Non-Moving Violations: Advancing Equity among Low-income, Minority Chicago Residents

Fall 2019, Mark Jones
Service Systems Design
1. Project Brief

Tasked by the City Clerk's office, IIT Institute of Design's Service Systems Design Workshop worked to advance equity among low-income, minority Chicago residents in the area of non-moving violations.
2. Research Highlights
A tenacious spiral for low-income, minority residents

No good options for low-income people

Loss of car worsens financial situation

Residents want a way that considers the long-term implications and socio-economic circumstances

"If I couldn't afford it initially, how can I afford it if it doubles?"

“I lost my car and I lost my job. Now my family can’t eat over parking ticket.”

“I am 64 and I’m still on my payment plan of $1300.”

“Our families are in debt because we just don’t have the means to pay basic living expenses—rent, utilities, groceries, and transportation.”
Being "in the know" relies too heavily on word-of-mouth channels

What a resident needs to know—and when and how a resident needs to be notified—has not been thought through

Unofficial channels and resources are in demand due to lack of formal support

“If you're new to Chicago, no one tells you about city parking rules. I only knew about the city parking sticker because roommate’s dad had randomly mentioned it.”

“There’s a lot of places where you could get free parking. You just got to use your resources. You can talk to some people that have lived there.”

“The web is the only way for people to get info about new parking policies, if no web, no other way.”
Difficulties in navigating the system

“I got three tickets this year. Once because I paid the wrong meter.”

“Do I have to keep track of every event in Soldier Field (to know) when I can park there? The signage is not clear at all.”

"The system is not easy to use. Not everyone has a debit card or credit card, it should be easier to pay by cash."
Unclear and uneven communication leads to bad experiences that feel unfair. These experiences accumulate and make people frustrated and lose trust in their city.

"The city is a bunch of fraud; they don't tell you (of your ticket increase) until it doubles."

"It's all about the money. No other city is like this. Chicago is all about the money. You can get a ticket for anything."

"The Aldermen don’t do anything, I don’t know why."
3. Opportunity Spaces
Avoiding Spiral of Debt

Many residents lose track of their outstanding tickets and the associated doubling and tripling dates. Their car ends up being booted and towed, which in turn takes away their ability to work and get out of the debt spiral.

How might we empower residents to make better informed payment decisions, keeping them from debt spiral?

Contesting Tickets

Many residents do not contest their cases or wait too long because they see it as a time sink; a long, drawn-out process with maybe no return. By not contesting, they subject themselves to more debt and aren’t heard.

How might we encourage residents to take action and build a stronger case in order to avoid incremental debt?

Improving City Relations

Improve the relationship between city government and its citizens by changing the perception that the city does not care.

How might we begin to improve perceptions of the Chicago City Government?
Preventing Tickets
Many tickets are due to forgetting or not knowing the rules. Citizens need more informative channels to help them prevent silly mistakes that result in ticketing.

How might we prevent residents from making silly mistakes and help people know the rules better?

Empowering New Drivers
When car owners first move in to the city, they feel clueless. Many are unaware of Chicago’s rules and regulations.

How might we cut down on confusion for newcomers, set people at ease by providing information up front, and empower new residents to spread this knowledge to their community?

Taking Initiative
Residents with tickets cannot properly manage them and do not always know how to prevent a similar violation in the future. They consequently accumulate debt and feel desperate to solve the problem.

How might we help residents take initiative and avoid penalties and future infractions?
4. Concepts
Avoiding Spiral of Debt

**Tailored Ticket Roadmap**

A personal roadmap that visualizes payment options and important payment plan dates for each unique ticket holder.

The purpose is to provide easily digestible information so the resident may be better informed and take the right steps forward.

Yue Yue Yang
Shiya Xiao
Jessica Granger
How might we empower residents to make better informed payment decisions, keeping them from debt spiral?

Insight 1
The greatest benefit for the ticket holder is in taking action before the ticket doubles.

Insight 2
Navigating the ticketing system creates a heavy cognitive load on the resident and is one of the greatest barriers to paying.

Insight 3
Residents have difficulty managing and prioritizing monthly bills vs. unexpected tickets.

“You have a car and 14 tickets and 8 are city sticker tickets...you know you owe thousands but you don’t know how much you owe, just that it’s a lot.”
—Chicago resident

“Our families are in debt because we just don’t have the means to pay basic living expenses—rent, utilities, groceries and transportation.”
—Chicago resident
### Experiment + Learnings

Assumption: Residents will use and trust the information from roadmap on city clerk website.

#### Step 1

Set up poster and iPad in Thompson Center near DMV for the public to interact with to gauge interest.

#### Step 2

Observed and did intercepts with participants for two hours to gauge interest in having a personal plan.

#### Key learning

34 people passed by + took a look
4 people read the poster
2 came up and interacted

“People will not be able to have an overall idea of what their monthly bills and expenses are.”

—Marketing Professional
4.1. Concepts > Tailored Ticket Roadmap

Roadmap

Help residents to navigate the payment process and release the mental burden.

Payment strategy

Empower residents to make better decisions based on their financial situation and choosing the cadence of their payments.

“Say I earn $300 a week, charge me $20 rather than $300, so I can still drive and make money to pay the ticket—less painful.”

—Chicago resident

Demo: https://youtu.be/DCt63jI_A_J0
Next Steps

**Lite Version**
Residents who do not have consistent computer access still receive a payment strategy through text messaging.

**Ticket Behavior Report**
Make resident aware of particular parking rules/regulations based on their ticketing patterns.

**Different Ways to Pay Back**
Explore with City Clerk alternative options, like community service hours, for those who are not able to pay their tickets.
Contesting Tickets

Mobile Lawyer

Mobile Lawyer is a digital service encouraging residents to contest by streamlining the process.

Divya
Goeun
Tanvi
Yuan
How might we encourage residents to take action and build a stronger case in order to avoid incremental debt?

“A lot of people don't contest, because it's much more expensive at times (time and money) than the ticket itself.”

**Insight 1**
The perception of contesting is that it is a time sink with potentially no return. But by not contesting, residents subject themselves to more debt and don’t raise their cases.

**Insight 2**
Even though the process to contest is communicated on the ticket, many residents still want clarification on what the steps are and how to navigate the process.

**Insight 3**
Residents assume that if they do contest, that there is a “right” or more effective way to contest in their favor.
Design suggestions

Empower residents with a **fair** process to contest unjust parking tickets in a **consistent** and **transparent** manner.

**Guidance**

- Collect evidence
- Make a strong case
- Schedule a hearing

**Customized tips**

You have entered the conversation with your **personal lawyer**.

I just got a ticket on state street. My ticket number is 0044546404

According to your situation, here are the **TIPS** that you can follow.

- Find errors in the ticket that render it illegally invalid.
- Show the photos with time stamp.
- Identify the statute you violated.
- Look for excuses under the statute item in the **traffic situation** shared by other user of Mobile lawyer.
- See how other people’s contesting evidence example in the similar situation.

**Track your progress**

- Collect evidence
- Make a strong case
- Schedule a hearing

- Photos of circumstance
- Traffic condition of

**Next step**

Need help build a stronger case?
What we tested

OBJECTIVE FOR OUR PROTOTYPE

**Created a mock parking ticket**

Delivery of Information - Created a physical ticket that references Mobile Lawyer Service to see if putting information on parking ticket is an efficient way to engage users.

**Planted 20 tickets**

Time of action - Planted tickets on cars parked on the street to see if people will start engaging with Mobile Lawyer at the time of receiving a ticket.

**Follow-up Survey**

Features & Content - We sent a follow-up survey to gauge which feature of Mobile Lawyer would meet the needs of residents and build their confidence to contest.
## What we learned from the test

Survey focused on potential engagement with the service

<table>
<thead>
<tr>
<th>What we asked</th>
<th>What we heard</th>
<th>Resident voices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gauging interest in specific features</td>
<td>Explanation of contesting process and details of each step, compilation of Tips and Tricks from other residents</td>
<td>“I think the city makes it intentionally difficult. It would be nice if your product helped me understand the likelihood of success and made it easier to submit.”</td>
</tr>
<tr>
<td>Likelihood of adopting city-approved guidelines</td>
<td>Residents would like to use city-approved guidelines specifically to collect and organize evidence in preparation</td>
<td></td>
</tr>
<tr>
<td>How others’ experiences can help</td>
<td>Majority of respondents want to hear from others on whether providing evidence affected outcome</td>
<td></td>
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</tbody>
</table>

Divya, Goeun, Tanvi, Yuan
Considerations for the next step

Possible collaborations

What are the different departments that service might touch?

Who will take an ownership of the service?

Production logistics

Integrating Mobile Lawyer with existing system

Managing crowdsourced data of resident experiences

Software development team to manage application

Information shared

Would the city of Chicago be willing to collect applications from an external source?

Can the city provide transparency on the status of applications submitted via mail?
Our primary research indicates that many tickets are due to forgetting or not knowing the rules. A text reminder could prevent forgetfulness and help people better understand the rules.
Could we help people prevent silly mistakes?

“I got three tickets this year. Once because I forgot the time.”

Street Cleaning/Snow

Although it could be part of a routine, people easily forget. This year nearly 250 vehicles were towed on December 1st.

City Sticker Renewal

As it is only paid once a year (now possible every 4 months), if the city could remind residents they could avoid a major source of debt.

Other

- Moving the car to prevent “abandonment”
- Rush hour time limit
- New parking regulations
- Temporary regulations due to construction, etc.
- Improved public perception by helping citizens

Signs can be deteriorated, not read or simply residents genuinely forget.
Hypothesis: parking reminders via text may be more attractive to people in areas without paid or permit parking.
How would the text reminder work?

Service highlights

Who is involved?

Features

- Citizens text the same number as bus arrivals
- Simplify location with number on sign
- Residents can be updated on new and temporary parking rules

Future Opportunity

With increasing GPS technology, text system could automatically identify the parking spot.
Next Steps

Operational

Gather CDOT, Dept of Streets and Sanitation, and CTA to discuss collaboration.

Identify other communication methods that could provide more privacy to residents.

Further investigation

Are citizens comfortable giving the City their mobile number?

Will residents foresee the need for reminders when parking their car?

Will this solution be applicable for areas with paid or permit parking?
Empowering New Drivers in Chicago

City Sticker Purchasing Text Assistant

A text message assistant enables new drivers in Chicago to become compliant with the City Sticker’s rules and regulations through a simple step-by-step process.

Cristina Tarriba
Julia Rochlin
Ananya Garg
How might we inform and enable new drivers in Chicago purchase the City Sticker and become compliant with Chicago’s City Sticker rules and regulations?

“I got my license, tag, and title in Chicago and I never learned about the city sticker until I got a ticket for it.”

“I didn’t know how to get the city sticker, I looked online and there was no clear information or instructions about it. I had to go to the clerk’s office and even then it wasn’t even clear. The janitor ended up telling me where I had to go.”

**Insight 1:**
New residents and new drivers in the City of Chicago are unaware that they are required to purchase a City Sticker. Lack of awareness among new drivers leads to tickets and frustrations.

**Insight 2:**
There are several “early checkpoints” where new drivers and new residents of the City of Chicago go through different processes to become drivers in Chicago (license, plates, etc). However, there is no actionable and available information regarding the City Sticker. Lack of communication and information creates confusion for new residents and new drivers in the City of Chicago.

**Insight 3:**
There is lack of clear, actionable steps, as well as lack of plain language involved in the process of purchasing a City Sticker. The information on the website is confusing and disperse, making it harder for residents and new drivers to buy the City Sticker.
Design principles

Enable action towards compliance through accurate and customized information for different types of drivers (new residents, vehicle transfers, renewals, seniors, veterans, visitors, etc.)

Be proactive in delivering information

New drivers are only finding out about City Stickers after getting tickets. There’s a clear opportunity to let them know in advance and make interventions where they’re most likely to be found. Instead of being “reactive” in their compliance, be “proactive” so they don’t get a ticket in the first place.

Break down information for different user groups

People clearly find it hard to associate themselves with one kind of a user group. Help them identify themselves as one from the different categories so they can find out about requirements that are only relevant to them. Giving them information about everyone is redundant and overwhelming to consume.

Be more interactive

The information currently available online is hard to interact with. People find it much easier to talk to people than review documents. Information can be made more conversational and hence more accessible for people from different sections of society. Also, make sure it’s available in at least 5 main languages.
What we tested

OBJECTIVES OF OUR PROTOTYPE

**Designed a poster**

Delivery of information - We designed a poster to test if people would read the information about getting a City Sticker and engage with the ‘call to action’ prompt.

![Poster Image]

**Installed poster in context**

Time to action - We installed the designed poster with the Secretary of State to see if people would engage with the piece and take action. We also wanted to know if this place is a ‘hot spot,’ i.e., if new drivers in Chicago are a frequent audience in this specific facility.

![Poster Installation Image]

**Prototyped texting interaction**

Features & content - We developed a customized step-by-step texting interaction between ‘city representatives’ and residents to see how might users interact with the text assistant and enable them to buy the right City Sticker.

![Texting Interaction Image]
What we learned from the test

Testing potential engagement with the service and texting interactions

Competing information at touch points

At the Secretary of State (DMV) there is a lot of competing information (posters, stickers, painted walls), making it hard to communicate information regarding the City Sticker with a poster. We also learned that we need to clarify differences between City Sticker and Plate Sticker.

Too much text and slow interactions

The interactions felt slow and too much text and information was provided. The participants had to wait for responses from the text assistant. The interaction should feel seamless, fast, and smooth.

Lack of orientation to resources and actionable items

Additional information should be provided for participants to take action. Links to Google maps, direct website links, etc., were missing.

Cristina, Julia, Ananya
## Considerations for next steps

### Identify new drivers and newcomers’ hot spots

- What are the different locations new drivers in the city go to?
- What are the different locations newcomers visit when moving to Chicago?

### Operations and City Representatives

- Who will take ownership of the service?
- Can the city provide training to representatives so they can send personalized answers to residents?
- How might the Text Assistant integrate well with the other existing purchasing channels?
- How might the City manage crowdsourced data of residents’ interaction with the Text Assistant?
- Software development team to implement Text Assistant interaction with residents.

### Design and install posters

- Would the City be willing to design posters and install them in different locations?
Opportunity Area: Taking Initiative

Right Time

Suggestions, Navigation, and Assistance for Settling Tickets

This product goes a step further than the existing City of Chicago website.

Right Time helps people avoid penalties and future infractions by offering personalized suggestions, step by step navigation, and assistance with next steps.

Yuqing He
Yifei Yu
Yuanyuan Hu
Opportunity
Help residents form proactive behaviors in paying tickets and following traffic rules

Current Problem
Residents with tickets cannot properly manage them and do not always know how to prevent a similar violation in the future. They consequently accumulate debt and feel desperate to solve the problem.

Opportunity Area
With our service, residents can easily manage the payment process by following a step by step guide when they receive a ticket—and feel confident in avoiding such expensive vehicle violations moving forward.

“Paying a ticket is not as easy as clicking the “pay” button on the website.

It often requires many considerations and decisions.”
Problem Analysis

Raising awareness before things go wrong

Get a ticket ——— Check the ticket status

Pay ticket

Fail to pay ticket

Ticket doubled

Next violation

“"It’s easy to forget to pay the tickets after receiving the tickets”
-Ogilvie Station, West Loop

“"I’m thinking to contest it later, then it doubled”
-IIT Mies Campus

- Forget
- Procrastinate
- Question the ticket
- Financial burden
- Want to contest

“How might we help residents avoid penalties because of missing the deadline?”

“"I have my friends try first and they tell me where is good to park. They find that out by getting towed.”
-Ogilvie Station, West Loop

- Get violation for a similar reason
- Don’t know how to avoid ticket
- Lack of guidance

“How might we help residents avoid the next violation?”

Yifei Yu, Yuqing He, Yuanyuan Hu

12.06.2019
Experiment

Remind me, yes. But I’d also like more help.

How can a reminder effectively make people take action?

Are there more obstacles that stop residents from paying their tickets?

Did paying the ticket lead people to change their traffic behavior?

Prefer to be reminded near the due date, when the ticket is uploaded on the system, and the budget is ready.

How and when to contest?

Many people mentioned budget challenges.

Paying a ticket is regarded as negative and it is disconnected with changing behavior.

Prefer personalized link which simplifies process and makes payment quicker.

We tested our key assumptions at a Target parking lot.

Yifei Yu, Yuqing He, Yuanyuan Hu 12.06.2019
Ticket Paying Assistant

An easy way to deal with tickets

By scanning the QR code or providing a driver’s license, residents can directly pay their tickets, get tailored and practical suggestions to avoid similar violations, and get help if they haven’t yet decided whether to pay.

Residents can choose their preferred next step to deal with a ticket. Along with the action they choose, we will assist them through the whole process by providing relevant information and reminding them of important dates.

Residents will get personalized messages and reminders from the assistant, including the due date, important links, and relevant ticket information.
# Implementation & Consideration

## Build services with the residents

### Implementation

<table>
<thead>
<tr>
<th>Platform Building</th>
<th>Suggestion Mechanism</th>
<th>User Feedback</th>
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<tbody>
<tr>
<td>Establish an easy-to-use suggestion and reminder system to ensure that multiple touchpoints can synchronize information.</td>
<td>Provide precise suggestions to help residents avoid future tickets related to the reasons the original ticket was issued.</td>
<td>Launch the minimal offering product with suggestions and payment due date reminder function. Test whether it helps transform residents' behavior from a vicious cycle to better behavior.</td>
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### Consideration

<table>
<thead>
<tr>
<th>Financial Value</th>
<th>Management Value</th>
<th>Social Value</th>
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<tbody>
<tr>
<td>Increase the social acceptance of a ticket. Addressing the unpaid ticket issue.</td>
<td>Leverage trust between parties, and improve compliance.</td>
<td>Build fairness by enabling those who didn't mean to violate to perform better.</td>
</tr>
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</table>
Residents do not know about the programs created to help them.

This lack of knowing adds to a feeling of distrust.

Our old-school solution: a city-mandated sign at the front of a gas station.
Opportunity area

How might we begin to improve perceptions of the City Government?

Trust is missing
People feel like the system is unfair, some even feel like the city is out to get them

Trust needs to be built
Building trust requires consistent communication

More than a sorry
With such extreme feelings about City Hall, consistent actions will speak louder than words
Trust is lacking because people are not in the know

9 in 10 residents
Did not know that October was City Sticker Amnesty Month*

0 in 12 residents
Knew about City Sticker debt forgiveness program happening November 15–December 15

Disparate media channels make it too hard to hear

Where can everyone hear?

We need a new consistent and fair communication channel

*residents surveyed in Bronzeville, Nov 8, 2019
Proposing: City Gas Station Notices

A new consistent and fair communication channel

Initial concept:

All drivers need to eventually go to a gas station or an electric charging station.

Cost effective

Consistent and credible

Fair: will not penalize those without smartphones or computers
Experiment + Learnings: Good idea, wrong spot

Gas pump advertising

Is this a good place to hear important information from the city?

"Yeah, everyone needs to go into a gas station, eventually."

Did you notice our sign? 0 out of 8 noticed

"No one pays attention to those signs."

"A sign by the door would be better."

18 out of 20 went into the gas station store
Experiment + Learnings: The right spot

Pivot: Gas station door notice

3 out of 4 noticed our sign

Even less cost: since it’s no longer an ad (may require an ordinance)

Consistent and credible
A consistent and fair communication channel that can reach *everybody*

Permanent City Gas Station Door Notice

Like this Chi Bag placard, consider an ordinance to place and update city government notices on Gas Station doors to simplify communications with all residents.

Janine Zhong, Wanshan Wu, Grace Hanford  
12.06.2019
Avoiding Spiral of Debt

Contesting Tickets

Improving City Relations

Preventing Tickets

Empowering New Drivers

Taking Initiative