Good morning everyone! My name is Jaime McKay and I am new member of the MDOT MTA Planning team. I’m here today to provide a snapshot of the transit data we have, and to share the ways it’s being used and to challenge you to think of new ways it can be used.
Let’s begin by providing an overview of our static resources. What types of static resources do we provide? We have schedules, geographic pocket maps, rider guides, BaltimoreLink.com, mta.Maryland.gov, and more!
We’ve also listened to our ridership and created accessible route sheets, enabling individuals with visual impairments, older adults, and people new to transit and to our community to have a better understanding and greater context of the system.
Design Process

We reviewed schedule designs with various stakeholders to add and refine desired features, and we studied international precedents for ideas.

One feature – frequency abridgement – was a direct outgrowth from Transit Choices feedback. Transit Choices noticed that early schedules (left) listed every single trip during frequent service periods, making the entries too difficult to read.

As a direct result of stakeholder input, we abridged the frequent portions and enlarged the entries.
Rider feedback was collected through comment cards, online comments, outreach events; and all comments were input into a database.
When you visit BaltimoreLink.com, you’ll see our three different types of maps. For the interactive system map you can save your own copy and add your own points of interest, frequent destinations, and more.
Abstract Map

Geographic Map

...also available to riders as a pocket map!
Interactive Google Map
We’ve shown you a series of different options with our new schedules and maps, and this is how they LINK up together. Our points of interest and destinations are consistent throughout, leading to more effective wayfinding.
But... what else?

What else are we able to provide? And in what formats do we provide this information?
Bus Stop data available on Open Data and can be downloaded as a KML or shapefile. You can see where your stop ranks in ridership and where shelters are distributed. It's important to note that the ridership data is from pre-BaltimoreLink while the route information is for BaltimoreLink, and of course that we're in the midst of making updates on bus stops so the data is going to have some flaws. Ridership data is updated based on the pick – the three times a year schedule change which occurs in September, February, and June.
To better understand the trends in our ridership, we take a look at this in a longer range so we can have a more well-rounded picture of the data. If you look up on Imap and it says fall, that’s why.
After traveling internationally in the summer of 2005, Bibiana McHugh at TriMet was frustrated that she couldn’t access transit information on a mapping program like Mapquest and certainly couldn’t plan a trip by transit with the same ease as a driving trip. When she returned stateside, she sent inquiries to Google, asking if they had plans to incorporate transit data into their mapping services and if TriMet could partner in the endeavor. TriMet worked with Google to prepare TriMet’s data set in a format that would work for Google Maps, a difficult task, according to McHugh.

"Transit data is extremely complex," she said. "There is a temporal element and special element and it takes a relational database in order to manage all of that information." She added, "A lot of agencies have this fear that it will be misrepresented or won’t be used accurately."

Because TriMet was proactive with its data, the subsequent GTFS very closely resembled the operator’s data feed. Google Transit Trip Planner launched on December 7th, 2005, and for most of the first year, TriMet was the only operator available on Google Maps. Today Google Maps has agreements with hundreds of transit providers around the world.
The goal of Google Transit was to make it as easy for users to plan public transit trips as it was to get driving directions. The developers at Google wanted the format for GTFS feeds to be as simple as possible to give even smaller transit agencies the ability to adopt the standard, leading to their decision to use comma separated values (CSV) files. Even today, a GTFS feed is a compressed ZIP file containing CSV files. Each file models a particular aspect of transit information: stops, routes, trips, and other schedule data.

**Easy input. Advanced results.**

GTFS enables users to transform simple information into advanced routing-capable data

**Transit data** (such as stops, routes, fares, etc.) are entered into these tools, whether Excel, software, or web-based tools

These tools save time and convert “plain data” into the specific format required for a GTFS feed
This is a snapshot of our Developer Resources page, which you can find online by navigating to https://mta.maryland.gov/content/developer-resources. You’re able to access our Static GTFS feed, which provides all of the same information you can find on our schedules (including when and where the bus runs, how much it costs, and more!). You’re also able to download our MTA Trip Updates in GTFS-Real Time or RT format, or MTA Vehicle Positions in GTFS-RT format.
From static GTFS data we can share the data with third parties, including the Transit app, Google Maps, Bing Maps, and some you’d never think of, like WalkScore and Zillow.
One of the most frequently used apps that relies on updated, accurate GTFS data is Google Maps. Here you can see an example of two different systems’ GTFS – the Charm City Circulator, and our MTA feed, describing the potential trip planning options available. This is a very useful tool – but what else do we use GTFS for?
Title VI & Low-English Proficiency
- 100+ languages
- Screenreading device-compatible

Emergency Preparedness
- Datasharing with MEMA/FEMA

Walk Score  Mapnificent

Title VI of the Civil Rights Act requires that all publicly funded agencies and authorities provide accommodations to those who may require it. GTFS fits in nicely with these requirements because trip planning software can translate information into hundreds of languages, removing the need to have access to those on staff. Additionally, for those with visual impairments, GTFS can be read aloud using a sight reading device.
How can we as a community support one another as we work to provide the best data possible? Outside of GTFS and static bus stop data, what other types of information can you use? We know realtime information is big right now and we’ve recognized that ours currently has limitations but are working to improve that.
How can we as a community support one another as we work to connect our regions and provide the best data possible?