.

Tasks

* Do our partners have a better understanding of resident transit needs and preferences than they did before?
* Do our partners have greater clarity about the next steps they should take to make the biggest impact?
* Have we found ways to foster greater user input in the process of transit policy design and implementation?
* Will our product help our partners justify future transit policy decisions to other decision-makers?

Metrics for Measuring Success

The following metrics were proposed by the client as being useful for identifying weaknesses in the current system and guiding future transportation-related development:

1. Usership rates per route and mode of transportation (bike/ped, buses/fixed route, microtransit, etc.) and demographic breakdown
2. Wait and travel times per route and mode of transportation
3. Vehicular deaths and injuries (Vision Zero)

The following additional metrics were identified by the group as representing untapped or under-explored opportunities:

1. Public support / satisfaction (with current transportation system as well as City’s transportation plans/proposals)
2. Traffic / congestion patterns
3. Patronage of downtown venues and events
4. Transparency and better communication with the public and inter-department

## Logistics

Describe the activities you’ll undertake to determine if your MVP (or research) shows promise.

Identify how you’ll conduct the interviews (in person, video, over phone), how long the interviews will be, and proposed range of dates you’re considering.

Explain the roles and responsibilities for your team members. You should have one facilitator and one note-taker. When taking notes, avoid capturing personally identifiable information (PII), and where possible try to capture verbatim notes. This will make the notes more useful (you will summarize observations later) and avoid missing or misrepresenting information this way. Place the interview notes in a separate, non-public location (a Google Drive folder limited to your team members is fine).

## Recruitment

1. **Who will you talk to and why?**

* Local transportation researchers (university professors, graduate students, etc.)
* Local public interest / advocacy groups

|  |  |
| --- | --- |
| Eastern Norwalk Neighborhood Association (ENNA)  Laurel Lindstrom  Norwalk, CT 06851  Phone: (203) 855-7668  Email: Email  Link: [Eastern Norwalk Neighborhood Association (ENNA)](http://eastnorwalk.org/) | Fosters and preserves the residential character, natural and historic resources, and quality of life in the East Norwalk community |

|  |  |
| --- | --- |
| Human Services Council of Connecticut  Kim Killoy  One Park Street, Second Floor  Norwalk, CT 06851-5125  Phone: 203-849-1111 x3023  Fax: 203-849-1151  Email: kkilloy@hscct.org  Link: [http://www.hscct.org](http://www.hscct.org/) | The Human Services Council creates and fosters programs that educate, safeguard and empower the people of our communities. Our vision is for everyone to have the opportunity to reach their full potential. |

|  |  |
| --- | --- |
| Norwalk / Nagarote Sister City Project  P.O. Box 382  Norwalk, CT 06852  Phone: (203) 846-9288  Link: [Norwalk / Nagarote Sister City Project](http://www.sistercityproject.org/) | The program is a partnership for sustainable community development between the people of Nagarote, Nicaragua and the Greater Norwalk Area of Connecticut. |

|  |  |
| --- | --- |
| Rotary Club of Norwalk  Mary Roman  P.O. Box 531  Norwalk, CT 06852  Email: Email  Link: [Rotary Club of Norwalk](http://www.norwalkrotary.org/) | The club develops community service projects that address children at risk, poverty and hunger, the environment, illiteracy, and violence. The club also supports programs and educational opportunities for students, teachers, and others. |

|  |  |
| --- | --- |
| West Norwalk Association  P.O. Box 381  Norwalk, CT 06852  Email: Email  Link: [West Norwalk Association](http://www.westnorwalk.org/) | An advocate for quality of development, education, and life in West Norwalk |

* Kathy’s updated List:
  + Chamber of Commerce - Brian Griffin
  + Housing Authority – Adam Bovlinsky
  + Human Services Council – Anthony Delauro
  + Maritime Aquarium – Tina Tison
  + Arts Commission – Marc Alan
  + Historic Society – Diane Jellerette
  + Library – Chris Bradley
  + Norwalk Transit District - [no contact provided]
  + link to the city’s approved operating budget/page 173 are non profit organizations that the city’s helps to fund - <https://www.norwalkct.org/DocumentCenter/View/14845/FYE_2020_ApprovedBudget?bidId=>
* Molly Onufer (Mayor’s office city of Pittsburgh; referred by Robert Cavalier, CMU)
* Microtransit Chief Operating Officer Britt Liotta
* CT DOT
* University of Texas, Austin researchers - <http://www.ce.utexas.edu/prof/kockelman/public_html/TRB15SAVsinAustin.pdf>
* Relevant articles:

1. <https://www.forbes.com/sites/forbestechcouncil/2019/02/27/how-to-use-data-to-get-micro-transit-right/#157c895467f9>
2. <https://usa.streetsblog.org/2018/06/26/the-story-of-micro-transit-is-consistent-dismal-failure/>
3. <https://www.citylab.com/transportation/2015/04/how-the-microtransit-movement-is-changing-urban-mobility/391565/>

→ See “3 ways that microtransit might be great” and “3 ways it might not”

1. <https://www.routematch.com/a-goldilocks-system-the-microtransit-solution/>

→ See list of 4 opportunities for Micro-transit

1. <https://humantransit.org/2018/02/microtransit-what-i-think-we-know.html>
2. <https://humantransit.org/2018/02/is-microtransit-a-sensible-transit-investment.html>
3. <https://www.curbed.com/2018/1/9/16871474/microtransit-mass-transit-uber-lyft>
4. <https://marketurbanismreport.com/blog/can-microtransit-serve-as-a-public-provider>
5. <https://icic.org/blog/micro-transit-movement/>
6. <https://www.theatlantic.com/technology/archive/2018/10/bus-best-public-transit-cities/574>
7. <https://www.ssti.us/2018/01/lessons-from-the-mixed-success-of-microtransit/>
8. <https://learn.sharedusemobilitycenter.org/overview/on-demand-pilot-with-via-launched-for-seniors-and-people-with-disabilities-grand-rapids-mi-2019/> - microtransit for older population and people with disabilities.
9. <https://learn.sharedusemobilitycenter.org/learning_module/access-for-persons-with-disabilities/>- microtransit for people with disabilities.
10. <https://learn.sharedusemobilitycenter.org/casestudy/new-marketing-mobility-on-demand-projects/> - Marketing mobility on demand
11. <https://s3.amazonaws.com/sumc-public/webinar_recordings/equity.mp4> - How to increase transportation equity in shared mobility

* CMU experts / researchers
  + Lisa Kay <https://prezi.com/p/us8axs7cdpsk/the-black-and-yellow-brick-road-navigating-new-mobility-in-pittsburgh-lisa-kay/> - Meeting Friday, 9/20 9:30-10 am
  + Lowell Taylor <https://www.cmu.edu/metro21/projects/ridesharing.html>
  + Lee Branstetter <https://www.cmu.edu/metro21/projects/ridesharing.html>
  + Robert Cavalier - Check the drive for deliberate community forum shared by Dr. Cavalier
  + Karen Lightman (Metro21)

1. **How many people will you try to interview?**

Goal of at least 3 professors + 3 non-profit / public sector stakeholders in Norwalk

1. **What characteristics and / or criteria have you established for your participants? (Your criteria should match up well against your hypothetical users, or any personas you have already developed.)**

Because we’re limited in our ability to talk directly with a broad random sample of users, we are hoping that the non-profit advocates we communicate with can help us understand the needs of various hypothetical users.

Criteria:

* Experts at CMU:
  + Relevant domain expertise (TOD, microtransit, accessibility)
* Non-profit org reps:
  + Mission related to transportation
  + Consideration for either equity or sustainability issues

1. **What do you need to try and understand from them?**

* Experts at CMU:
  + Policy considerations we may not have thought of?
  + How have similar plans played out in similarly situated cities
  + Is there any reason why people would be hesitant to use microtransit instead of public transit, despite free ridesharing and regular availability of microtransit in odd hours?
  + How can we make people more engaged in new initiatives launched by city transportation authorities?
  + Do you agree with streetblog USA when it said microtransit don't work as well? <https://usa.streetsblog.org/2018/06/26/the-story-of-micro-transit-is-consistent-dismal-failure/>
  + Microtransit has a certain customer base and demand. Do you think it will ever completely replace public transit? What factors should we consider if we ever want to do that?
  + How to make microtransit financially viable if a larger population of citizens won't adapt it?
  + Do microtransit subsidies just subsidize higher-income riders?
* Non-profit org reps:
  + The breadth of transit needs and shortfalls in Norwalk
  + Residents’ feelings toward microtransit plan
  + Residents’ feelings toward the policy implementation approach

1. **How will you make sure your interviews are effective?**

* Ask open-ended questions
* Be willing to deviate from the script, since we don’t know what issues will be most important ahead of time.

# The interview

Identify how you’ll approach the interview. An important aspect of conducting interviews is ensuring that you are following a uniform process as much as possible. By writing out a sample script your colleagues can also adopt the research plan to guide an interview if your lead interviewer cannot participate for some reason.

In all interviews your actual questions will vary depending on how the conversation leads you. Don’t feel that you have to follow a script verbatim, but use it as a way to make sure you’re capturing the essential information, and use it as a roadmap for getting conversations back on track.

A few suggestions:

* Ask open-ended questions that encourage the participant to expand on thoughts related to your original question.
* Avoid leading questions, or language that direct affirms or contradicts the interviewee. This can influence or push the interviewee in a direction they wouldn’t normally go on their own.
* Ask the participant to verbally walk-through any activities they’re performing. For example, if you are asking them to test a prototype, ask them to describe what they’re doing as they go.

## Introduction

“Hi, my name is [your name here] and I’m a student at Carnegie Mellon University. Today I’d like to talk to you about [topic] and we’re interested to hear your thoughts on [something]. We’re interested in talking to you specifically because [reason]. I’m here with my colleague [other person’s name] who will be taking notes. There aren’t any wrong or right answers, and we won’t be writing down any personal information. We’ll also share a copy of the notes with you after the meeting if you like, and your participation is voluntary. You can stop the interview at any time. Do you have any questions or concerns so far?”

[pause - answer questions]

“Ok, so first we’d like to get to know you a little better.”

[continue writing out your script here and into the following sections]

## Background

Describe the information (if any) you need to know about the participant. You should encourage the participant to talk about themselves and their own experiences.

### **CMU expert Q’s:**

* Tell me a little bit about your background in the field of transit/micro-transit/accessibility?
* What are the biggest challenges with planning and studying transit systems?

### **Norwalk Stakeholder Q’s:**

* Tell me a little bit about the work [organization] does?
* What does your membership look like? Do you feel like they represent a certain slice of Norwalk residents?
* What are the biggest challenges you face as advocates?
* What do you wish you would have known about transit when you first started working in the space?
* How would you describe the way a member of your organization picked at random interacts with Norwalk’s transit infrastructure? Commuting, access to services, leisure, etc?

## Project / prototype

Next, you’ll want to ask the participant to react to your project, or explore a prototype you’ve been working on. Sometimes it’s helpful to set up a hypothetical situation.

[continue writing out your script here]

**CMU experts, after describing the City of Norwalk’s goals for future transit improvements?**

* Have you come across similar projects in your research before? How did those play out, what are the pitfalls?
* How would you go about measuring outcomes?
* Do you have any insight into factors that may determine the effectiveness of micro-transit/digital wayfinding services? Are there specific data we should look at to predict if these services will work for Norwalk residents?
* Potential pitfalls?
* Where you start to identify breakages in transit systems under tight time constraints?
* What questions aren’t we asking that we should?

**Norwalk Stakeholders**

* Have you used the wheels2u service? Have many of your stakeholders used it?
* Do you think the service would continue to be useful for your stakeholders if it eventually were to cost money? What price point do you think the city could charge?
* In general, do you think app-based solutions can help your stakeholders with wayfinding? What are your concerns?
* Do you think a “park-once” model where people can park at a lot somewhere outside the city center, and move about without needing a car throughout the day until they need to return home, makes sense for Norwalk?
* What questions aren’t we asking that we should?

## Wrap-up

Close out your discussion with the participant.

Example:

“Thanks for taking the time to walk through our project / prototype with us today. We really appreciate your time. Do you have any other questions for me or for any members of our team?”

[pause]

“I’d also like to ask my other team members if they have any questions they’d like to ask.”

[pause]

“Our next steps will be analyzing our notes on your feedback and thinking about how this will inform our overall approach. We’d be happy to keep you informed of our project’s progress as we go if you would be interested. I’m also curious if there is anyone else you would recommend we talk to?”

[pause]

“If you have any other questions, thoughts or comments later you can always reach out to me. Thanks again for your time!”

# Post-interview and debrief

In a separate document, take the next 5-10 minutes to jot down any overall thoughts / feelings about the interview with your team members. This will help make sure you capture any final information that might otherwise be forgotten.

Talk with your team members about any thoughts, trends between interviews, or any other nuggets of valuable information.