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**19**

# Building statewide equity, one dataset at a time: Equity checks in the Massachusetts Bicycle and Pedestrian Transportation Plans

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## **Sidebar: Dealing with data quality**

- Pedestrian/bicycle travel data is incomplete
- Each goal and initiative has multiple measures of success, intended to be calculated as data becomes available
  - Goal 1 of both plans: Eliminate fatalities and serious injuries
    - Measure: Rate of fatalities and serious injuries among people biking / among people walking
    - Measure: Percentage of residents who can safely access nearby destinations by bike / using pedestrian facilities
- Similarly, some data sources lack demographic breakdowns, so equity will be analyzed in stages too
- Initiative 6 of each plan is dedicated to data development, with a combined investment of \$3m

**The plans will combine partial and emerging data sources to show a meaningful overview of statewide performance**

# Equity checks

Concept: Every time the plans measure walking or biking conditions, the plans should also say whether those conditions are equitable.

- Example based on actual amounts of walking or biking:
  - **Measure:** Rate of fatalities and serious injuries among people walking
  - **Equity check:** Are certain populations at a higher risk for fatalities and serious injuries while walking?
- Example based on residents' access that varies by area:
  - **Measure:** Percentage of residents who can safely reach nearby destinations using pedestrian facilities
  - **Equity check:** Do certain populations have less access to pedestrian facilities near their homes?

**A “YES” answer to any equity check is cause for concern.**

# Overview of Pedestrian Plan

|                                                                                                                                                                                     |                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| <b>Goal 1.</b> Eliminate fatalities and serious injuries among people walking                                                                                                       | 2 measures,<br>2 equity checks |
| <b>Goal 2.</b> Increase the percentage of short trips that are made by walking.                                                                                                     | 2 measures,<br>2 equity checks |
| <b>Initiative 1.</b> Complete prioritized pedestrian-specific projects on MassDOT-owned roadways and bridges that address safety, critical gaps in connectivity, and accessibility. | 1 measure,<br>1 equity check   |
| <b>Initiative 2.</b> Incorporate pedestrian safety, comfort, and convenience in investment decision-making and project development for all MassDOT initiatives.                     | 5 measures,<br>1 equity check  |
| <b>Initiative 3.</b> Slow vehicle speeds and improve visibility of people walking.                                                                                                  | 2 measures,<br>2 equity checks |
| <b>Initiative 4.</b> Improve pedestrian accessible paths of travel to transit.                                                                                                      | 2 measures,<br>2 equity checks |
| <b>Initiative 5.</b> Launch a year-round maintenance and operations plan for MassDOT-owned pedestrian facilities and support municipalities to do the same.                         | 2 measures,<br>2 equity checks |

# Interpreting results of equity checks

Example from Initiative 4 based on actual amounts of biking:

- **Measure:** Percentage of short trips beginning or ending at a transit station that were made by bike: **4.0%** overall
- **Equity check:** Do certain populations bike to or from transit less?
  - minority pop.: **3.3%** -> **concern**
  - low-income pop.: **5.5%** -> not immediately concerning
  - limited English proficiency pop.: **insufficient data**
  - persons with disabilities: **insufficient data**
  - vulnerable roadway users (up to 18 or 65+): **1.2%** -> **concern**
  - no-car households: **3.4%** -> **concern**
  - women: **2.1%** -> **concern**

**Equity checks report on disparities and illuminate possible considerations for prioritizing future investments**

## Conclusions and next steps

- Each equity check highlights disparities
  - Disparities in amounts of walking or cycling may need interpretation to determine the appropriate remedy
  - Disparities in access to safe facilities are clearer to interpret
- Altogether, multiple equity checks show how effectively the Plans are addressing inequity, and whether certain initiatives need special attention.
- “At least as good as Massachusetts overall” is a good default target for the populations evaluated in each equity check
- MassDOT may set additional targets starting next year

**Equity checks give the Bicycle and Pedestrian plans a number of tools for continuing to invest in equitable conditions.**

In doing so, they help the plans ensure that biking and walking are truly safe, comfortable, and convenient options for all.

# Appendix



# Potential for Everyday Biking Methodology

- The Bike Plan used it to prioritize projects...

MassDOT selected four variables to identify potential for everyday biking:

- **Short Trip Activity**, as expressed by the number and location of short trips that occur today
  - **Transit Access**, as expressed by proximity to transit stations and stops
  - **Crashes**, as expressed by proximity to reported bike crashes
  - **Social Equity**, as expressed by proximity to
    - minority populations,
    - low-income populations,
    - limited English proficiency populations,
    - persons with disabilities,
    - vulnerable roadway users (ages up to 18 or 65 and older), and
    - no-car households
- The Ped Plan used a similar Potential for Everyday Walking

## Further reading

- Massachusetts Pedestrian Transportation Plan
  - <https://www.mass.gov/service-details/pedestrian-plan>
- Massachusetts Bicycle Transportation Plan
  - <https://www.mass.gov/service-details/bicycle-plan>