Answers to Follow Up Questions from Harold Kliems

From: Cechvala, Michael
Sent: Monday, November 21, 2022 2:24 PM
To: 'Harald Kliems' <kliems@gmail.com>; Stuehrenberg, Justin <JStuehrenberg@cityofmadison.com>
Subject: RE: Follow-up questions from hearing

Hi Harald, thanks for your email. These are all good, in depth questions. I hope we can provide some clarification. For the public materials, we tried to keep it high level enough so that most people could absorb the relevant information. See some responses below.

- Block groups, accessibility analysis: I looked at JWA's various reports and did not see information how exactly they conducted the block-group level accessibility analysis. A lot of members from the public pointed this out, and I would like to understand exactly what they did. Was the 1/4 mile distance done as a simple Euclidian distance or did it take use actual walksheds? Was the 1/4 from the centroid of the block group or did it use some other way to decide whether the population of a block group did or didn't have access? I'm not sure any of these would fundamentally change the analysis, but I think we owe ourselves an understanding of the method and its possible limitations. **The process used Remix's "people-trips" method which has been vetted for Title VI analyses. While it's a bit of a "black box" (we don't control much of the inner workings), it also removes any potential bias we may have for wanting it to pass. All the bus stops served by a route pattern* are buffered ¼ mile using Euclidian geometry, in other words it does not use the walking network, it just draws a ¼-mile radius circle. Then, it assumes the block groups are homogenous and says, if 20% of the block group area is within the buffer, then 20% of the block group population x the number of trips on that route pattern is the number of "people-trips". *A route pattern is an individual path a route may take. Usually routes have 2 patterns, one in each direction, but sometimes they have less or more.**
- Double-counting trips around TPs: The explanation around the double-counting around transfer points was very helpful. It's unfortunate that we can't better quantify, as it seems to really contribute to the apparent drops in accessibility on the map, with unclear practical impact on riders. **Agreed. We talked about ways we could work around this, but it would be hard to explain and justify what we did. There is no good answer. This is why we feel adding the transit access analysis is very important.**
- First bus/last bus: Before the meeting I was very confused about the information about that. Your presentation helped me understand _why_ you provided the numbers in this manner, but from a user perspective, I think it is still really challenging to answer questions like "Will I be able to get to my job at X in the morning by x:xx AM?" "If I go to an event downtown, what's the latest bus I can take to get back?" It would be great if you provide some of this information -- maybe in addition to the full run times you can provide a "last departure/arrival at midpoint of route" or something like that. **Agreed, unfortunately we need to have the schedules written to have that information. A lot of partial trips come out of that process, filling in gaps and using deadheads. And we need this first trip / last trip information to write the schedules. The schedules will be**

available in spring early 2023 to review and approve, and we'll use any input we get to help us fill in those gaps.

- System map: I really like the new draft map compared to the current system map. Is it possible to create a version of the map that has all potential transfer (or all) stops included? Again, from a user perspective, this is really important. (Suggestion for a final version of the map: Maybe make the downtown inset large enough to hospital loop and extend a little farther east on the isthmus) **Thanks good suggestions. We're trying to have the right amount of information but not too much, and having all bus stops on the system map would be a challenge. As we develop other materials – timetables with individual route maps and online maps, we hope to have some of that bus stop information.**
- Frequencies I: Adding the frequency information to the map is very helpful. A few clarifications: Do the frequencies on the map take into account interlining? I think they do: E.g. on Monroe Street you show Frequent service with the D, which then branches into Standard service with the D1 and D2. But on the rapid lines, the frequency is for each line, i.e. on the E Wash trunk you have 5-15 min arrivals of each the A and B, right? **The frequencies normally just apply to that specific route, not a combination of routes. The exception is where we have routes that branch. For example, Route D splits into D1 and D2, so it's shown as every 15 minutes before the split and every 30 after. For other routes, we cannot guarantee that the schedules will mesh and produce significantly better frequency.**
- Frequencies II: The map says "late nights" in the legend for frequency drop-offs. What does that actually mean? **Generally 7 pm. This is a draft map and we're working on this language, typically we'd use the word "evening" to describe this time period, so we may make that change. "Late night" typically means after midnight or so.**
- BRT frequencies: Are the BRT lines really only going to run every 30 minutes on the weekend, as the draft map implies? **Actually it will run every 15 minutes during the day on Saturdays, and every 30 minutes Saturday evenings and all day Sunday. That is another change that should be incorporated.**
- Comparison to "existing system": A lot of metrics presented compared service to the "existing system." Is that the system as it is now or the pre-pandemic system? **The system as it currently exists in 2022.**

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From: Harald Kliems <kliems@gmail.com>
Sent: Monday, November 21, 2022 8:58 AM
To: Cechvala, Michael <MCechvala@cityofmadison.com>; Stuehrenberg, Justin <JStuehrenberg@cityofmadison.com>
Subject: Follow-up questions from hearing

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Hi Mike, hi Justin:
Sorry that this is coming only now, but I needed to organize my notes and decide what is most important. Thanks for all the work you put into preparing for and presenting at the TC hearing. I can only imagine how big a lift that has been.

I got a lot of answers out of the materials and your presentation, but I do have some follow ups.

- Block groups, accessibility analysis: I looked at JWA's various reports and did not see information how exactly they conducted the block-group level accessibility analysis. A lot of members from the public pointed this out, and I would like to understand exactly what they did. Was the 1/4 mile distance done as a simple Euclidian distance or did it take use actual walksheds? Was the 1/4 from the centroid of the block group or did it use some other way to decide whether the population of a block group did or didn't have access? I'm not sure any of these would fundamentally change the analysis, but I think we owe ourselves an understanding of the method and its possible limitations.
- Double-counting trips around TPs: The explanation around the double-counting around transfer points was very helpful. It's unfortunate that we can't better quantify, as it seems to really contribute to the apparent drops in accessibility on the map, with unclear practical impact on riders.
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- BRT frequencies: Are the BRT lines really only going to run every 30 minutes on the weekend, as the draft map implies?
- Comparison to "existing system": A lot of metrics presented compared service to the "existing system." Is that the system as it is now or the pre-pandemic system?

Thanks!
Harald.