Examples of infrastructure with room for improvement

“Doglegs” before the corner cause a person to turn from their projected line of direction and then realign. This curb ramp points toward the busy parallel road, making alignment challenging.

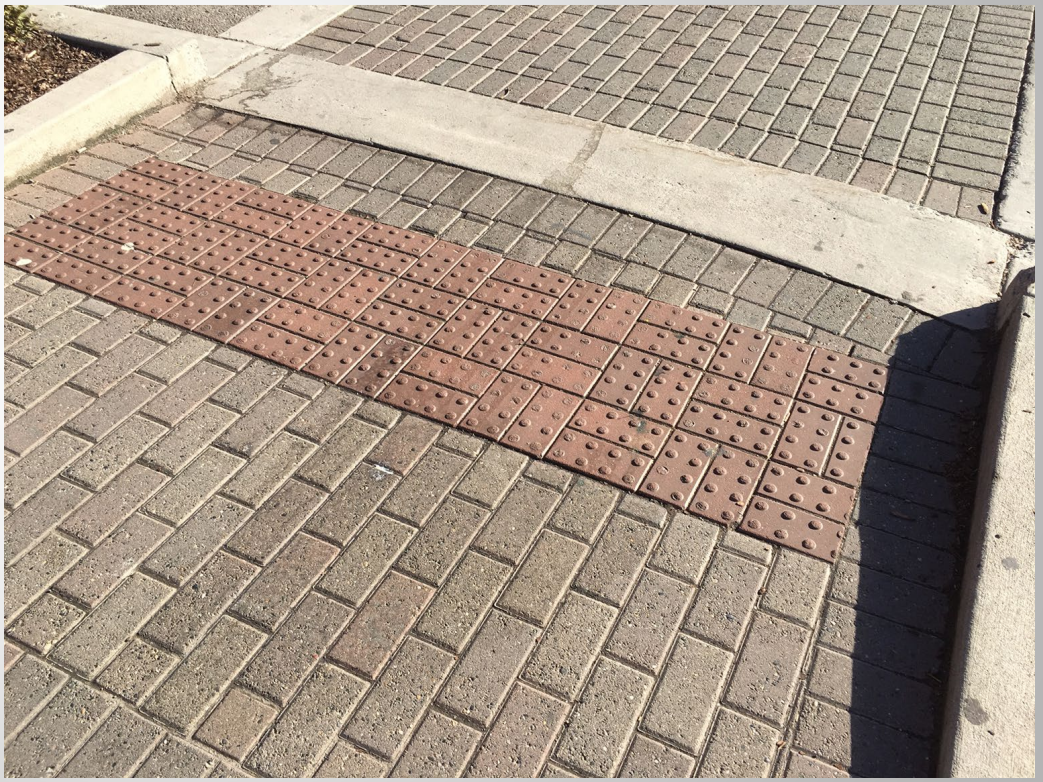
Francis and Colton

This approach takes a pedestrian from their projected line of direction. Traffic is light. Directional curb ramps would provide information for alignment that is not otherwise available.

White truncated domes at this corner are not providing contrast.

Because of the diagonal curb ramp, a wheelchair user must enter the road and then listen to traffic to realign. Realigning in the road could be hazardous for a traveler with vision loss.

Lack of contrast or texture



Other factors affecting ability to maintain alignment

- Blocked sidewalks
- Missing sidewalk pieces
- Poles and sidewalk furniture
- Inaccessible curb ramps
- Snow and ice

A person pushed off of a blocked sidewalk may come into contact with moving vehicles. Navigating parked vehicles while monitoring traffic includes encountering side mirrors and trailer hitches.

Other considerations

- Noise from lawnmower/snowblower, fountain, loud vehicles etc. makes traffic analysis difficult.
- Reluctance of many people who experience vision loss to using a white cane leads to a greater need for high contrast and APS. Designing for all ages and abilities ensures better access for all.
- People who participated in orientation and mobility training in the past may not have the skills to travel in the current and constantly changing environment. Roundabouts, more mid-block crossings, channelized turn lanes, actuated signals, leading pedestrian intervals and exclusive pedestrian phasing, micromobility, floating transit stops, and quieter vehicles are among factors continuing to evolve. As with driver training, people often do not realize that they would benefit from additional instruction as laws and infrastructure are changing.

Summary

Infrastructure design and installation have the potential to remove information being used for independent travel, especially information needed to align and cross streets. It also has the ability to preserve this information, and even provide additional information that would be used to promote independent travel.

A proposed design could be reviewed by considering what a pedestrian would encounter when attempting to:

- Navigate sidewalks or sidewalkless areas
- Locate the correct place to cross
- Align
- Determine when to cross
- Locate the upcurb
- Recover from possible veering

Resources

Accessible Pedestrian Signals:

Polara
1497 CR 2178
Greenville, TX 75402
https://support.polara.com/

Audible Warning Devices:

Speakmaster:
MDI WorldWide
38271 W Twelve Mile Road
Farmington Hills, MI 48331
Fax: 248-488-5700
Toll Free: 800-521-6776
EMail: tcpsales@mdiworldwide.com

http://www.mditrafficcontrol.com/ada_speakmaster

Empco-Lite
Elgin Molded Plastics
847-931-2454
www.elginmolded.com