



# BART Smart

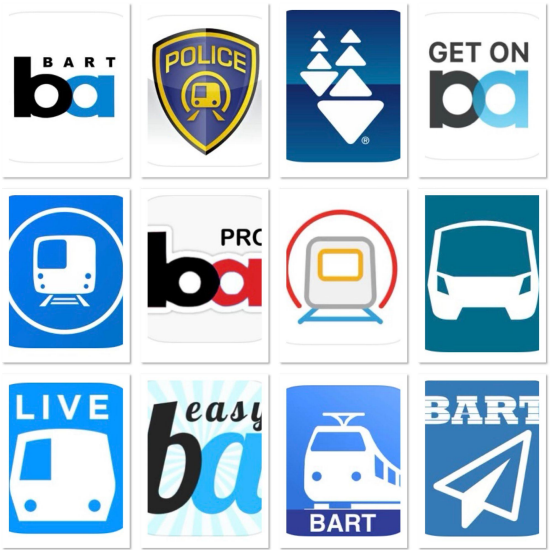
Centralizing BART resources to maximize efficiency and improve user experience

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## How to improve the BART experience?

There are currently 23 Bay Area Rapid Transit related apps, 3 of them being official apps, and although each of them individually does important things, it takes a minimum of 4 to have access to all the important features.

So why isn't there an app that has all the BART necessities in one? Let's ease the load off our users and put the most used BART features into one, reimagined app.



### My motivation

As a frequent BART user, I found myself frequently switching between 4 apps during my commutes: Clipper(to update my card balance), BART Official(to look at train times), *easy BART* (to look at the train maps), and I always feel safer knowing I have the BART Watch app. Consequently, I tasked myself with designing a new, reimagined, BART app that contains the most used and helpful features.

### What I did

- Talk to BART users
- Identify a gap in accessibility and production
- Incubation
- Research coordination
- Wireframe
- Prototyping
- Get feedback from BART users
- Adjust

A well rounded BART app would contain all the features and resources necessary for a smooth BART experience. These being:

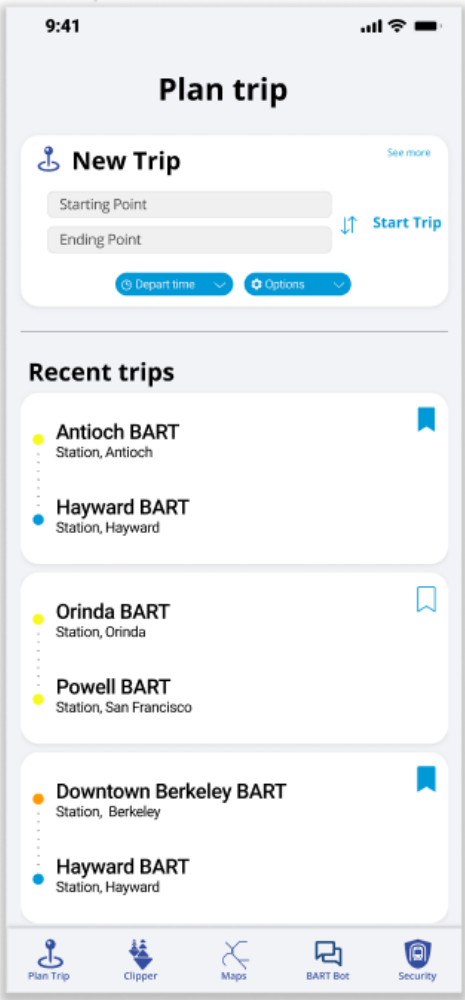
- Plan Trip feature
- Clipper
- Quick access to maps
- Someone to ask questions to
- Quick access to BART security

The main goals of this project are to:

1. Centralize BART resources
2. Make app first-time BART user friendly
3. Simplify “Plan Trip” process and reword directions
4. Redesign Clipper page to have a cleaner look
5. Add BART maps
6. Introduce a new help Bot feature
7. Include BartWatch app

## Plan Trip Simplified

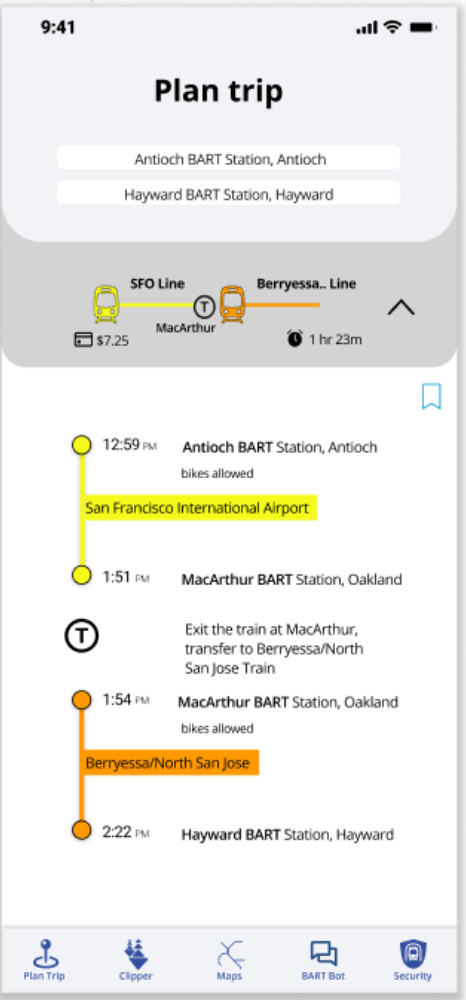
Plan Trip- main screen



Plan Trip- location entered



Plan Trip- location selected



These redesigned BART Plan Trip pages offers users a clean, easy to understand, and efficient way to plan their BART routes and see all options available to them.

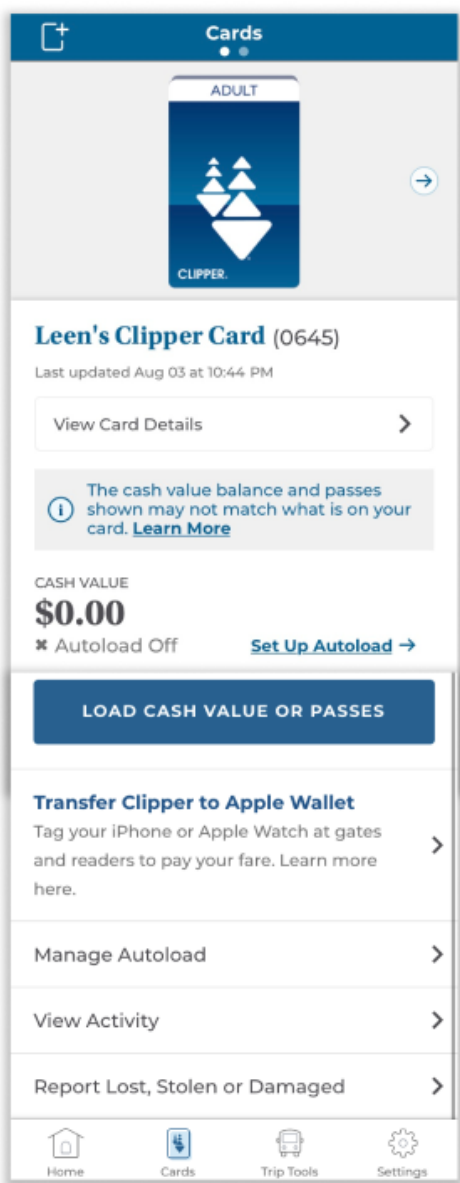
Based on my interviews with over 15 frequent BART users, the Plan Trip is their most used transit resource, as a result, this is the first page that users are shown after opening *BART Smart*.

The intentional use of colored trains and train lines allow users to at a glance understand which transit line they should be on; however, for users with visual impairments or who are not as familiar with what color each line is, it is also written in bold which line they should be on.

Further, the final page of the Plan Trip includes transit instructions which are worded much more clearly than the original BART app, as it simplifies the steps to a degree in which a first time BART user would clearly understand when to exit the train and transfer stations.



# CLIPPER – Redesigned



Official CLIPPER app

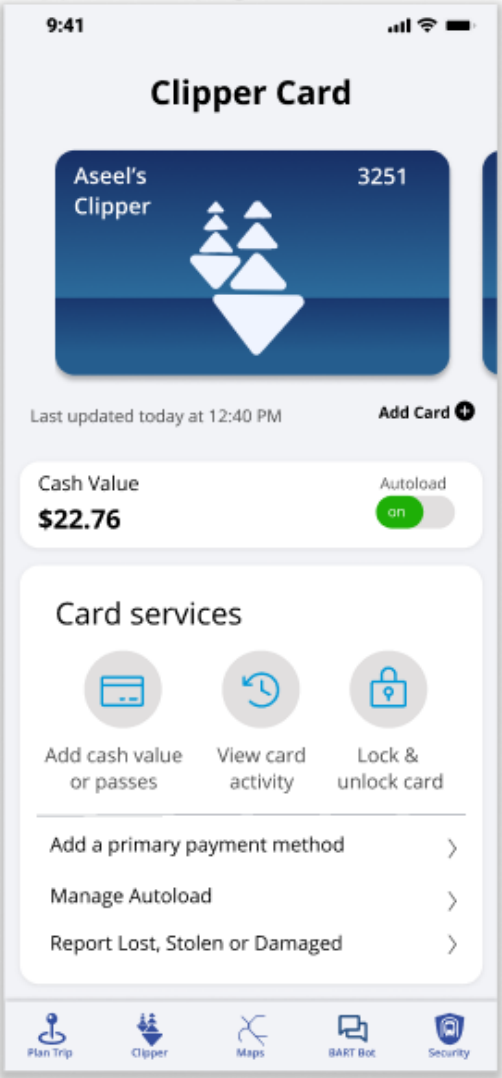
To properly redesign the CLIPPER app, I asked frequent BART users which features they used the most and the least. The main issues with the official CLIPPER app (shown on left) are as follows:

1. Cash value amount is too low on the screen
2. Most users use the app to add value to card, so this button should be one of the first elements users notice
3. There is wasted space (ie. how the clipper card takes up a quarter of the screen but does not add any substance)
4. Users download the CLIPPER app primarily to manage the money on their card; however, the tab section shows that there is a “Trip Tools” tab, which is not necessary for the purpose of the app and is also unorganized.

The redesigned version (to the right) takes into account what users had downloaded the CLIPPER app for and puts it all into one simple page. This new version takes into account:

1. How the CLIPPER app was primarily used to check card balance and add value to card
2. What the users attention should be drawn to first
3. A simpler display of card services
4. The addition of a new Clipper feature which allows users to temporarily lock and unlock their card if they cannot find it at the moment. This is a much more feasible route to take when a users card is lost, in comparison to the option provided on the official Clipper app which only allows users to permanently block the use of the card.

Clipper Card page



Redesigned CLIPPER page

# BART Maps Feature

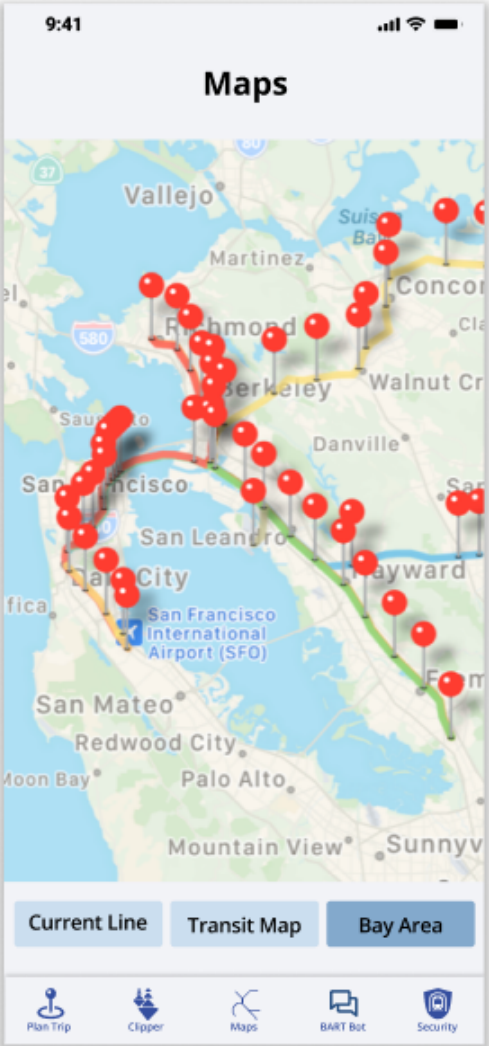
Default map shown



Current line map



Bay area map

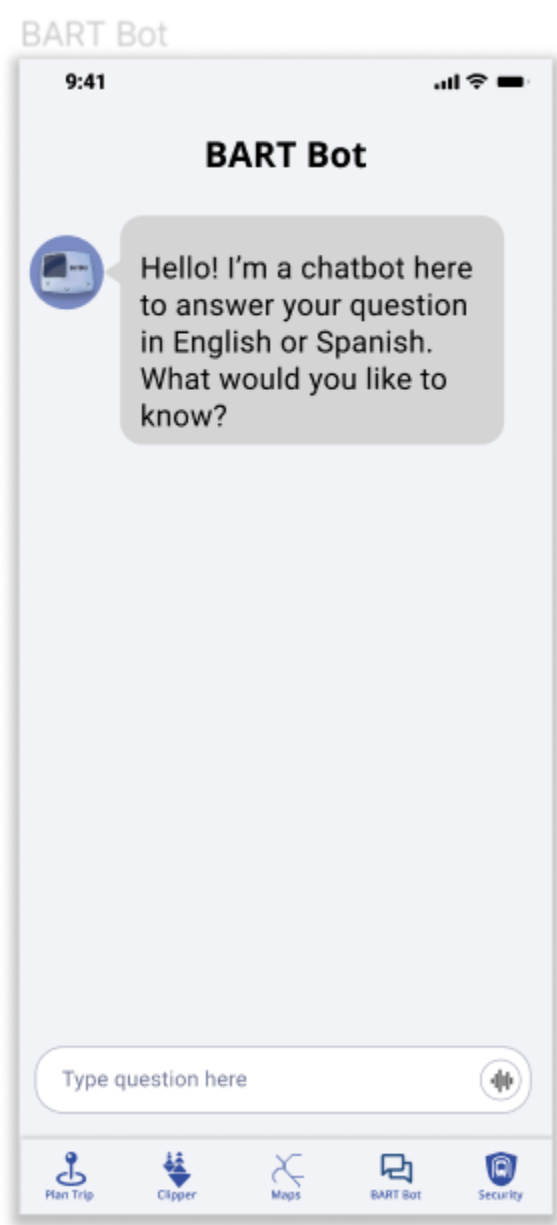


Interestingly enough, the Official BART app only offers the users the transit map, and even then users must search for it in the “More” tab. Upon asking BART users what resources they use the most, all responded with the BART map. This resource is essential to all BARD riders as it offers all the information one needs to get to their destination; consequently, it should be easily accessible to users.

The Maps tab (as shown above) directs *BART Smart* app users to three essential apps: the “Transit map”, which shows train lines, the “Current Line map”, which highlights the line the user is currently, and the “Bay Area map” which simply is a map of the bay area with the BART stations/routes pinned, thus allowing users a broader view of where they can get to with bart.

Further, all the maps are zoomable/movable. This allows greater accessibility and makes it easier to follow the transit lines.

**“BART Bot”- a new conversational AI bot**



As someone who commutes around 3 hours daily using BART, I have heard many people ask others questions related to navigation, ranging from “Does this train go to Antioch” to “When should I exit the train to transfer”. Although such questions can be answered by looking at the map, many BART riders find themselves asking strangers, whether that be because they don’t know how to read the map, are first time riders, or just need assurance. The process of asking strangers such questions can be very anxiety inducing, as some questions are often not responded to or there may be no one for the rider to ask.

So, what’s the solution? A new feature called BART Bot! Using artificial intelligence technology and machine learning, a virtual and automated support system can easily be created for BART riders. As shown in the image to the left, once users press the “BART Bot” tab, they will be greeted with an automated message that asks how it (the bot) can assist. From there, users can enter questions such as “ I’m at Orinda Station, how do I get to Lake Merritt Station?” and the bot could easily deduce the solution by plugging in given information then outputting a response. All the bot has to do is take the question, access key words, and use the information it already knows to give a response.

In this day and age of technology, such a feature of virtual assistance is relatively simple implement, and users would surely find it beneficial in many aspects.

Click [here](#) to view the BART Smart prototype!