

Poster Guidance

Please use the template below for arranging your poster. How sections are arranged within the poster is up to the PI's discretion. However, your post must address the following:

a)Project Challenge - *describe the challenge/issue being addressed by this project*

b)Intellectual Merit – *describe the vision of the project to address the identified challenges and the technical and social advancements resulting from its research and the impact on specific application domains (e.g., transportation, community planning, and health and wellbeing etc.)*

c)Major Outcomes/Progress - *describe project activities and research outcomes to date*

d)Broader Impact – *describe the immediate, as well as long-term impact on society – who will care and who benefits from the outcomes?*

e)Future Goals - *planned activities and expected outcomes in the coming year*

This scale of this template is adjusted for a 48”(W) x 36” (H) poster size.

Text should be easy to read and follow. Be mindful of margins.

Use of images/graphics is strongly encouraged. Use high-resolution images.

Please use the fonts and colors used within the template for headers and text.

PI's should print and bring their posters to the PI meeting. **[A digital version of the poster should be submitted at this link by Tuesday, February 6th.](#)**

Reach out to vsharma@nsf.gov and jkravetz@nsf.gov if you have questions.

Inclusive Public Transit Toolkit to Assess Quality of Service Across Socioeconomic Status in Baltimore City

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Award Type: IRG 1951924



Project Challenge

Access to reliable and efficient public transit is one of the most significant needs in Baltimore City. We focus on the identification of high value, small scale, community-led improvements in the quality of the current public transit network via conversations among low-income residents in Baltimore, transit advocacy groups and transit agencies.

Intellectual Merit

BALTO App

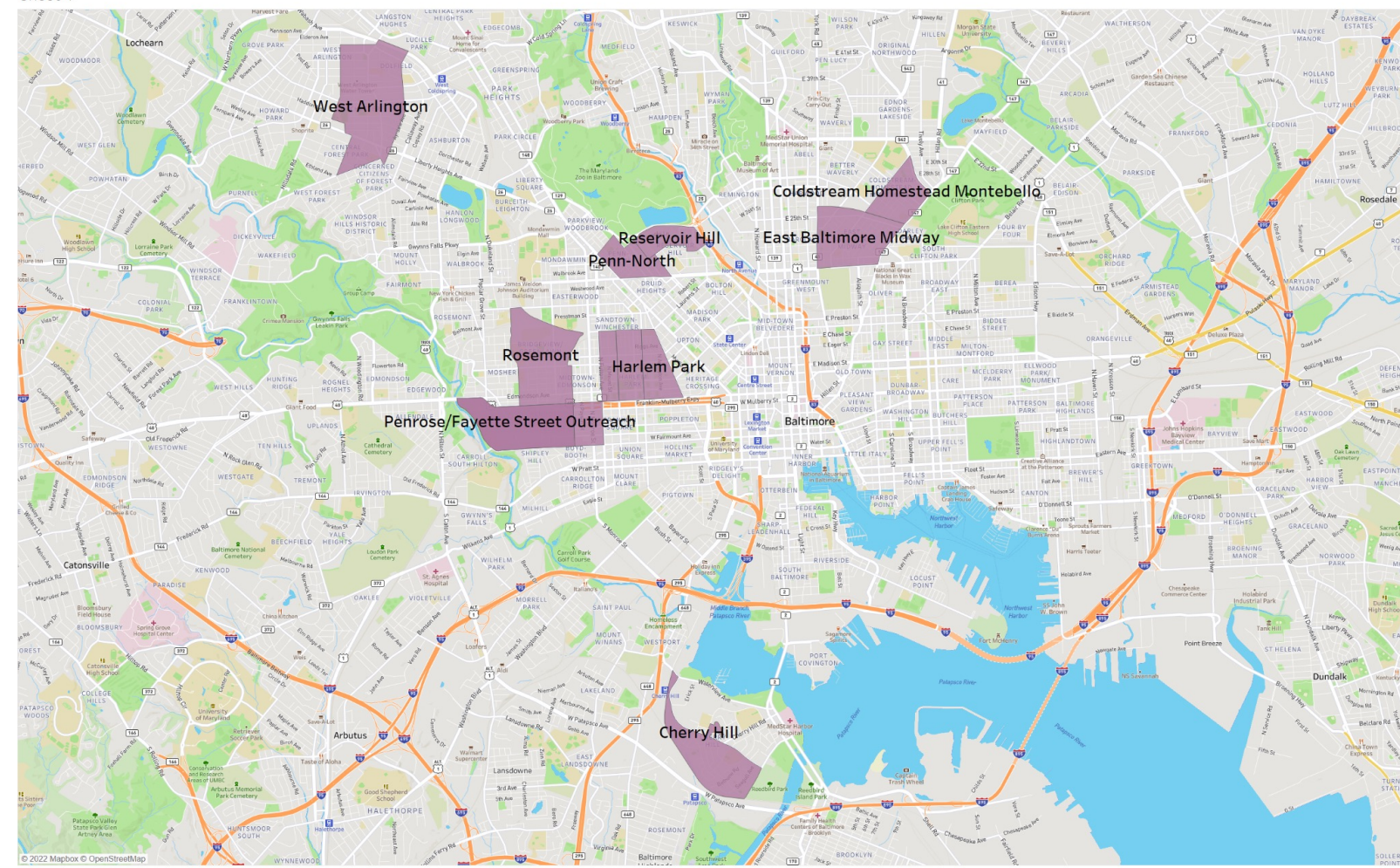
- Understand privacy barriers of low-income residents with location data collection
- Design and evaluation of methodology for effective survey data collection

BALTO Dashboard

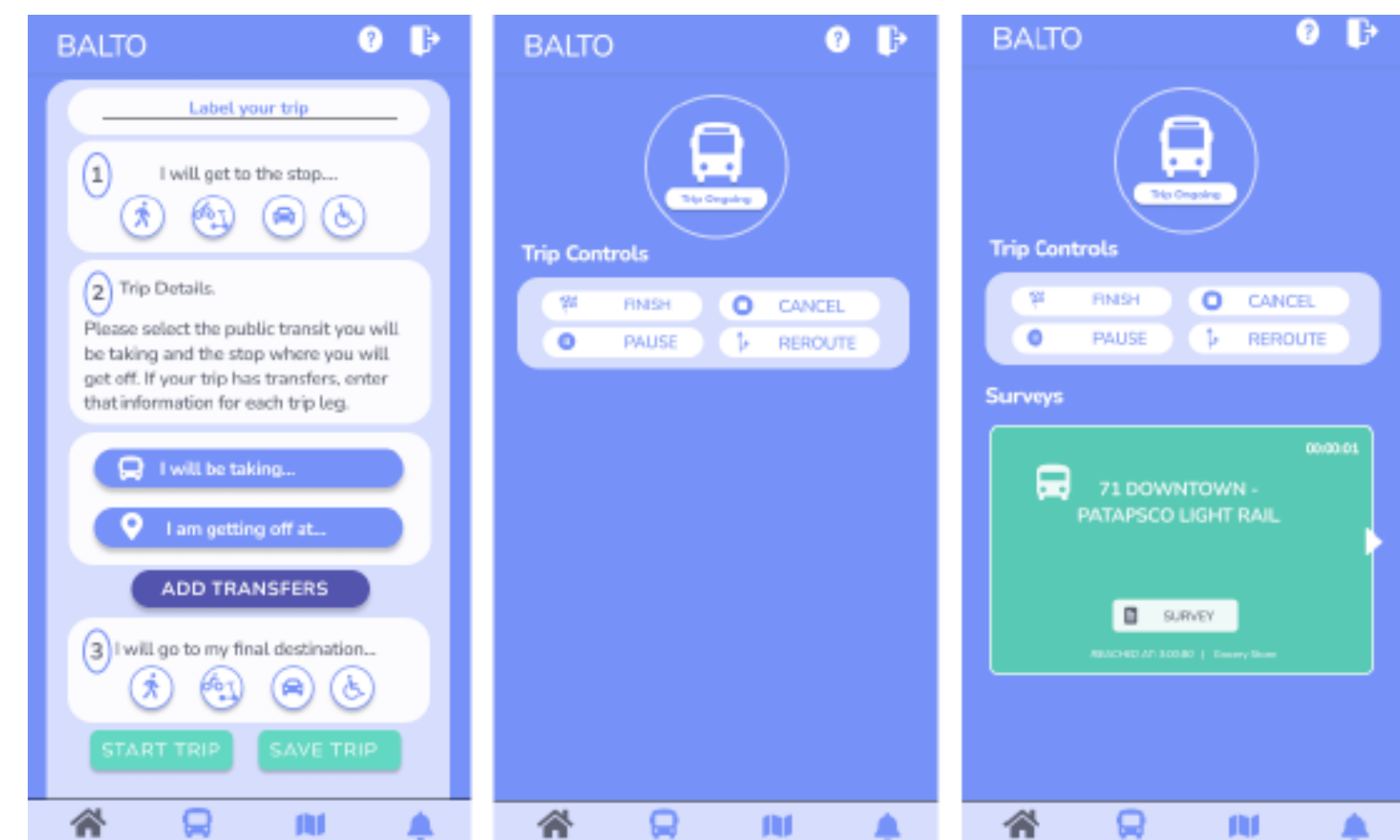
- Design novel, interpretable ML methods to identify transit challenges
- Identification of processes and tools needed to create democratic spaces where solutions to public transit challenges are identified via data-driven community conversations among residents, advocacy groups and decision makers

Major Outcomes

1. **Understand Privacy Barriers.** We run 10 focus groups with 45 participants from various HABC locations. Current]
 - Insights incorporated into BALTO App.
 - Usability tests with 10 participants.



2. **Effective Survey Data Collection.** Pilot to understand best survey approach to acquire the largest number of surveys with the highest response quality.
 - Four conditions: In-trip vs. end of trip and two incentive approaches (\$2/survey vs. \$4/day, total of \$56). Two weeks of trips.



Download BALTO!



- **Recruitment Approaches:** Mailing, tabling, Circulator ads.

Mailing: 2,500 letters to selected neighborhoods.

Tabling: 13 tabling events at public transit stops



Circulator Ads: ads on 16 buses in Baltimore.



Future Goals

- **Survey Pilot.** Collect data from participants, analyze, implement best.
- **BALTO Dashboard.** Co-design dashboard with communities; ML to compute privacy-preserving experiences; Community “Data Labs” to discuss data collected and devise solutions to barriers

Broader Impacts

- Society:** Design of tools and processes to crowdsource the identification of public transit barriers in complex trips.
- Sustainability:** Low-cost tools that require minimal resources, with a focus on ability to sustain efforts after project is finalized.