Can the exact crossing location of pedestrians be predicted?

Walk21 Vienna, 22.10.2015
Ernst Bosina, Mark Meeder, Ulrich Weidmann
Study Location

Switzerland → Zürich → Affoltern → In Böden

Maps: openstreetmap.org & data.stadt-zuerich.ch
Before
After
Shared space
Study focus

- How is the street section used by pedestrians before and after the transformation?
- Did the crossing locations change?
Initial Situations

Pedestrian Guardrail

Crosswalk

Map: data.stadt-zuerich.ch
Important routes

Shopping centre in the street is main attractor for pedestrians.
Measurements
Pedestrian Crossing:
Total numbers
Pedestrian use the crossing, but not perpendicular.
Pedestrian use the crossing, but not perpendicular. They always try to walk the shortest path.

Map: data.stadt-zuerich.ch
Pedestrian use the crossing, but not perpendicular. They always try to walk the shortest path.

In the new situation the crossing location is more distributed, …
Pedestrian use the crossing, but not perpendicular. They always try to walk the shortest path.

In the new situation the crossing location is more distributed, but also shifted away from the shortest path.
Pedestrian use the crossing, but not perpendicular. They always try to walk the shortest path.

In the new situation the crossing location is more distributed, but also shifted away from the shortest path. Parked cars block most of the pedestrian.
Crossing Locations – Shared Space
Parking cars
Crossing Locations – Shared Space
Crossing Locations – Shared Space

Map: bing.com
Can the exact crossing location of pedestrians be predicted?

- People use the shortest path
- But quality is highly appreciated
Thank you!

ETH Zurich
Ernst Bosina
Institute for Transport Planning and Systems (IVT)
Stefano-Franscini-Platz 5
8093 Zurich

ernst.bosina@ivt.baug.ethz.ch