Mobility for all: Community as producers of transit innovation

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Let's take a quick poll



Have you riden public transit in the city you currently live in?

My city does not have public transportation

Yes

No



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How invested are you in completing surveys about transit?

Not at all Somewhat I'm not sure Quite a bit It's a must



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What is the first word that comes to mind when you think of public transit?



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On-Demand Transit

- First-mile / Last-Mile
- Low-Density
- Off Peak
- Paratransit

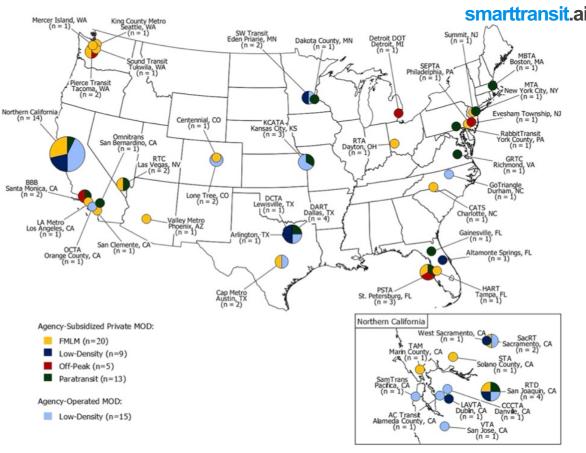


Fig. 2. Map of MOD PPPs in the U.S. through April 2019.

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(Lucken et al 2019)



Our On-Demand Approach

Approach: Integrating the fixed-line service with on-demand service



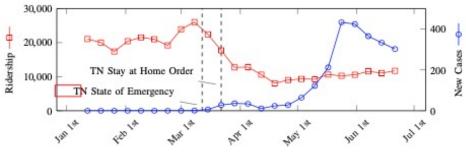
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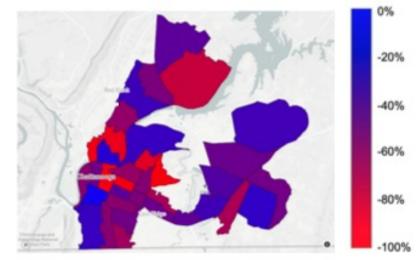


Demand is Dynamic



(b) Chattanooga

Weekly ridership compared to new COVID-19 cases per week for Chattanooga



Change in ridership between pre-COVID (January-February) and post-COVID (May-June) 2020 per census tract for Chattanooga

(Wilbur et al., 2020)



Community Engagement



Biggest challenge to previous transit initiatives has been engaging and sustaining ridership.

Public participation has been a central component of all past efforts (required by Federal Transit Authority [FTA]), yet community input has not yielded engagement with transit systems.

In reviewing past community engagement efforts, community members have been approached as consumers rather that producers of transit systems. smarttransit.a



Socio-Relational Model

assumes people are complex, democratic citizens as opposed to rational consumers Connect with existing networks

> Uncover community values and needs

Translate values/needs into system design smarttransit.ai





Top-down vs

bottom-up

Historic and sustained power differentials between community and institutions

Latent demand

How to predict and explore latent demand of public transit

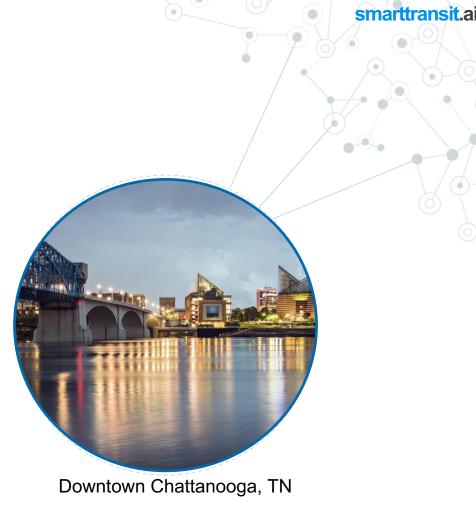
Sustainability

Establishing, maintaining, and prioritizing community relationships

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- Navigating dynamic partnerships
- Focus groups
- Survey development
- Iterative transit development





Thanks!

Any questions?

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