

Accessible BART Station Maps (ABSM) FAQ

What is the Accessible BART Station Maps project?

With the support of New Freedom funds the LightHouse for the Blind and Visually Impaired in conjunction with the Smith Kettlewell Eye Research Institute are developing accessible maps of Bay Area Rapid Transit (BART) stations to facilitate safe and more effective travel for individuals who are blind or visually impaired.

What are we making?

Portable, low-cost, audio-tactile maps of BART stations. Each BART station is shown in three views: platform, concourse and street-level. Maps are tactile, large print, high contrast color and Smartpen enabled. By tapping on the map, consumers hear information about that feature being tapped. These multiple layers of accessibility allow use by people with a wide variety of visual disabilities.

Why are we making it?

To support independent travel within the BART system by blind and visually-impaired transit riders. The information necessary to plan a trip extends well beyond the need for schedules and transfer stops. Knowledge of station layouts, landmarks, and important features within stations greatly enhances the efficiency and confidence with which blind people navigate. The ABSM project is based on the idea that navigation into and out of the BART system, transfers within the system, and successful connections to and from buses, taxis, and other transit are greatly facilitated by better way-finding information within the BART stations themselves.

What is a Smartpen?

A Smartpen is a device containing a small computer, video camera, and speaker. The technology was developed in Sweden by a company called Anoto. Pulse and Echo Smartpens are made by Livescribe who also provide a Software Developer Kit (SDK), so that people can write applications for the Smartpen.

How does it work?

LiveScribe Smartpens have been adapted for use as a platform for audio-tactile graphics through research and development by Smith-Kettlewell, Touch Graphics, and Vanderbilt University (Miele and van Shaack, 2008; Miele and Landau, 2009). Through the video camera in the tip of the pen, it can immediately identify what page it is touching, as well as its exact location on that page, for specially printed materials. Thus, it can announce audio labels and additional spoken information for the station maps simply by tapping the feature with the tip of the pen.

When will these maps be available?

The three station booklets will be available by January 2012. Though there are still considerations related to production to sort out we expect all maps will be available by July 2012.

How do I get them?

Maps and Smartpens will be distributed through the LightHouse for the Blind and Visually Impaired in San Francisco. Maps will be available for reference at station agent booths. Smartpens are available from Best Buy, the Apple Store, Staples, and Brookstone.

How much will they cost?

We're still considering different fabrication methods, materials and related production costs so the price is To Be Determined, but the objective is make them very affordable for individuals.

The Accessible BART Station Map project is funded in part by a New Freedom grant from the Federal Transit Administration (FTA.) The New Freedom grant program seeks to reduce barriers to transportation services and expand the transportation mobility options available to people with disabilities beyond the requirements of the Americans with Disabilities Act (ADA).

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