



VMT Reduction Mode Shift Study

Update for TPP Technical Working Group



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Study Goals

- Provide background to eventual VMT and emissions goal setting.
- Estimate the maximum mode shift possible given existing land use patterns and travel needs.
- Effectively use a wealth of real-world data to understand scope of reasonable change while avoiding uncertainty of long-range forecast models.
- Identify markets where mode shift has the greatest potential.
- Develop open-source, reproducible tools that will allow the study to be repeated with newer data when available.

Research Questions

Central question: With land use, transportation system, and travel patterns held constant, how much travel can be shifted away from driving towards other, less carbon-intensive modes?

Additional Questions:

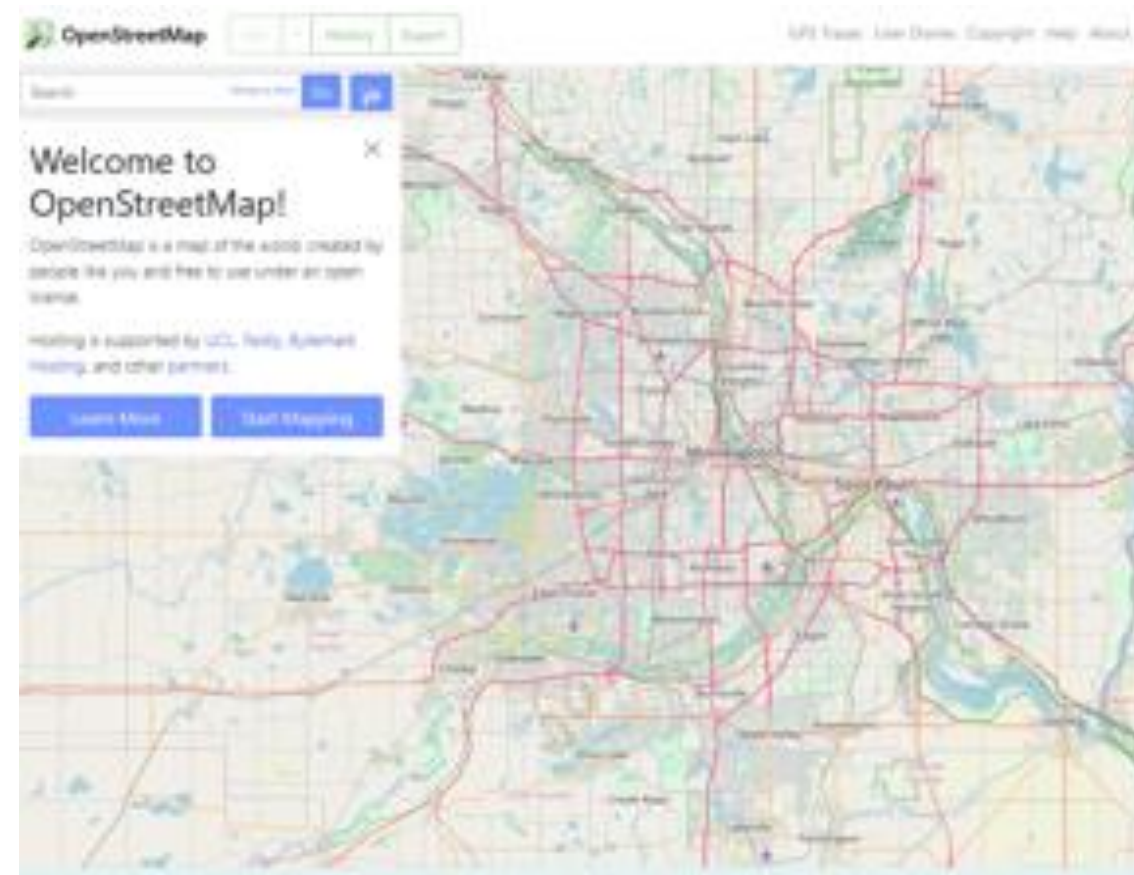
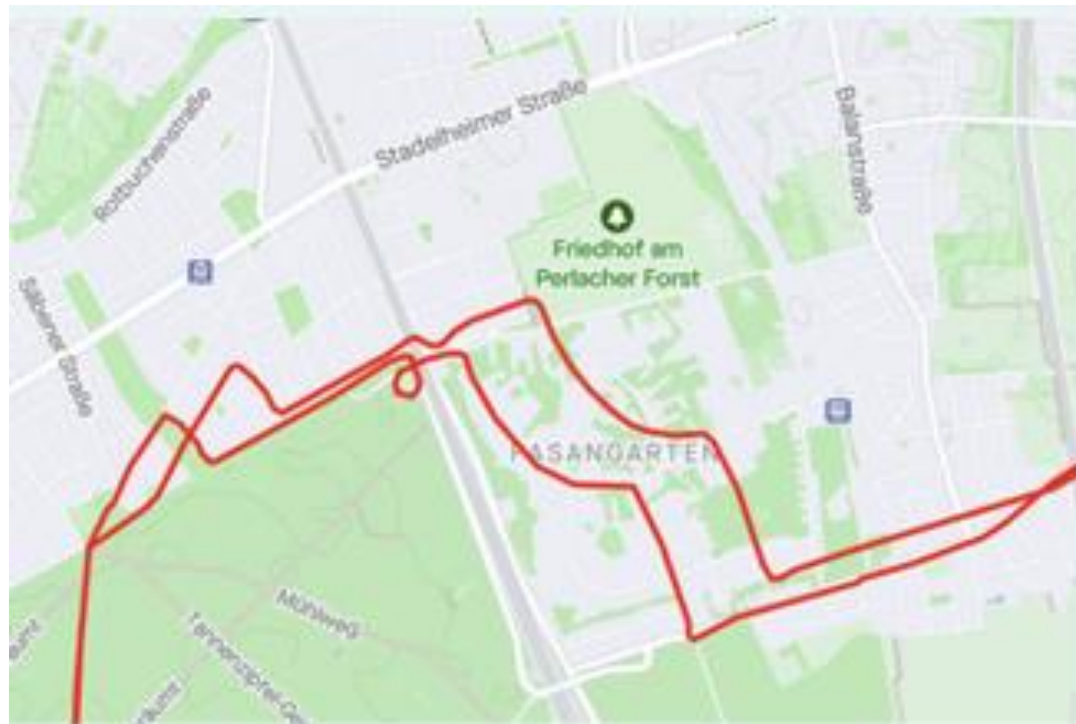
- To what extent does the potential for mode shift vary across regional geographies, including community types, transit market areas, or trips to/from job and activity centers?
- To what extent does the potential for, or cost of, mode shift vary across demographic groups (age, gender, income, disability status, race)?
- Which types of trips (errands, commutes, etc.) are most and least conducive to mode shift?
- Has mode shift potential changed over time?
- How much mode shift potential is lost when travel is evaluated in the context of related (linked) trips?
- Which communities or households have enough time in their day to shift travel from driving to other modes?
- To what degree would drastic improvements to the [bike, walk, transit] system increase or decrease mode shift potential, if they were complete today?

Project Tasks (1)

Task 1: Project management

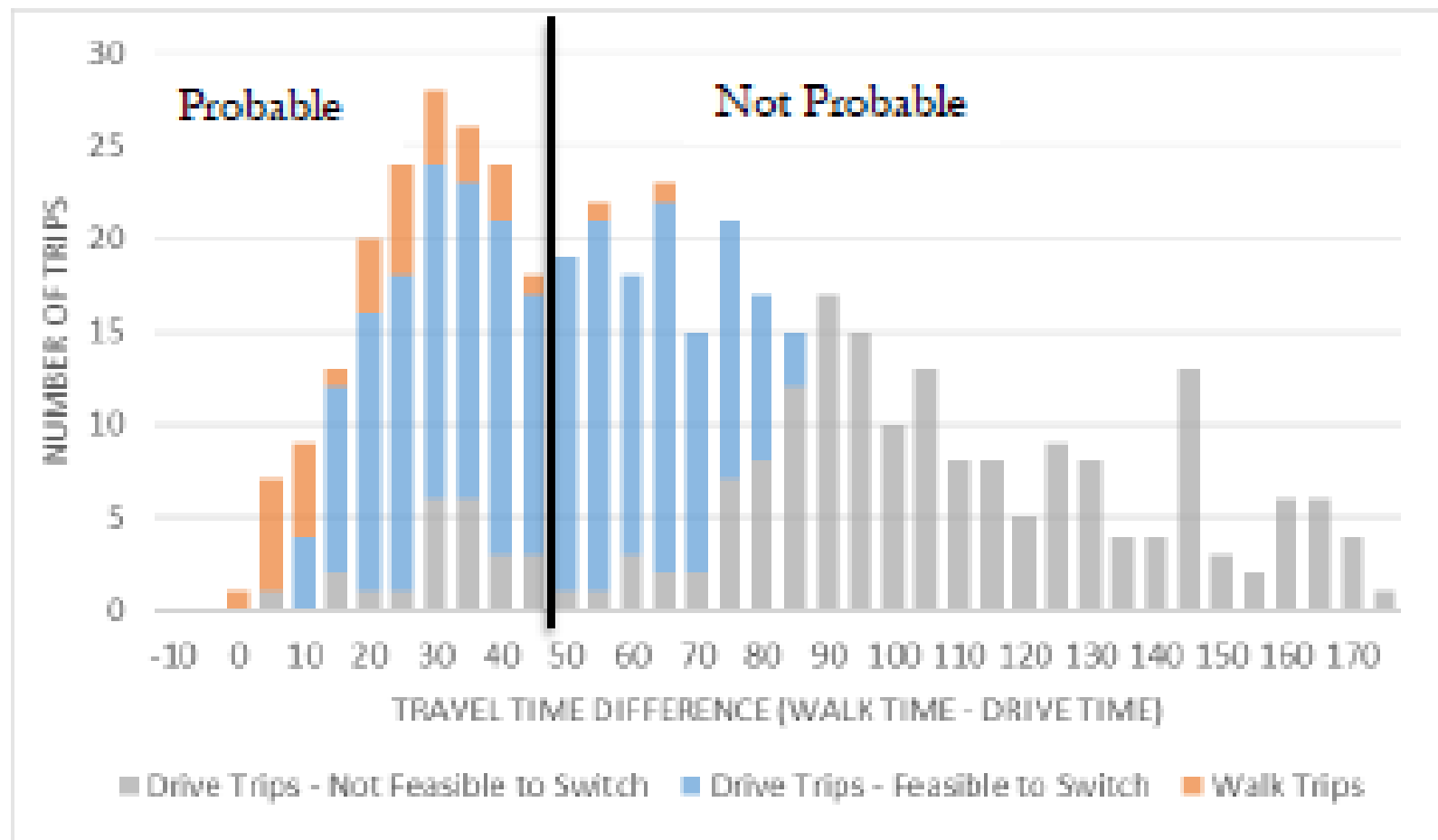
Task 2: Rerouting analysis

Task 3: Visualize and QA/QC rerouting



Project Tasks (2)

Task 4: Develop mode shift feasibility classification



Project Tasks (3)

Task 4a: Hypothetical scenarios

- Would drastic improvements to the [bike, walk, transit] system increase or decrease mode shift potential, if they were complete today?
- Not a forecast, but exploring some outer bounds of the possible
- Region-wide, systematic changes illustrative of big changes avoiding cumbersome network coding

Task 5: Analyze and Share Results

Questions?

