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| Paper | Methodologies | Takeaways |
| **High impact prioritization of bikeshare program investment to improve disadvantaged communities' access to jobs and essential services**  Chicago, Philadelphia | * Disadvantaged census tracts =   + Median household income   + % minority population (High, moderate, low thresholds)   + % households owning 0-1 vehicles (High, moderate, low thresholds) * Bike infrastructure from OpenStreetMap and local government data portals (length within each block group/block group area) (High, moderate, low thresholds) * Jobs data from LEHD database   + Low-wage jobs ($3333/month or less)   + Transit stations   + Grocery stores   + Hospitals   + Schools   + Used google maps API for two scenarios: walking and transit only, then assuming immediate access to bikeshare. Calculated travel times using standard walking, biking speeds and GTFS data. Text      Description automatically generated   Note: different weight factors assigned to different opportunities O based on percentages of trip purpose from survey results.   * Improvement in accessibility reported (high, moderate, and low). Graphed sensitivity of this for both disadvantaged and other areas with respect to max travel time and beta.   -Categories A-D created based on combinations of quantiles of disadvantaged areas, level of bike infrastructure, and potential for increased job/essential service access | -Areas of high priority for bikeshare stations, with analysis of existing bikeshare station locations in relation to identified disadvantaged census tracks to illustrate how this framework is different from others, and how service could improve for disadvantaged tracts  -limitations/potential improvements: with more info about traffic demand and transport mode split in disadvantaged areas, could have precise number of bike trips and created a more nuanced model for accurate estimation of accessibility  -Travel times averaged across block in accessibility analysis, only offer an approximate travel time between every block group pair  -travel cost of access was not considered, but should be as it is an essential factor of concern for disadvantaged populations  -doesn’t take into account dockless |
| Spatial Equity of Micromobility Systems: A Comparison of Shared E-scooters and  Docked Bikeshare in Washington DC | * “Equity Emphasis Area” status determined by income levels, racial and ethnic compositions as determined by National Capital Region Transportation Planning Board   + Quartiles of household median income, identified as “low income” as bottom quartile, ”middle income”, and “high income” as top quartile   + More than 50% residents of a specific single race as “X-majority” block groups, otherwise “No Majority” * Used GBFS data, Xu et al. trip inference algorithms and Capital Bikeshare System Data used to calculate Availability (no. daily available bikes) * LEHD O-D Employment Statistics aggregated to the block group level were used to calculate Accessibility, measured by kernel density (predefined search radius distance, highest values on top of the bike station, smooth curve as approaching search radius) |  |
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