Local

Pedestrian-First Traffic Signals

Make walk-signals intuitive and give people walking a head start

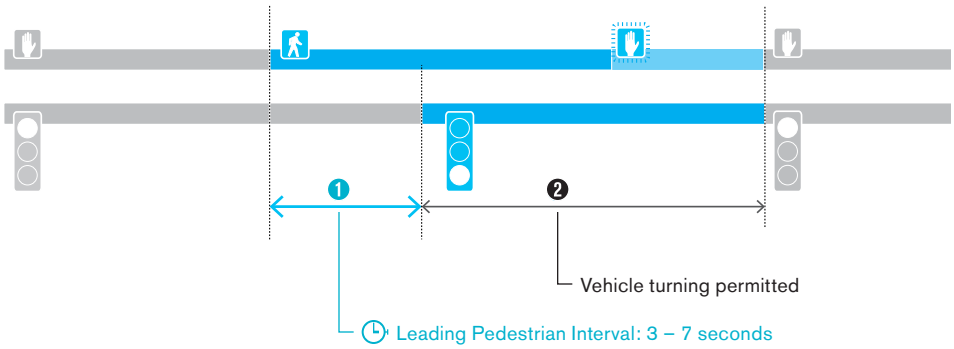
Policy Score

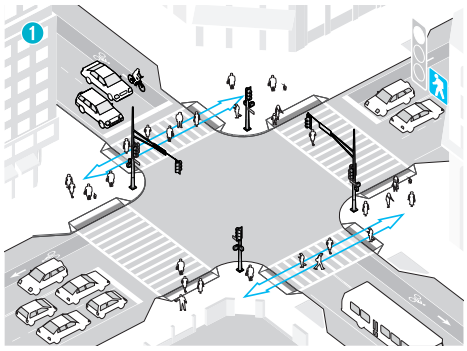
- ● Access 1
- ● Access 2
- ● Safety 1
- ● Safety 2
- ◕ Reliability
- ◕ Affordability
- ○ Sustainability/Resiliency 1
- ◕ Sustainability/Resiliency 2
- ● Governance

#9 in public voting

Policy Description

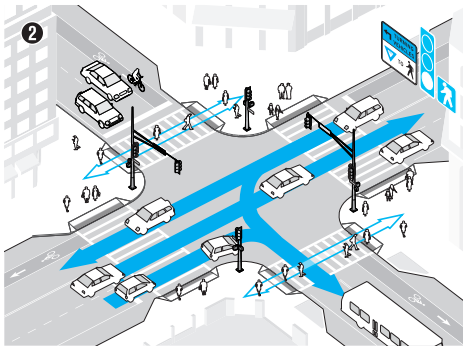
Every trip begins and ends with at least a short walk. Our traffic signals and intersection designs will recognize the importance of supporting people on foot by shortening wait times at crossings and making signals adapt in real time to pedestrian behavior and flows. Automatic pedestrian phases–not requiring people to push a button–will be standard, as will countdown timers with audible indications for those with hearing impairment. Leading Pedestrian Intervals (LPI's) will allow people to start crossing the street and be seen before cars are permitted to move or turn with a green light, reducing incidents of right-turning vehicles hitting or startling walkers. Walk signals will be shown on every intersection leg at any phase when there are not conflicts with oncoming cars. A "Don't Walk" will only be shown when the traffic is about to be released, allowing more time for more people to cross safely.





Leading Pedestrian Interval

Image source: *Boston Complete Streets*



Vehicle turning permitted

Benefits and Issues Addressed

Boston's walk-friendliness is often measured by walking distances and intersection frequency, but not all of our traffic signals provide convenient wait times, intuitive signal patterns, or minimum crossing distances. Many Bostonians regularly ignore signals if they show a "walk" too infrequently, which sometimes leads to conflicts. By reprioritizing people on foot at each intersection and making "walk" signals the norm, the City can promote walking for longer trips, create stronger perceptions of safety, reduce collisions, and create an environment where the temptation to cross the street "incorrectly" is dramatically reduced. Increased walk times can benefit older adults and people with disabilities the most.

Best Practices

Since 2010, Washington, D.C., has installed over 160 leading pedestrian intervals (LPIs) at intersections. Anecdotally, DDOT found that these were more effective when used in concert with No Turn On Red restrictions for vehicles.
www.pedbikeinfo.org/pdf/Webinar_PSAP_120215.pdf

A study in State College, PA, found that LPI reduced pedestrian-vehicles crashes by almost 60%.
nacto.org/docs/usdg/safety_effectiveness_of_lpi_fayish.pdf

Oakland, CA, is in the process of enacting a new signal policy that will prioritize pedestrians based on signal location and pedestrian counts. The policy is aimed at eliminating the need for pedestrians to cross using a push button and instead provides a pedestrian phase as a default.
www.gjel.com/blog/oaklands-new-pedestrian-signal-policy-a-half-step-forward.html

Implementation

Who's responsible: BTD is developing new traffic signal policies to build on existing work such as installing LPIs
Time Frame: Ongoing

Public Input

"Maximize people (especially kids!) crossing on foot, not automobiles, at intersections."
–Roslindale roundtable

"Pedestrian safety and convenience should be #1 in Boston. ... make all pedestrian signals automatic all the time, as many big cities across the US and the world typically do. If people know they will always get a walk signal, they are more likely to wait for one, improving safety for everyone."
–02143