



***brightline***

Brightline Mobile App

# Usability Testing Findings & Analysis

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# Executive Summary

We conducted a usability study to test several common tasks on the Brightline train mobile app.

Brightline is an express intercity higher-speed rail system in Florida.

Both positive and negative usability issues were observed during testing that included **nine participants**.

## Main takeaways include:

- The booking process is clear and the app gives users a straightforward entry point to begin booking a trip.
- The app's overall performance and technical issues can easily frustrate users.
- Aspects of the seat selection task in the booking process has room for improvement.

# Research Goals

- **Observe** user patterns and behaviors as they attempt a set of common tasks using the mobile application
- **Identify** how easily users accomplish common tasks
- **Understand** users' experiences and expectations as they work with the app
- **Gather** user attitudes and perceptions as they relate to this type of booking app

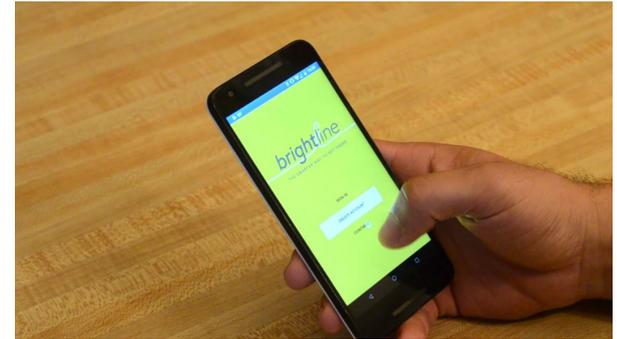
# Participants

**We recruited nine individuals for testing.**

- The majority of participants travel using plane, train, or bus about 1 to 2 times a year.
- About half have used a mobile app to purchase a ticket for a train, bus or plane.
- Only three participants had heard of Brightline, and two used the service before. No tester ever purchased a ticket using the app.
- Testers used their own devices, which included Android and iPhones.

# Methodology

- Our formative usability study followed the “**think aloud**” protocol by asking test participants to describe their thoughts as they attempted to complete three tasks.
- We recruited **nine participants** and used a moderated usability testing method. Each participant’s voice and phone screen was recorded.
- A set of pre-test and post-test questions were asked to gain further user insights.



# Methodology

## How we analyzed the data:

- Each video was observed, which helped surface patterns and themes based on how users navigate the app and attempt the tasks.
- From the initial observations and findings, themes were sorted and given prioritization based on frequency of the issue and other qualitative feedback. Post-test questions also help to influence the findings.
- We then developed recommendations that address several of the findings.

# Task Success

**Task 1:** You'd like to book a trip from Miami to West Palm Beach this Saturday afternoon and you'd like a window seat traveling the same direction of the train. Please walk us through how'd you do this.

**Task 2:** You'll be using the Brightline for work each day so you want to purchase tickets in bulk. How would you go about doing this?

**Task 3:** You have a small puppy you'd like to bring with you on a trip to Miami using the Brightline. Are pets allowed? Is there a fee or any restrictions?

User	Task 1	Task 2	Task 3
P1	C	C	C*
P2	C*	C	C
P3	C	C	C
P4	C	C	C
P5	F	C	C
P6	C	C	C
P7	C	C*	F
P8	C	C	C*
P9	C	C*	F

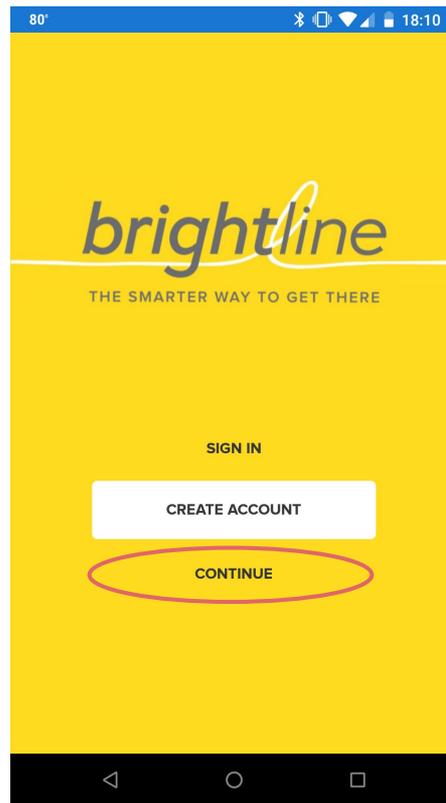
C=completed, F=failed did not complete, C\*=completed with difficulty.

# ■ Findings - Positives

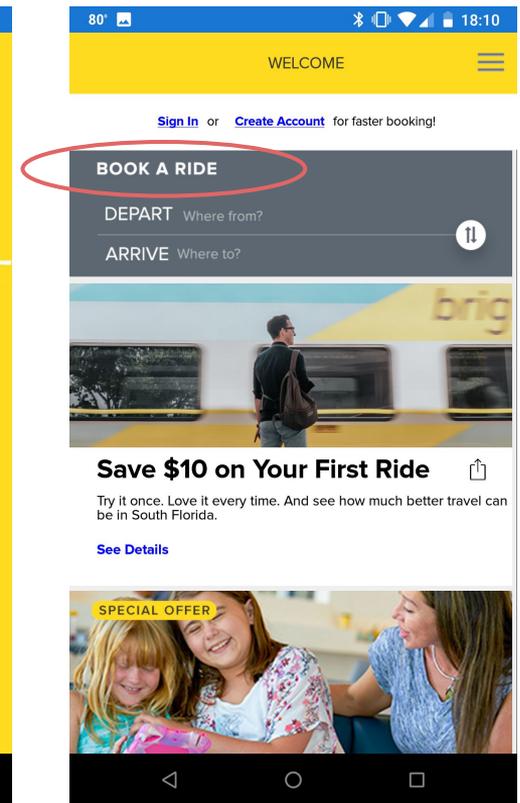
## POSITIVES

1. The **continue “as guest” mode** on the app allows users to quickly book travel and doesn’t roadblock them into creating accounts. Users appreciate this and all testers took this path.

2. Nearly all users were able to easily **start the booking process** and had little difficulty in identifying where to begin.



**Finding 1** - All users used “continue” to start the booking process. Users can jump into the app avoiding the account creation friction that can easily lead to frustrations.

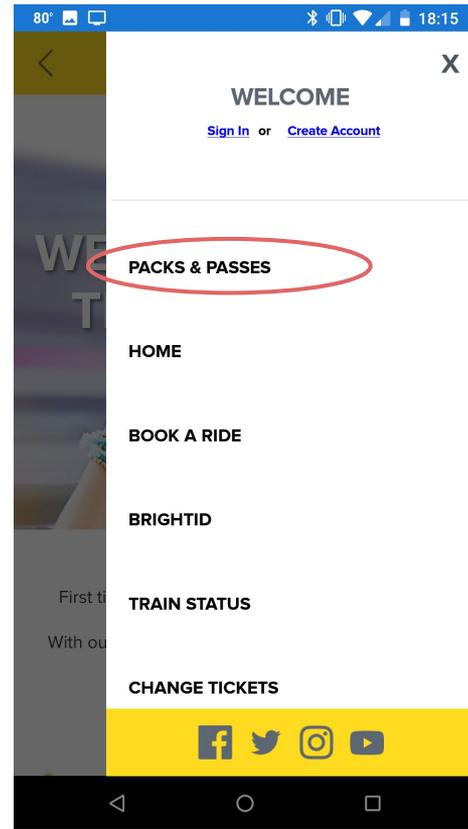


**Finding 2** - All users were able to start booking a trip seamlessly from the app’s homepage.

## POSITIVES

3. The “packs and passes” language is **understandable to users** who want to purchase bulk tickets. Nearly all users first tapped this link when opening the navigation.

4. **The navigation is clear**, and users were able to find out information on pet policies easily through the support section’s FAQs.



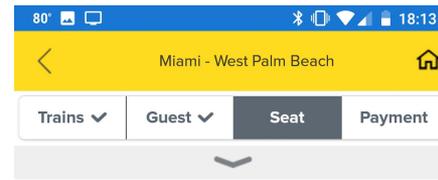
**Finding 3** - Users had little hesitation before selecting “Packs and Passes” for the bulk tickets task.

# ■ Findings - Areas of Improvement

## APP PERFORMANCE

5. The app's **overall performance** could be improved. Many users struggled with slow animations, lag time between pages, and unexpected crashing. The app crashed for two users, forcing them to restart. Subtle frustrations like these can lose users and create distrust in the booking process.

- “The app’s a bit laggy right now.” - P2
- “I may have frozen the app. I hit the back button instead of the home button.” - P3



Please wait...



**Finding 5** - The app frustrated users with its performance issues, causing users to lose trust in the system.

## SEAT SELECTION

6. Selecting seats after providing personal information is unexpected. The booking flow doesn't allow users to view/select seats for trains before putting in personal information. **Nearly half of testers** thought they could bypass the form and go straight to the seats by tapping the the progress indicator label "Seat."

80° 18:13

1 GUEST

DATE OF BIRTH\*  
8/7/1993

AFFILIATION

EMAIL ADDRESS\*  
janedoe@email.com

PHONE

PHONE TYPE

Special Requests

The best seat has been reserved.  
View Seats or Continue

CONTINUE TO PAY

80° 18:12

1 GUEST

Trains Guest **Seat** Payment

SUMMARY

Sat 11 Aug 2018

Miami → West Palm Beach

Departs 9:13 AM

Arrives 10:27 AM

Service Smart

Guest 1 \$15.00

Train 1 Total \$15.00

TOTAL PRICE \$15.00

SIGN IN or CREATE ACCOUNT for faster booking!

Guest 1

Required info is missing.

FIRST NAME\*

**Finding 6** - Selecting the View Seats link requires you to fill out personal information first. There is no way to see seats before filling in this info. Nearly half of users tried to tap the "Seat" button-like progress indicator.

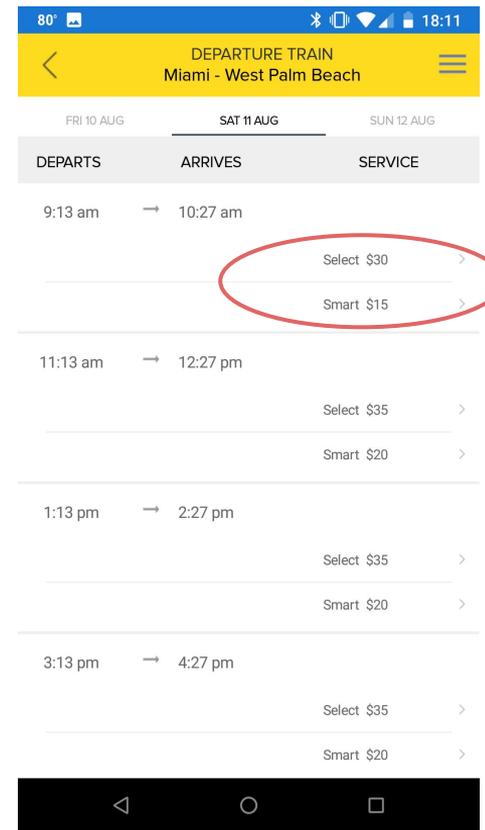
## SEAT SELECTION

“I want to see the information first before giving my information. I like traveling in the direction of train, so if there wasn't a seat in the direction of the train I'm going, I may go back and look at another train time.” - P3

## SEAT SELECTION

7. Smart and Select seat choices can be confusing, and it's unclear to some users how they differ. Many users have a coach vs. first/business class mental model, which doesn't match the app's language.

- “I have no idea what smart or select is. I'm going to select Smart because it's the cheapest.” - P1
- “What's the difference between select and smart? I don't know the difference between the two. I wish it would have told me.” - P4



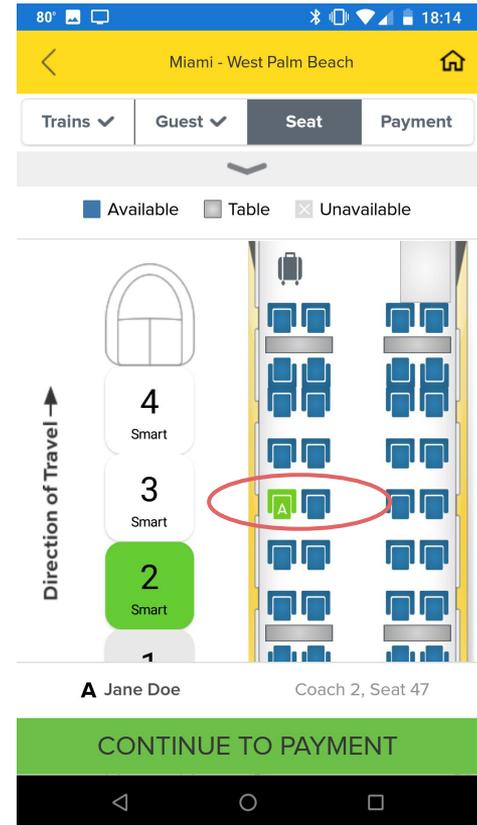
**Finding 7** - There isn't much to distinguish “Select” from “Smart” beyond price. Users seemed confused by the differences.

## SEAT SELECTION

### 8. The seat icons are **difficult to distinguish**.

It's unclear to users which way they are facing. Users hesitated when trying to select a seat in the direction of travel.

- “I’m really unsure which seats are in the forward direction.” - P1
- “It’s very hard to tell which way I’m actually facing.” - P8
- “To me this chair seems to be facing the correct way.” - P2



**Finding 8** - Forward- and back-facing seat icons were difficult to distinguish.

## SEAT SELECTION

9. Users didn't always notice the app had pre-selected a seat for them. Some users **skipped the seat selection** since the call-to-action button takes users past this step to the payment page.

- “I don't know where you select seats - maybe it's at the end.” - P2

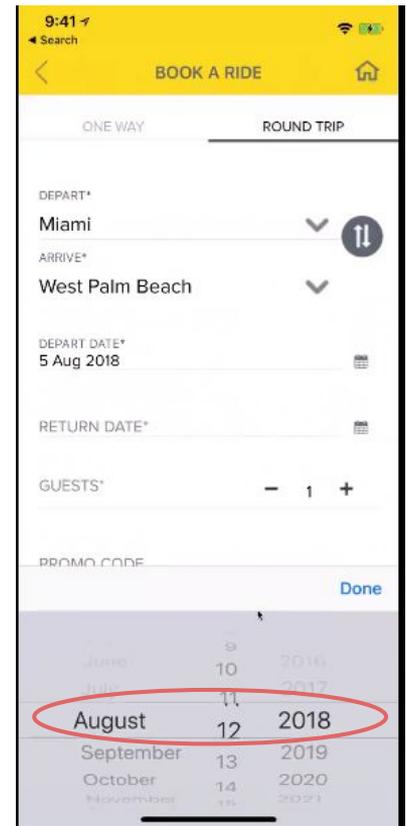
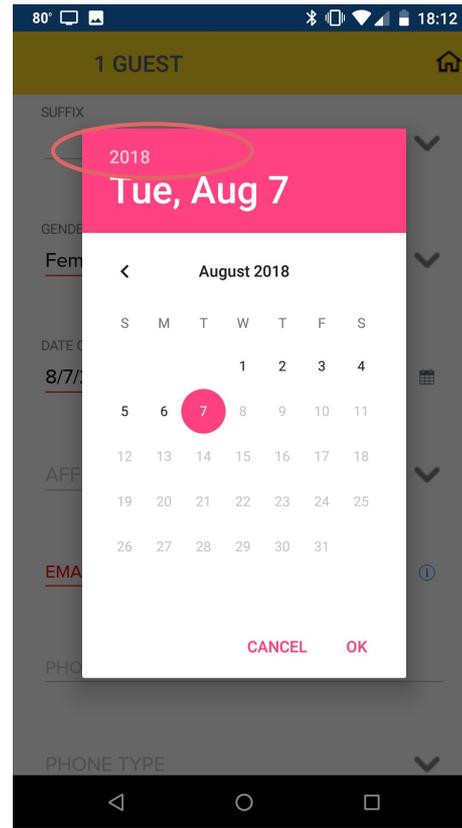
The screenshot shows a mobile app interface for a booking process. At the top, there's a status bar with weather (80°), signal, and time (18:13). Below that is a yellow header with '1 GUEST' and a home icon. The form contains several input fields: 'DATE OF BIRTH\*' with the value '8/7/1993', 'AFFILIATION' with a dropdown arrow, 'EMAIL ADDRESS\*' with the value 'janedoe@email.com', and 'PHONE'. Below these is a 'Special Requests' toggle switch. At the bottom, there's a light blue banner with a chair icon, the text 'The best seat has been reserved.', and two links: 'View Seats' and 'Continue'. Below the banner is a green button labeled 'CONTINUE TO PAY', which is circled in red. The bottom of the screen shows the standard Android navigation bar.

**Finding 9** - If users follow the flow in the booking process, the main call-to-action button bypasses the seat selection, since the app pre-selects seats, which is not clear to users.

## BOOKING PROCESS

10. While calendar widgets can be helpful, they are cumbersome to select date of birth since users must identify a way to select a different year.

iOS users have an easier time with the date selection, but have to view departure and return dates in a non-calendar view, which makes it hard to identify a specific day of the week.

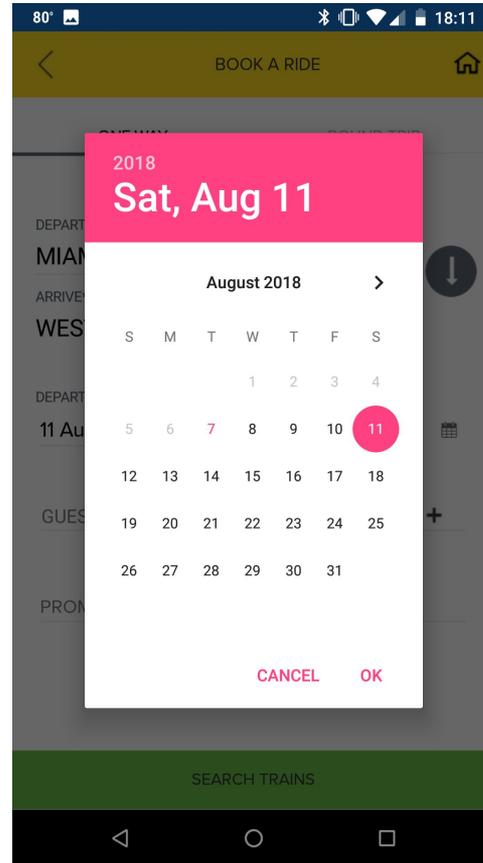


**Finding 10** - More than half the testers (with Android) didn't know that tapping the year allows them to select a different year. Many users swiped left on the calendar until they reached their date of birth. iOS devices have a list view of dates.

## BOOKING PROCESS

“Kinda an annoying calendar selection ... am I supposed to go back all the way to my date of birth?” - P5

“I hate these datepickers” - P6

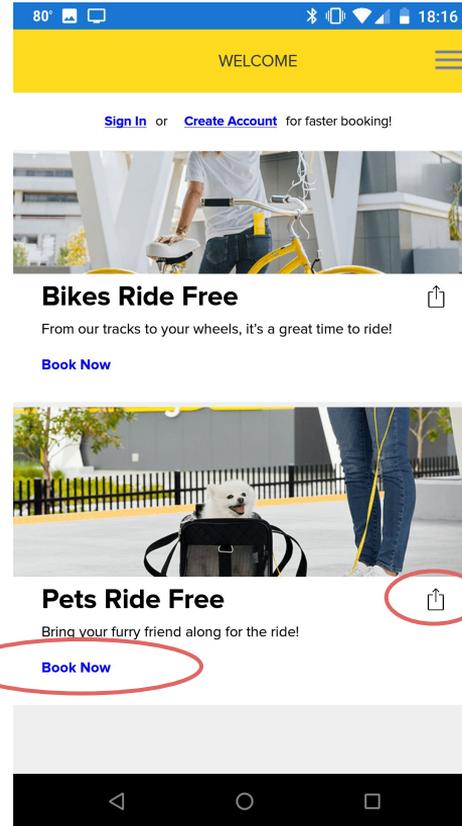


## POLICIES AND FEATURED CONTENT

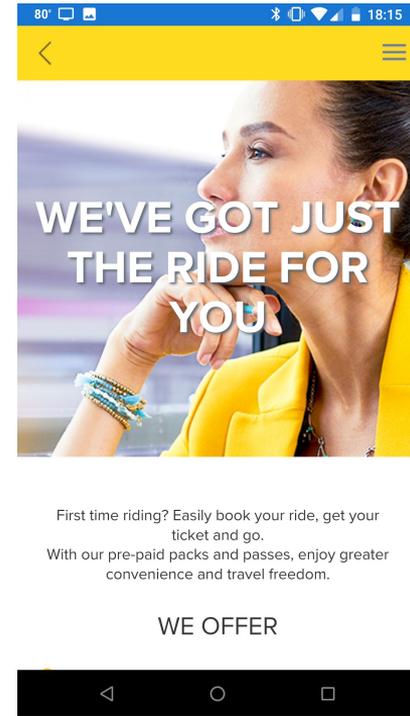
11. Homepage features (like pet policy) don't provide additional information with a link for more details, something users expect.

- “When I click on it, it doesn't show me any options.” - P7

12. The Packs and Passes page doesn't clearly label “coming soon” above the fold. This forces users to scan the page longer than necessary.



**Finding 11** - Features on the app's homepage don't link to additional information, something users expect. Many tried to tap the “share” icon, which lead to unexpected results.

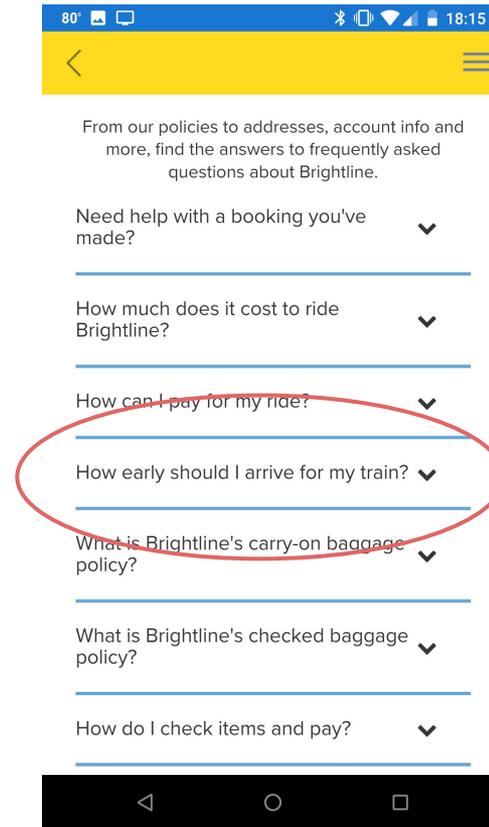


**Finding 12** - Packs and Passes page doesn't label the fact they are unavailable above the fold.

## POLICIES AND FEATURED CONTENT

13. The list of FAQs lack groupings and the long list of questions **can make scanning difficult**. The repetitive prose increase users' cognitive load.

- “Did I not find it, did I miss it?” - “I missed it the first time.” - P1
- “I liked the FAQs, but there was a lot of FAQs.” - P1



**Finding 12** - The FAQs lack specific groupings and follow question formats, “How ... or What ...” which leads to repetitive language, making scanning more difficult.

# ■ Recommendations

## RECOMMENDATIONS - OVERALL

- Improve the app's overall performance where possible. Encourage users to report technical bugs. **(Finding 1)**

- Keep calendar widgets, but allow users to manually enter dates if they choose (booking dates or DOB).

- Include more prominently “coming soon” on the Packs and Passes page.

- Link homepage features to more details, where appropriate. Users want more information and the system should offer a link to do that.

- Create groupings and reduce question length and repetitive prose for FAQs. Create categories of questions to help users scan the page easily.

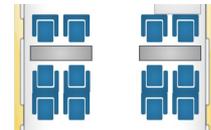
## RECOMMENDATIONS - SEAT SELECTION & BOOKING

Research if displaying seat options before asking users to put in personal information is feasible. Accommodate users flexible booking styles. If the system allows for flexible booking, give users the option to advance to the seat selection before adding personal information.

Redesign the progress indicator for the booking flow to not resemble buttons. Many users tried to tap them.



Redesign seat icons to imply stronger affordances toward the direction the seat is facing. Users struggled and hesitated when asked to select a seat in the direction of the train travel.



## RECOMMENDATIONS - SEAT SELECTION & BOOKING

Provide more **targeted descriptors** informing users that the system pre-selects seats. Most testers failed to notice that a seat was already selected for them. The app should take users through the seat selection page before payment, even though a seat is pre-selected. Don't skip steps that are included in a step indicator hierarchy.

Distinguish more clearly between **Smart and Select** seat types. Many users have mental models which include coach/business/first class, and apply this thinking toward differently priced tickets. If possible, include more descriptions of seat options on the booking page of train times and price.

# Additional Research Questions & Next Steps

Conducting further research will help identify answers to outstanding questions:

- What additional pain points do users encounter while attempting other common tasks?
- Does improving the seat selection booking process (flow, icons, etc.) lead to a better booking experience?
- How do other similar booking apps compare? Conducting comparison usability testing may help identify additional improvements to the Brightline app.

**Next Steps:** Review recommendations and determine feasibility of changes.

# Appendix

# Participant List and Video Links

User	Video Link
P1	<a href="https://video.kent.edu/media/BrightlineA+Usability+Test+-+Sean-P1/1_kneppcec">https://video.kent.edu/media/BrightlineA+Usability+Test+-+Sean-P1/1_kneppcec</a>
P2	<a href="https://video.kent.edu/media/BrightlineA+Usability+Test+-+Sean-P2/1_y3pnz0iv">https://video.kent.edu/media/BrightlineA+Usability+Test+-+Sean-P2/1_y3pnz0iv</a>
P3	<a href="https://video.kent.edu/media/BrightlineA+Usability+Test+-+Sean-P3/1_idoqq106">https://video.kent.edu/media/BrightlineA+Usability+Test+-+Sean-P3/1_idoqq106</a>
P4	<a href="https://video.kent.edu/media/brightline_rick/0_wqwtcu3z">https://video.kent.edu/media/brightline_rick/0_wqwtcu3z</a>
P5	<a href="https://video.kent.edu/media/brightline_nancy/0_9xhpyoir">https://video.kent.edu/media/brightline_nancy/0_9xhpyoir</a>
P6	<a href="https://video.kent.edu/media/brightline_matt/0_7a4wx3g2">https://video.kent.edu/media/brightline_matt/0_7a4wx3g2</a>
P7	<a href="https://video.kent.edu/media/Mobility+Testing+-+Brightline+1/1_dsl97eec">https://video.kent.edu/media/Mobility+Testing+-+Brightline+1/1_dsl97eec</a>
P8	<a href="https://video.kent.edu/media/Mobility+Testing+-+Brightline+2/1_t5nbj8ef">https://video.kent.edu/media/Mobility+Testing+-+Brightline+2/1_t5nbj8ef</a>
P9	<a href="https://video.kent.edu/media/Mobility+Testing+-+Brightline+3/1_xb5zj55a">https://video.kent.edu/media/Mobility+Testing+-+Brightline+3/1_xb5zj55a</a>