

How much time does it take for a pedestrian to cross the street?

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It sounds like the set-up to an old joke, but it's not. It's just one of the random bits of trivia that I wondered about. For intersections with both high pedestrian and high vehicle volumes, I was able to find the Federal Highway Administration recommendation, which is to give pedestrians a head start to allow them to cross one lane of traffic before vehicles are given a green light, and the formula they use for determining how much time to allow is 2.8 feet per second. In the city of Bellevue, planners assume a pedestrian speed of four feet per second. At Microsoft campus, there is one dedicated pedestrian crossing, and the planners who designed the crossing came up with a clever hack to reduce the amount of time that traffic is stopped while still adhering to the four-feet-per-second rule. As you can see from the photo, there is an island in the road. Traffic is stopped long enough to allow a four-feet-per-second pedestrian to reach the center island. The pedestrian can then hit a crossing control button on the island to get a second chunk of time to complete the crossing. On the other hand, a faster pedestrian can complete the entire crossing within one cycle and the center crossing control is not needed. Before the pedestrian crossing was installed there, you would often see Microsoft employees jaywalking at that location by playing a game of real-life Frogger. You'd be driving along and catch a head peeping out of the trees on the median and have a brief moment of panic as you realized you were travelling too fast to stop in time if the person decided to take that moment to resume their crossing. Signs and warnings didn't stop people from jaywalking, so the traffic planners installed an official crossing, for which I am thankful. Now I no longer panic when I drive past that area.

(For completeness, here is the Washington State Crosswalk Law in pictures.)

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