ALL STATIONS ACCESSIBILITY PROGRAM (ASAP)

Mayor's Pedestrian Advisory Council Meeting
May 10, 2017

DRAFT

ASAP Introduction

Goal: To create an accessible rail system within 20 years

- 45 of 145 CTA stations are currently non-accessible

- 3 of these stations are currently under design and/or construction

- 42 of these stations will be made accessible as part of the 20 year program

  - 8 of these stations are part of the *Blue Line Forest Park Vision Study*

  - 14 of these stations are part of the *Red-Purple Modernization (RPM) Program*

  - 20 stations are not part of any existing program

- Replacement of 155 existing elevators at CTA rail stations is also part of **ASAP**

Conceptual, artist's rendering of Quincy station improvements

Station Design Principles

ASAP proposed station modifications include:

- New elevators meeting ADA standards

- Power assisted doors

- ADA fare array

- New ADA braille and signage

- Accessible customer agent kiosks and staff toilet rooms

- Increasing platform clearances for wheel chair maneuverability

- Evaluation of additional code requirements (i.e. exiting and NFPA 130)

- Adjacent sidewalks and street crosswalks made ADA accessible

- Consideration of wayfinding elements

ASAP - WAYFINDING ELEMENTS

- Six categories of wayfinding elements identified -
    - o Tactile Ground Surface Indicators
    - o Floor Graphics
    - o Pedestrian Routes to Bus Stops & Accessible Pedestrian Signals (APS)
    - o Tactile Maps
    - o Directional Signage
    - o Way Finding Applications (APP's)

- Some of these may be more suitable for application in CTA system than others and some may be more suitable for application in certain types of stations.

- We are investigating these treatments by asking other transit agencies who have used them about their experience, coordinating within different CTA departments to understand on what would be suitable for our system, and coordinating with CDOT.

- There is no one wayfinding approach that would meet the needs of all transit users and a combination of different solutions may be needed.

Tactile Ground Surface Indicators

Tactile Ground Surface Indicators assist pedestrians who are blind or have a visual impairment in navigating the environment.

Warning Surfaces (truncated domes)
- used in the United States on transit platform edges and the bottom of curb ramps.

Directional Surfaces
- indicate the direction of travel

- more commonly used in Asia, Europe, and Canada.

- a common concern with these is that they may also create obstructions for wheelchair users when placed in a common pathway.

CONTRASTING FLOOR GRAPHICS

Contrasting Floor Graphics is helpful for people who have some sight and normally rely on that sight, as well as other aids, to navigate through the environment. 85% of people considered blind retain some vision.

- Floor graphics with color, high contrast, patterns and light can enhance identification of routes through a complex station and help identify important elements such as fare arrays or vertical transportation, or help navigate details like stair nosings

- The CTA has used contrasting colors on stair tread nosings and landings in some recent station projects

PEDESTRIAN ROUTE FROM RAIL STATION TO BUS STOP

An accessible pathway from rail station to a bus stop is an essential element of overall accessible service.

Color contrast crosswalk with curb ramps

Color contrast crosswalk with tactile surface

An accessible route from a CTA station to a CTA bus stop would include:

- Sidewalks that do not present significant cross or running slopes

- Compliant curb ramps

- crosswalks with cane detectable surfaces

- Color contrasting cross walk borders

- Accessible Pedestrian Signals (APS)

Accessible Pedestrian Signals (APS)

APS provides information for blind and deaf/blind pedestrians at street crossings through audible signals and vibrotactile surfaces.

The CDOT is currently analyzing different technologies for APS and is working on a pilot program.

TACTILE MAPS

Tactile maps are modeled using raised surfaces to enable people who are blind or visually impaired to plan routes through a rail system, a transit line, or a building.

The visually impaired community has a wide range of capabilities and spatial recognition when it comes to using and benefitting from tactile maps.

DIRECTIONAL SIGNAGE

Since 85% of the people considered blind or visually impaired retain some vision and rely on that limited vision, it is important to provide information and directional signage that allows people with low vision to move independently.

The CTA currently provides required directional and informational signage.

Millennium Park
Chicago, Illinois

Directional signage for wayfinding should incorporate -

- Frequent signage
- Enhanced signage lighting
- Contrast – dark character on light background
- Large characters w/ San Serif text
- Non-glare

Wayfinding Applications (APPs)

APPs are being developed for smart phones that use WiFi and beacons for interior mapping and navigation.

This is an emerging technology. DC Metro recently implemented a pilot project in one of their stations. One limitation of this system is that it may be only useful to people with smartphones.

WAYFINDING RECOMMENDATIONS FOR ASAP

CTA's proposed wayfinding recommendations for ASAP include –

- find pilot station locations for tactile ground surface indicators and additional floor graphics – we will need to analyze both how this works functionally and the materials that could be used;

- coordinate with CDOT on pedestrian routes outside rail stations to bus stops and potential installation of APS;

- explore tactile signage at bus stops to assist with exact location. CTA is currently preparing rail station guides to assist with navigation inside rail stations, which will be available online soon and will serve a similar purpose as tactile maps;

- further enhance directional signage and lighting in stations;

- seek feedback on wayfinding apps from users in other systems on adaptability and usability of these apps and remain engaged on the topic with the goal of potentially adopting something like this when the technology is better proven.