



Subway Stations Summary

Orange Line and Blue Line

Project Connect's proposed Orange and Blue Lines make up a 28.2-mile light rail transit (LRT) plan that would operate throughout Austin. This meeting focused on the proposed subway stations and included a discussion about community needs, tunnel technology, accessibility and safety features.

Austin, Texas
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1.0 Engagement Approach and Event Details

The Subway Stations Overview meeting gathered feedback and answered questions regarding community needs, tunnel technology, accessibility and safety features. This meeting was held virtually on Zoom on Wednesday, June 22, 2022 from 5:30 – 7 p.m. This meeting was intended to inform the public on the proposed subway stations.

Outreach for the meeting included CapMetro social media posts, e-blasts and promotion on the Project Connect website. This was a public meeting and all members of the public were welcome to participate.

The purpose of this meeting was to:

- Inform the public on proposed subway stations for the Orange Line and Blue Line
- Gather input on community needs, tunnel technology, accessibility and safety features

During the Zoom meeting, closed captioning and Spanish translation options were provided for the presentation and were available upon request.

The workshop began with a presentation to all attendees. This included an overview of Project Connect, subway extents and underground stations, accessibility and station amenities. The presentation also provided an overview of subway stations at Orange Line North, Capitol West/Government Center Station, Republic Square Station, Orange Line South, Auditorium Shores, SoCo, Downtown Transit Hub/4th Street Corridor, Congress Avenue, Brush Square and Rainey/ESB-MACC Station. There were three Q&A sessions throughout the presentation.

After the overview presentation, the meeting was open for participants to ask questions and provide feedback to the project team during a live Q&A session.

2.0 Participation Summary

There were 138 people directly participating in the Zoom meeting. The simulcast on Facebook, Twitter, and YouTube, has received an additional 545 views across all three platforms. Listed below are the number of participants and their zip codes. Note that not all participants provided zip codes.

Total engaged: 683 (Zoom meeting participants + live stream views)

Table 1. Participation Summary

Meeting	Participants/Viewers	Zip Codes Represented (27 Total)
Zoom	138	10005, 10018 (2), 10024, 10029, 20002, 48323, 60606, 75044, 76001, 76013, 76092, 76548, 77005, 77006, 77379, 78552, 78610, 78613, 78641, 78664, 78701 (19), 78702 (4), 7873, 78704 (13), 78705 (7), 78721, 78722 (5), 78723 (4), 78724, 78727 (3), 78729, 78731 (2), 78735, 78737, 78739, 78741 (6), 78744, 78745 (7), 78746 (3), 78747, 78748, 78749, 78750, 78751 (3), 78752 (2), 78753 (2), 78754, 78755, 78757, 78758, 78759 (4), 85016, 85267, 90029, 90039, 90292, 92101, 94110, 94306, 94610 (2), 97004, 97006



Simulcast	545
Total Participants	683

3.0 Feedback Summary

During the meeting, feedback was gathered via chat/verbal comments.

3.1 Zoom Q&A

The meeting included a live Q&A session where participants were invited to ask questions and share their feedback on subway stations. Comments submitted during the meeting were either shared verbally and captured by notetakers or were submitted into the Zoom meeting Q&A function.

Comment themes included bike and pedestrian accessibility, station design, station retail and amenities, connectivity and cost. High-level takeaways regarding the participants' areas of interest with illustrative comments are summarized in Table 2. A full list of participant comments is in Table 3.

Table 2. High-level Takeaways

Theme	Illustrative Comments and Questions
Bike and Pedestrian Accessibility	<ul style="list-style-type: none"> • Will staircases have a ramp for bikes? • How will large bikes access that station that do not fit in elevators? • How many elevators and escalators will there be? • Some concourses are large and will require long walks. • The pedestrian tunnel extension should be removed. • Will bikes ride down the same ramp entry as pedestrians? • Will bikes be allowed on the train?
Station Design	<ul style="list-style-type: none"> • Will there be gates to the subway station? • Will subway stations have faregates and platform screen doors? • What is the reason for using side platforms? • Will there be solar tubes for lighting below? • How deep will each station be?
Connectivity	<ul style="list-style-type: none"> • Will there be connection to other stations? • Will there be a stop at Brush Square? • Can the Rainey/MACC station be further south to move closer to Rainey and MACC?
Station Retail and Amenities	<ul style="list-style-type: none"> • Will there be visible art? • Happy to see retail in the stations • Will there be food courts, restaurants and entertainment venues in the subway station?



	<ul style="list-style-type: none"> • Retail plays a key role in activating the space.
Cost	<ul style="list-style-type: none"> • What is the cost to build around the Capital View Corridor restrictions? • Will designs be simplified to lower cost? • Will there be subsurface rail with the new budget? • Will cut and cover at the stations help with cost? • What are the cost savings of the proposed cuts to the Downtown transit hub?

4.0 Public Comments

The raw public comments received during the Q&A are listed in the tables below. Comments submitted during the meeting were either shared verbally and captured by notetakers or were submitted into the Zoom meeting Q&A function.

Table 3. General Public Comments

	Question/Comment
1	Question for CM Kitchen (if that's okay). What is City Council working on to allow for ETODs around stations (underground or surface). Good transit utilization needs good land use policy. I hope we can count on your support for that.
2	Does the ATP anticipate the construction delivery method to be Alternative? (CMAR, CM/GC, PDB)? Versus, a lengthy Design-Build, or Bid/Build Delivery?
3	During the cost overages portion of Peter's comments, no mention of the total failure to plan around the Capital View Corridor restrictions. That added significant costs in the tens of millions to this program. What is being done to avoid woeful errors like that going forward? The CVC maps are not exactly a mystery. Thank you.
4	Will the staircases have a flat section to walk bikes up/down? Would be a nice nod to accommodating bikes in the system: https://en.wikipedia.org/wiki/Bicycle_stairway
5	Graphic shows art on subway wall next to track. But won't platform doors etc. obscure this from passengers on platform? So, who will ever see this?
6	It seems you are spending a tremendous amount of time focusing on how to navigate stations. There are hundreds of examples of underground systems throughout big cities in the world. You simply put up signs, and people can follow them. They don't lose their bearings and cognitive abilities simply because they're in a subway.
7	You mentioned the project is already 70-80% over budget which is very concerning. Are you looking at simplifying the design? For instance, why is a concourse and platform level separation necessary? Most subway systems with light rail simply have one level for moving around and for the platform.



8	When I was in Atlanta, there were gates at the subway station entrance where you had to scan the metro pass to get into the station. Will the subway stations have these gates as well? I did not see it in the design?
9	Are mezzanine levels going to be used for every underground station? It is a less direct path for a user to get to the actual platform. What value do they bring?
10	Will this presentation be available afterwards?
11	Some bikes are a little longer due to a front rack or child seat. In those stations where elevators are small and cannot accommodate longer bikes what markings are planned to know which stations are accessible (or not)?
12	Happy to see the intention to include retail in the stations - convenience stores are nice to have in metro stations I've used elsewhere. I'd also encourage consideration to maintaining cellular reception in the stations/on trains while underground for both safety and convenience.
13	Original project proposals, graphics showed various amenities such as food courts, restaurants, entertainment venues, etc. in the subway areas. Will these be planned for and included?
14	<p>David Fouts - Thank you for your question. Housing is needed close to transit / stations (as well as retail uses).</p> <p>And thank you Jo Anne for providing the links to the ETOD Study process. Council passed the ETOD resolutions last year (which I helped with) to kick off this process. We also recently passed the VMU2 ordinance which I sponsored, which allows for greater height tied to affordable housing and relaxed compatibility along the Orange/Blue Lines. The Council also passed a resolution to relax compatibility along the other Project Connect lines, as well as other corridors.</p> <p>Best Ann Kitchen</p>
15	How do you plan to design and execute a \$12B project on a \$7B budget, and still include subsurface rail?
16	Will subway stations feature faregates and/or platform screen doors?
17	Subway station shown at right seems to have a lot of wasted vertical space. Wouldn't this be needed for mezzanine construction for passenger access?
18	Isn't cut and cover a very antiquated, disruptive, and expensive technique?
19	Capitol West Station -- elevator only at ONE of the two entrances? Seems access problem particularly for mobility challenged.



20	Why not PPOP fare validation onboard trains? Fare collection in stations will likely create potential bottlenecks.
21	Thanks for your replies to the questions. One more: what is the reason for using side platforms? This would require passengers to go upstairs and back down if they want to change directions / trains, which would be very difficult for those with mobility issues. This seems like a major disadvantage for usability.
22	Would doing cut/cover at the stations and dealing with street closures save money?
23	What is the purpose of the underground concourse on 4th street? Has pedestrianizing the street on surface level instead been considered?
24	That has a large "unpaid space". What do you envision will happen there?
25	What would the cost difference be if building the system without the subsurface rail? How much could be saved?
26	Can you show the 15th street station again? It looked like 15th was being narrowed to 2 lanes but I might have not seen that correctly.
27	will there be any need to use solar tubes for lighting below?
28	What is thinking of the architecture of the entry canopies? Is that already designed, or will that be designed in a later phase?
29	What is envisioned for natural lighting for Republic Square station?
30	Also wanted to echo support for retail in the stations - a convenience store or similar plays a key role in activating the space. Hong Kong's MTR serves as a good model
31	Is there any effort to include the Travis County Courthouse with access? Why is this station at 15th to 17th St, and not focused on City/County government?
32	Is there any lingering consideration of approaching Texas Lege again to get ability to put station under republic square?
33	Andrew mentioned the concourse connection to the Congress station - my understanding (based on a lot of maps I've seen of the full system) is that there will be an in-station transfer between the orange and blue lines in the Republic square station, and that both Republic square station and government square station will serve both the orange and blue lines. Is that not the case?
34	the underground mezzanine does make a big difference for the summertime
35	Will there be security screening to prevent guns from being on these lower levels?
36	Since this project was initially proposed, I have had concerns concerning the construction costs. Austin has had several projects over the past 40 years that required significant tunneling, the Crosstown Wastewater tunnel and the short stretches of the MOPAC express lanes. Both of these projects resulted in substantial overruns because of the amount of limestone that needed to be cut. This is especially troublesome when you are proposing multilevel concourses AND tunneling under Lake Lady Bird. Both require deep boring and



	or open cuts. Question 2: why tunnel under the lake. Wouldn't a bridge be cheaper and safer to accomplish and maintain
37	I agree regarding retail in the station mezzanines. Taco stands especially in the mezzanine would be great & hopefully CapMetro could rent out the space to vendors & recover some of the cost of the system as a result
38	Wanted to shout out all the comments regarding TOD, we need TOD along the entire rail lines to maximize its use. Retail and vending machines are excellent ideas
39	Of the \$7.1b in bonds approved by voters...in the last two bond sales cycles (Spring 2021 & 2022)....PRECISELY how much muni paper has already been sold? What interest rate are we paying on those bonds? And what will increasing rates due to the "buying power" of that \$7.1b going forward? Thank you.
40	Can you share the proposed depth of each station? I hope that we're trying to make stations as shallow as possible based on the constraints of needing to go under LBL, so we can have quicker trip times and better accessibility.
41	Do the paid/unpaid zones mean that there will be fare gates, or just that it's open, but you'll get ticketed if you're hanging out in the paid zone without having paid?
42	I think the issue with the CVC has to do with the structures - not the rail cars. I prefer the open track so folks can enjoy seeing the city.
43	IF South portal moved further south for CVC, why not move SoCo subway Station further south?
44	Will the cars run on steel or rubber wheels? Rubber would reduce or even eliminate the elimination of sound to the ground level, especially for nighttime operations near residential areas.
45	Are you using Boring Company TBMs? It would be great to support a local company to do the tunnel work.
46	Some of these concourses (like Auditorium Shores) are massive and will require very long walks, difficult for those with disabilities.
47	May I suggest holding a session on the financing of Project Connect? Most people do not understand that the voters did not approve a specific amount for the project; what they approved was tax rate increase in perpetuity.
48	Seems like a good idea to remove the pedestrian tunnel extension as proposed by Peter Mullan.
49	Can we drop the connection to Long Center but extend station entries to have access from other side of streets? Riverside at Congress and Barton Springs at Riverside
50	Thank you! Do you know if the architectural design will be a part of a separate contract, and if so, when procurement might begin for that future phase?
51	I think we remove the ped tunnel at auditorium shores to cut a bit of costs. Crossing at street level to the station seems like an acceptable option.



52	I agree that the ped tunnel is nice but not worth \$100+ million.
53	Agree that if we need to cut costs, dropping the pedestrian connection to Auditorium Shores seems like a good candidate. But I am curious about the long-term ramifications - if it was omitted, would it be significantly more expensive to add it later (versus including it in the original project)?
54	Speaking of Hong Kong MTR, one thing they do well is profit from the development that springs up around their stations, it helps a lot with diversifying their revenue streams and keeping service levels high through economic ups and downs. TOD is very important and Project Connect enables that, I would encourage the team to look for any opportunities for Cap Metro to acquire land for high-density development around currently planned or future stations.
55	Will the Capitol addition underground have a connection to a station?
56	In lieu of the Auditorium Shores, might consider a covered, pedestrian-only path raised above the street: Escalator up from the street, bypass traffic signals, take advantage of views, separate street traffic (already complicated) from pedestrians, strengthen connection to Auditorium Shores, Palmer Events Center, Long Center, Butler Park.
57	What traffic changes are the team hoping for once this system is in place? I'm thinking specifically about Zilker Park.
58	I thought we were on South Congress and Auditorium Shores, but whether we are discussing Auditorium Shores or now 15th St, has the team considered eliminating stations like these two stations until density really warranted it. Neither Judge's Hill or Auditorium Shores are heavily trafficked.
59	The Republic Square and the Congress Ave Stations are really close to each other. Do y'all expect a lot of in and out traffic from both stations that are 4 blocks from each other?
60	Just saw @Art Bedrosian's comment and wanted to add -- while rubber tires are not an option for this system, it's incorrect that they are quieter than steel wheels. Rubber tires (e.g. those used on the Paris and Montreal Metros) have much more friction and are significantly louder than steel-wheel trains.
61	100 mil savings on the ped tunnel is worth it, but only if we can make the ped crossing at street the centerpiece of the intersection - raised, bulb-outs, the works
62	Do y'all plan to have bus stops at Brush Square? There was previous talk about this before.
63	What will prevent bicyclists from riding down the gently sloped ramp entryway, causing safety issues for walking patrons?
64	Agreed with the comment above, it needs to be raised, lots of shade, wide pedestrian, and bicycle friendly only ways, maybe some local retail stands
65	In regard to the removal of the ped tunnel.
66	What is the funding stream that would support the additional \$5B cost of the project at a \$12B level?



67	I never thought I'd say this, but I agree with Lyndon Henry
68	Question about the Rainey / ESB-MACC station location placement: this station is not really close to Rainey St., or ESB-MACC, both of which it's named after. It's really another convention center station. The Cesar Chavez entrance empties onto a narrow sidewalk on the south side of Cesar Chavez, that requires a long walk up a hill to get to Rainey St. (about 7–10-minute walk). The gentle slope onto the Butler trail then requires another 10-minute walk, on a dirt trail and again up a long hill, to get to MACC. Did the team consider making the station at surface level, further south at the shoreline, to be able to more closely connect to Rainey and MACC? This is a fast-growing area with a lot of potential riders that are not well served by the current proposed location.
69	Is ongoing maintenance - especially all the underground area - being calculated and considered in terms of final configuration?
70	Only other note I have (missed the northern portion), please get an entrance much much closer to the Capitol if you can because it looks like it's just serving Texas Chili Parlor at the moment. Thanks for all you all do.
71	Will bikes be allowed on the metro?
72	I'd hate to see the continuous downtown concourse broken up to save costs - I think a continuous concourse under downtown, integrated with the convention center and other destinations, would provide Austin with a world-class indoor amenity that would be greater than the sum of its parts.
73	Do you have an estimate of the cost savings of the proposed cuts to the concourse in the downtown transit hub?
74	Very easy to walk to/from MACC to the Waller Creek boathouse (future location of LBL entrance) - only upgrade that would be preferred would be a larger bridge.
75	the downtown concourse does not seem needed - there is already a natural pedestrian connection at street level to all stations. The street is also more active and supports street level shops and businesses.
76	Given that the proposed downtown concourse runs along the subway lines, would eliminating it significantly reduce costs? I would assume the majority of the cost is digging the tunnel in the first place, rather than the concourse specifically.
78	Project Connect is expensive, but it is worth it in the long run to provide frequent and good quality transit in Austin. The cost of the program is beneficial for future economic growth in Austin.
79	What is the expected time from downtown (Convention Center/Rainey) to the airport with the current Blue Line design?
80	I agree re: keeping the whole Congress concourse. It would be a public airconditioned area to walk through and hang out in during summer, I think it would be a focal point of downtown and a shame to axe it.
81	Thanks to Lonny and entire team for super presentation!



82	Is there any discussion about scaling back? For example, the mezzanines that connect one to another. Is there any opportunity to delay those to manage cost?
83	I think escalators are extremely important. They handle large volumes of people. I saw them in earlier graphics, I assume you will be planning those. Amenities in terms of shopping, food, entertainment, etc. were all shown in earlier promotions, i think they are great. If there is any way to plan and include that I think we should. I'm all for saving costs but I think this is necessary. I encourage outside investors if at all possible to help pay for it.
84	I was intrigued by the auditorium shores. Can you speak on the impact on traffic through Zilker Park this might have?
85	Tokyo's rail system is very complex. As you add subways you have to coordinate the intersections of the stations. You typically have to tunnel deeper. The current system is proposed north to south. How might an east to west segment tie into what we are planning?
86	Previous design showed it parallel to the capital around 7 th St. Why did you all decide to put it at 15 th and 17 th St.?
87	What would the cost difference be by eliminating subsurface construction?
88	Subsurface construction is a large cost. I do not see that it can be totally eliminated. I have proposed that rather than continuing the subway under Town Lake, instead the 4 th St. route can be used. You can also have a surface station. I see that the team is making an effort to remove some costs. I think there should be a mezzanine remaining to maintain access downtown. I think it is important to cut costs. I would hope we are able to do that.
89	The location of Rainey St. and the Mexican American Cultural location. It seems more adjacent to the convention center. It seems like a difficult walk. Was there any conversation to put that station further south to make the connection to the district better?
90	Has there been an analysis done on the time for employment of bus/rapid vs rail line?
91	How well will 4G and 5G cell service work underground?
92	How are you addressing elevators and ensuring 100% availability for wheelchair users?
93	Why not have integrated seating so that wheelchair users are included rather than set aside?
94	why not flip the escalators around and save 20 seconds from ingress and egress?
95	What protection from the environment are being provided for elevator or escalator entrances?
96	Why not always use center platforms to save building costs and not having to have multiple elevators?

