

Seattle Department of Transportation

Madison Street Corridor Bus Rapid Transit Study May Outreach Report

July 2015



 **SDOT**
Seattle Department of Transportation


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1 INTRODUCTION

This memorandum summarizes comments received from members of the public during outreach events for the Madison BRT Study, held May 4-6, 2015. Four meetings were held: invitation-based stakeholder meetings in the Downtown, First Hill and Capitol Hill/Central District segments of the corridor, and an open house for the entire corridor. Additionally, it includes a summary of comments received by email in May 2015.

The primary purpose of these meetings was to share key findings from the technical analysis of project alternatives completed prior to the meetings, and to ask the public for input on major decision points in preparation for identification of a preferred alternative.

Formats were as follows:

- Stakeholder meetings: A presentation was made, and questions were taken both during and after the presentation.
- Open house: A similar presentation was made, but including a formal interactive polling exercise, with participants voting using clickers. Informational boards and “roll-plot” plan-view drawings of project alternatives were also on display, and staff and consultants were available to answer questions. Attendees submitted comments using comment cards and post-it notes placed on roll-plot drawings.

2 STAKEHOLDER MEETINGS

Downtown

Major topics of discussion at this meeting included:

- *Branding.* Commenters suggested that BRT service should use the existing Metro RapidRide brand.
- *Interoperability with Route 2.* One of the perceived possible advantages of the Spring Street alignment is the opportunity for Route 2 to use BRT lanes.
- *Location of BRT lanes on Spring.* While some suggested that BRT could use transit-only lanes already planned for the south side of the street, others noted that this results in conflicts with I-5 bound traffic.
- *Traffic on Marion.* Commenters noted that Route 12 currently has difficulty turning left onto 6th Avenue during the PM peak. BRT on Marion would have to make this same turn in mixed traffic. Traffic unloading from ferries also receives priority on Marion at Western.
- *Access to properties.* A number of commenters expressed concerns about potential impacts of BRT, depending on design, on access to their properties. This could take two forms: direct access to garages or loading areas, or reduced access in terms of parking loss. A commenter from the YMCA noted that having to pay for garage parking vs. cheaper on-street parking would be a burden.

- *I-5-bound traffic.* In addition to the queues on Spring, traffic backs up on Madison westbound in the PM peak, on First Hill above I-5, and commenters were concerned that BRT vehicles attempting to turn left onto Madison from 8th (as proposed under the Spring option) would be blocked from doing so.
- *Grades at stops and ADA access.* Commenters were concerned about the ability of wheelchair-using passengers to use stops on east-west streets downtown, with their steep grades.
- *Signal timing.* Some noted that traffic flow downtown might be improved by making changes to signal timing.
- *Protected bike lane.* Some suggested that in order to create more space for BRT on Spring, the protected bike lane planned there might be located on another street – perhaps in both directions on Seneca, rather than eastbound on Spring and westbound on Seneca, or on University, although the latter is interrupted between Downtown and First Hill by Freeway Park.
- *Station locations.* A commenter asked why stations couldn't be provided at both 6th and 8th Avenues. Another expressed support for a stop at the main library between 4th and 5th Avenues, where Route 2 currently stops.
- *Madison bridge over I-5.* A commenter asked if it could be widened. It could, but the idea has been studied and was eliminated earlier in the process due to the high cost. Another commenter suggested that parking could be prohibited during peak hours to increase capacity; however, BRT designs already call for parking to be removed on the bridge in order to make room for a BRT lane.
- *Madison vs. MLK Jr. Way eastern terminal.* While not located downtown, these alternate locations for an eastern terminal of BRT were of interest to downtown commenters, who expressed a preference for a terminal at MLK Jr. Way providing BRT access to Madison Valley.
- *Ridership projections.* A commenter asked whether the 1st Avenue streetcar was included in ridership modeling (it was).
- *Move Seattle.* A commenter asked where the BRT project fit into the Move Seattle proposal. The answer: it would be included in an early phase.
- *Carpool parking.* Commenters were concerned that reserved spaces for carpoolers would be reduced or eliminated in the corridor as part of the project.

Capitol Hill/Central District

Major topics of discussion at this meeting included:

- *Methodology and data.* There were a number of questions related to the technical analysis, including: the methodology for estimating ridership; current validity of on-time performance data; availability of data on transit reliability; and how information was collected on current and planned development. Additionally, one commenter wondered why bicycle access to Madison wasn't asked about in the previous online survey.
- *Loading on First Hill.* There were concerns that removal of the existing two-way turn lane on First Hill could impact loading, as it is sometimes used for deliveries.
- *Project alternatives.* There were a number of questions related to project design. In particular, commenters wondered why a shorter project with an eastern terminal at Broadway or 12th Avenue had not been studied, as well as a no-build alternative. There was strong interest among several commenters in a more "incremental" approach without transit lanes, or with lanes only in some segments of the corridor. One asked if different types of lanes could be used in different segments, i.e. center-running in one segment and side-running in another (the answer is yes).
- *Interoperability with other transit services.* There were several questions regarding whether other routes would be able to use BRT lanes and stations. It has not yet been determined.
- *Coordination between SDOT and Metro.* There were questions regarding the extent to which SDOT and King County Metro staff were coordinating in their planning efforts. SDOT staff who were present noted that the latest U-Link integration proposal for an "all-Madison" Route 11 was based on discussions with SDOT regarding BRT service.
- *Trolley wire in Madison Park.* There was disagreement among attendees regarding the expected level of opposition to installation of overhead wires in Madison Park, with one commenter stating that they would be strongly opposed, while another said that many years had passed since the last effort to introduce wires to the neighborhood.
- *Relative value of different BRT elements.* Commenters questioned the value of BRT stations, noting that service frequency is the greatest driver and indicator of transit ridership, along with service reliability.
- *Station locations.* Support was expressed for a station at 25th Avenue, between proposed stations at 22nd and MLK Jr. Way. As at the downtown meeting, there was also support for stations at both 6th and 8th, and at the downtown library. There was general concern about impacts of stop removal on access, particularly for those with mobility difficulties.
- *Parking impacts.* Concern was expressed about removal of parking.
- *Union Street configuration.* One commenter asked if Union would be closed to cars. The answer is that as currently proposed, it would be closed to westbound traffic on one block, between Madison and 13th.
- *Connections between Madison Park and Downtown.* Support was expressed for a continuous "one-seat" ride between Madison Park and downtown, as exists today on Route 11. One commenter stated that Madison Park service should continue to connect to the Pike/Pine corridor, with its major retail destinations.

- *Route network configuration.* One commenter stating that his primary concern was a “network that works,” in terms of direct connections between important origin-and-destination pairs. Consultants emphasized that a route network is not being proposed as part of this project. Closer to the point of project implementation, an integration plan would need to be developed like that developed for U-Link.
- *Protected bike lanes on Union.* There were a number of questions about the design of the proposed protected bike lanes on Union. There was a preference expressed for separate one-way lanes, rather than a two-way facility, and there were concerns about conflicts at transit stops. The project team noted that bike lanes could go behind the transit stop, like on Dexter.
- *Impacts on autos.* There was concern that autos would not be able to pass buses blocking a single shared lane, where this would occur. Staff noted that this would have a traffic calming effect.
- *Center vs. side-running lanes.* Noting the relatively slight difference in performance between the alternatives in areas including transit travel times, commenters expressed a preference for the side-running alternative, which would have less of an impact in areas including auto travel times.
- *Modal priorities.* Commenters stated their opinion that bikes and loading should receive priority over transit in the corridor east of Broadway, where there is less existing demand for transit.
- *Impacts on larger transportation system.* There were general concerns about the potential for impacts on the larger transportation network, including both traffic congestion and transit routings, from the project. There was a clear preference among several attendees for preservation of existing transit alignments and stops, and concern that the BRT project was being planned in isolation rather than being integrated with the rest of the transportation system.
- *Transit connections.* Commenters stated that transfers between BRT and the Broadway streetcar should be optimized. The BRT station is planned to be at Boylston rather than Broadway, actually putting it slightly closer to the streetcar stop at Marion.

First Hill

Major topics of discussion at this meeting included:

- *Travel patterns.* A commenter asked whether origin and destination data were available to inform the decision making process. Yes, travel market analysis was conducted.
- *Station locations.* Commenters expressed a preference for a station at 8th Avenue, citing the steep grades and many senior and disabled residents in the area. One commenter asked if Polyclinic representatives had been consulted. One participant noted that a station on 6th Avenue would have ADA access issues, and would require removal of the existing tour bus parking there. Another commenter said that stops were needed at both 8th and 5th, by the library. Staff noted that one option would be to place a westbound stop by the courthouse at 6th, and an eastbound, uphill stop at 8th. Who will make the final decision, attendees asked? SDOT will develop a recommendation and the City Council will have to approve a final preferred alternative.
- *Traffic.* Commenters asked how much of the traffic on Madison was related to I-5 ramp access, how much was related to cross streets, and how BRT would impact these relationships.
- *Project schedule/process.* A commenter asked about process. A preferred alternative will be developed prior to another round of public meetings in July. Another asked when the environmental process would occur (subsequent to council adoption of a locally preferred alternative in September).
- *Custom vehicles.* An attendee asked whether center-running lanes would require custom vehicles. They would if center islands were used, requiring doors on the left side of the vehicle.
- *Extent of transit lanes.* A commenter asked how far east transit lanes might run (A: 20th Avenue). Another asked why lanes were not proposed over I-5 (they are westbound).
- *Frequency of service.* A commenter asked how often service would operate. A: As frequently as every 5 to 6 minutes peak (6 to 10 minutes off-peak).
- *Interoperability with other transit routes.* Again, some expressed a preference for side-running lanes that could be used by multiple routes.
- *Sidewalk impacts.* There was concern about reduction of sidewalks on First Hill, which are already very narrow in places. There has been discussion about widening the sidewalk in places using the underutilized parking lane.
- *8th vs. 9th Avenue alignment.* Several commenters observed that 8th Avenue is a relatively quiet, residential street, while 9th is a busier street that already have overhead wires. If the Spring alternative were chosen, why not have eastbound buses return to Madison at 9th rather than 9th?
- *Financial impacts on other services.* There were concerns that the cost of implementing BRT service could require reductions in service on other routes, including Route 2.
- *Open space opportunities.* Interest was expressed in identifying opportunities to provide additional open space associated with BRT stations, possibly at the Presbyterian parking lot or an adjacent commercial parking lot.

- *Operating costs.* One attendee asked why analysis had found that annual operating costs for service to MLK Jr. Way might be several hundred thousand dollars higher than for 23rd Avenue. The answer is that extending service to MLK might require an additional bus and operator to be in service at some times.
- *Terminal operations/impacts.* There were concerns about the impacts to surroundings from a BRT terminal with bus layover as well as operator break facilities, including impacts from “hide and ride” commuter parking.
- *Route configuration.* There was support for extending service as far east as possible. Some also wanted to see BRT service branch to serve different corridors.
- *Trolley wire in Madison Park.* As at the Capitol Hill meeting, a participant stated that any proposal to extend overhead wires to Madison Park would likely face community opposition.
- *Pedestrian conditions.* An attendee asked about opportunities to provide pedestrian scrambles and leading intervals.
- *Parking.* There were concerns about impacts on parking and there was interest in mitigation to reduce those impacts. Several commenters asked about ways to curtail abuse of disabled parking placards. There was a discussion about the strategy pursued in Portland, where abuse has been curtailed. One commenter stated that there is a black market in stolen residential parking permits.
- *Loading.* Similarly, there were concerns about delivery access, particularly to restaurants and bars. In general, commenters said potential impacts on businesses needed to be clearly understood.
- *Madison Park extension.* Support was expressed for BRT service to Madison Park.
- *Service for hospital workers.* Nurses at hospitals in the area work 12-hour shifts, starting at 7 a.m. and continuing to 7 p.m., and would need transit service available at both times in order to use it. Hospitals have legally binding mode share targets they must achieve, but it’s difficult when transit trips require a transfer downtown without frequency to make it easier.
- *Bike route.* One commenter asked where the proposed bike facility on First Hill would go. It would be on Spring and Seneca below 9th Avenue, and University above it. Treatments would be needed on University.
- *I-5 lid.* Another commenter expressed interest in decking over I-5 as part of the project.
- *Transit connections.* One commenter stated that the connection to ferries at Colman Dock was a very important one.
- *Character of 8th.* One commenter was very concerned about impacts on 8th, which is a relatively quiet, calm street compared to Madison, from additional transit service.

3 OPEN HOUSE

In this section, comments received on comment cards, roll-plot comments and through the interactive polling exercise are synthesized in order to provide a more complete portrait of the demographics and positions of meeting attendees.

Figure 1 Open House Attendees



Respondent Demographics

Comment Cards

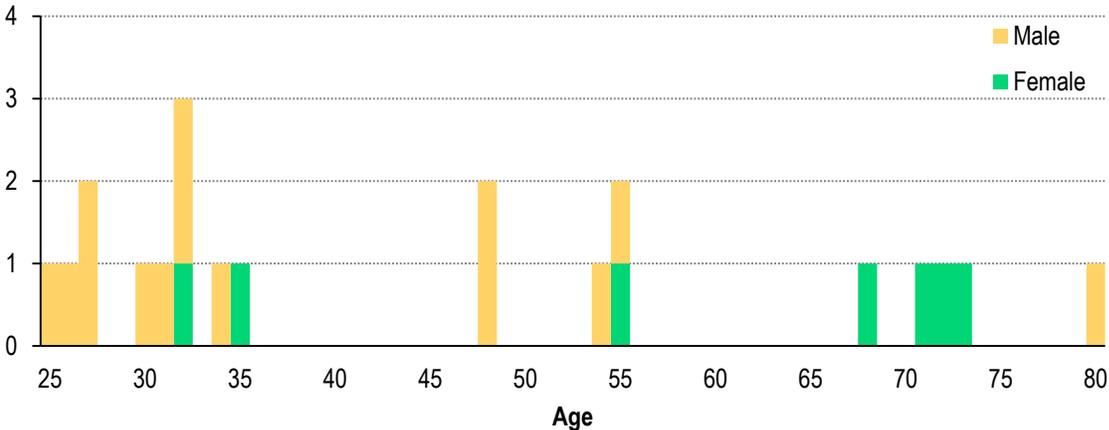
Comment cards requested information on respondents including the zip codes in which they lived, their ages and genders. A total of 29 cards were submitted at the open house. Figure 2 shows responses by zip code. The majority of comment cards were submitted by residents in the immediate vicinity of the Madison corridor east of Broadway (zip codes 98122 and 98112).

Figure 2 Comment Card Response by ZIP Code

ZIP Code	County
98122	11
98112	7
98104	2
98105	2
98102	1
98146	1
Total	24

Figure 3 shows the age and gender of respondents. Respondents ranged in age from 25 to 80 and were two thirds male.

Figure 3 Comment Card Response by Age and Gender



Polling Exercise

There were approximately 70 responses for each question in the interactive exercise. Figure 4 shows that the majority (77 percent) of respondents live within 10 blocks of Madison Street.

Figure 4 Polling Exercise Home Location

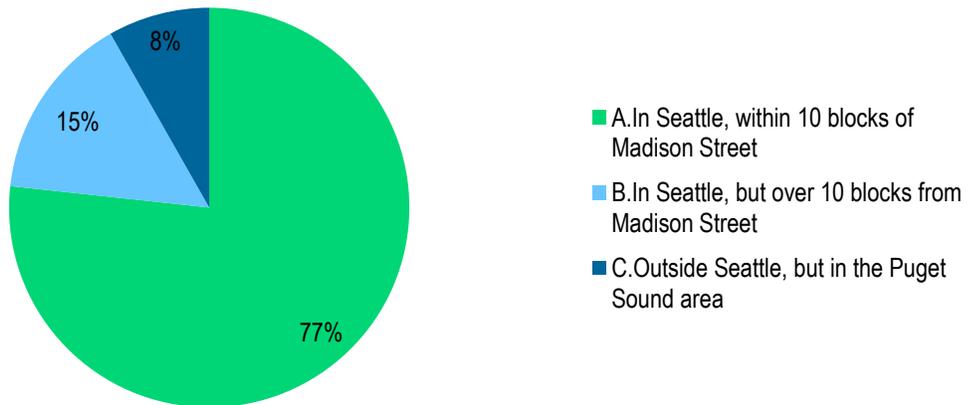
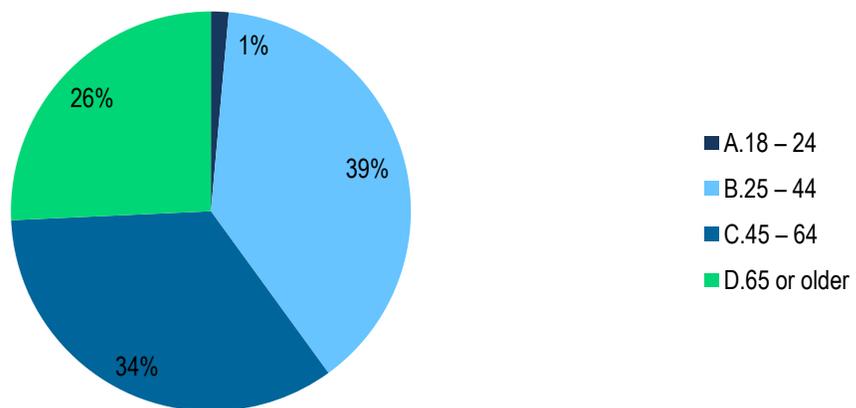


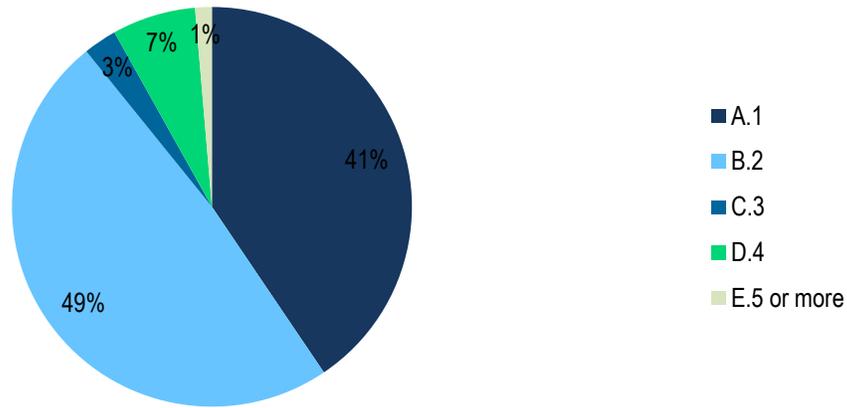
Figure 5 shows that participants were generally older, with a quarter of respondents aged 65 or older, a third aged 45-64, and 39 percent aged 24-44. Only 1 percent were below age 24.

Figure 5 Polling Exercise Age



The polling exercise indicated that very few attendees (only 10 percent) live in households of more than two people. Half live in households of two people, and 41 percent live in households of one person.

Figure 6 Polling Exercise Household Size



Over half of those polled own one vehicle, with an additional 14 percent who own two or more. Nearly a quarter of respondents, however, not only do not own a car but do not drive at all, while 10 percent do not own a car but do drive. The majority of respondents are frequent transit riders: 40 percent ride five or more times a week, while 27 percent ride two to four times a week. An additional 19 percent ride two to four times a month, 11 percent ride once a month or less, and 3 percent do not ride public transit.

Figure 7 Polling Exercise Vehicle Ownership

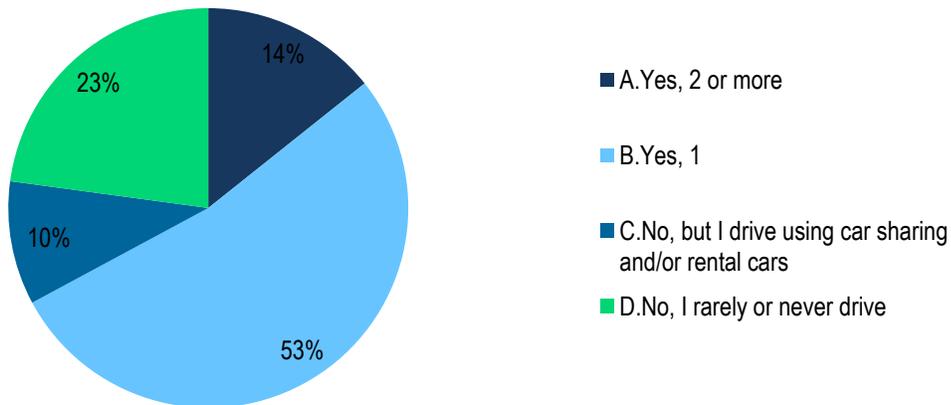
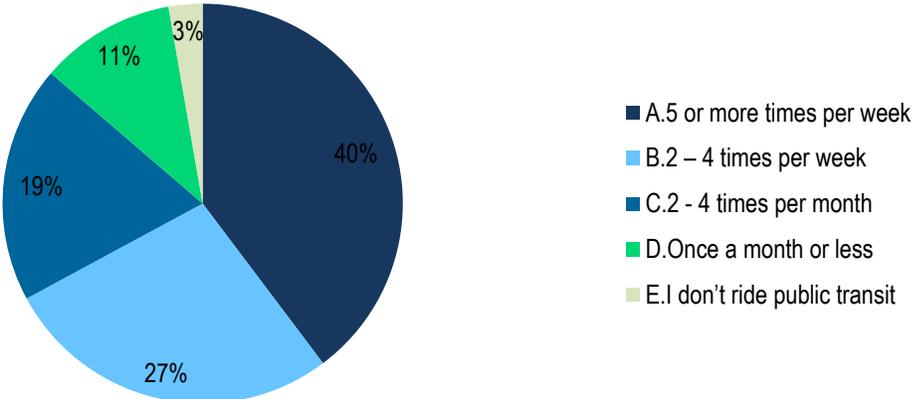


Figure 8 Polling Exercise Transit Use



Comments and Polling Results

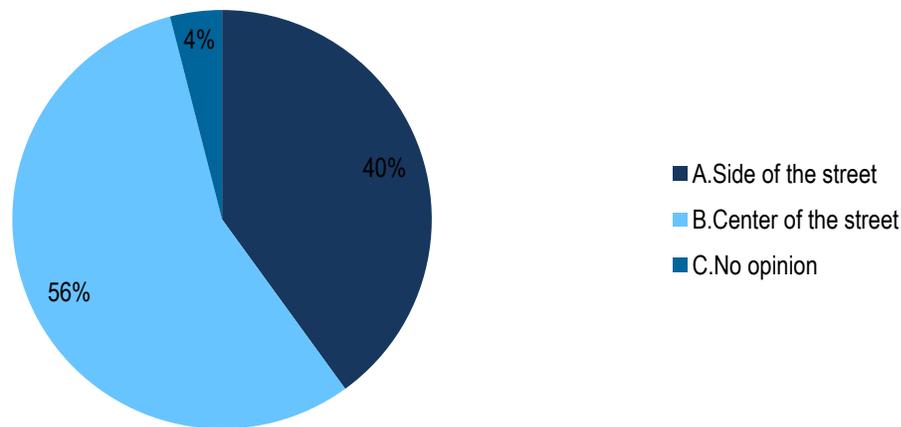
In this section, responses to project-related questions are summarized using charts showing responses to the multiple-choice questions asked during the interactive polling exercise, as well as lists of comments received on comment cards and on post-it notes placed on the roll-plot plan-view drawings of the proposed alternatives. Polling exercise participants were asked a series of questions related to major project design decision points. Comments have been edited only for spelling and grammar.

Center- vs. Side-Running Alignment

The polling results, comment cards and roll plot post-it notes indicated a relatively even divide in preference, with center-running slightly more popular. In the polling exercise, 56 percent preferred center-running, while 40 percent preferred side-running and 4 percent had no preference. A total of seven comment card and roll-plot respondents, meanwhile, expressed a preference for side-running, while five expressed a preference for center-running.

This topic garnered the most comments on comment cards. The comments indicated that center-running was supported for its benefits to transit speed and reliability, while side-running was supported due to lower cost and impacts to auto travel times, as well as due to potential fears about access to center platforms for pedestrians and persons with disabilities.

Figure 9 Polling Exercise and Comment Card Responses: Center vs. Side-Running Alignment



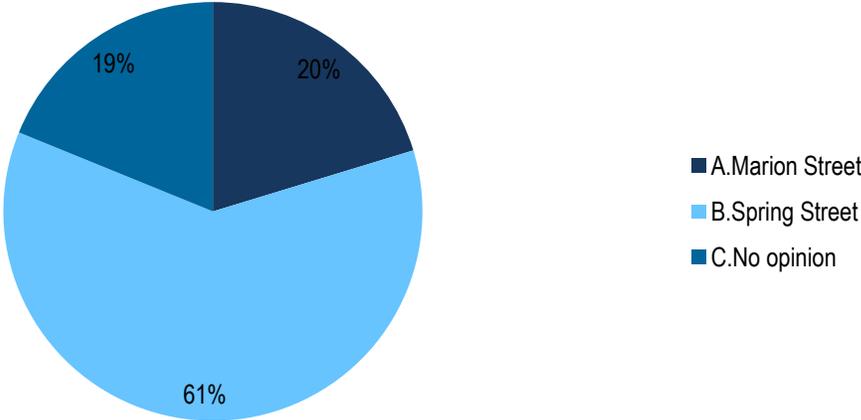
Comment	Number of Comments
<p>Prefer Center-Running:</p> <ul style="list-style-type: none"> ▪ I voted for middle options, BUT when I have used such transit, I find it scary to cross the street and then wait in the middle of the street. ▪ I have a slight preference for the center-running BRT lane but am split on whether the stations should be center or side platforms. I like the idea of allowing other bus routes to interline with the BRT route, potentially routes that don't feature fancy BRT vehicles. ▪ Center-running with regular right side door boarding, so as to use standard buses - islands between transit lanes and general traffic lanes. ▪ Reliability is the most important factor for transit. The center alignment keeps cars out of the travel lane and should be the obvious choice for implementation. ▪ Center lanes for east of Broadway 	5
<p>Prefer Side-Running</p> <ul style="list-style-type: none"> ▪ I strongly prefer a side-station model, particularly east of Broadway. I believe it gives the greatest flexibility in several ways-allows other buses to use the stations, makes it feasible for bikes to use the bus lanes, and allows you to start with mixed-travel lanes and add bus lane-only paint as needed. ▪ It only makes sense to look at the side running. It is \$22M cheaper, dramatically reduces transit time and has minimal increase in auto travel times. ▪ I think the outcome of the poll on center vs. side lanes would have been substantially different if information on car travel times had been made available. This information needs to be made readily available through other input venues (online, e.g.). Given the lack of noticeable benefits of center lanes, I strongly support side lanes. I don't like the idea of potentially having to run across the street to catch a bus (rather than along the sidewalk). ▪ Prefer side, not center platforms. ▪ I'm worried that middle lanes would be hard to reach in a wheelchair. 	7

Comment	Number of Comments
<p>Prefer Side-Running (cont.)</p> <ul style="list-style-type: none"> ▪ Side lanes are better because of the flexibility with other bus routes and the benefits to pedestrian space on the sidewalk. Love the station design ideas. ▪ Please consider side lanes east of Broadway even if center lane is used in First Hill. 	
<ul style="list-style-type: none"> ▪ Side vs. center - choose what is best for speed and reliability. 	1

Marion vs. Spring Downtown Eastbound Pathway

Both comments and the polling exercise showed strong support for a Spring Street Downtown Eastbound Pathway. In the polling exercise, 61 percent of respondents supported Spring Street compared to 20 percent who supported Marion. None of the comments in comment cards or post-it notes expressed support for Marion, compared to five supporting Spring Street.

Figure 10 Polling Exercise and Comment Card Responses: Marion vs. Spring Downtown Eastbound Pathway

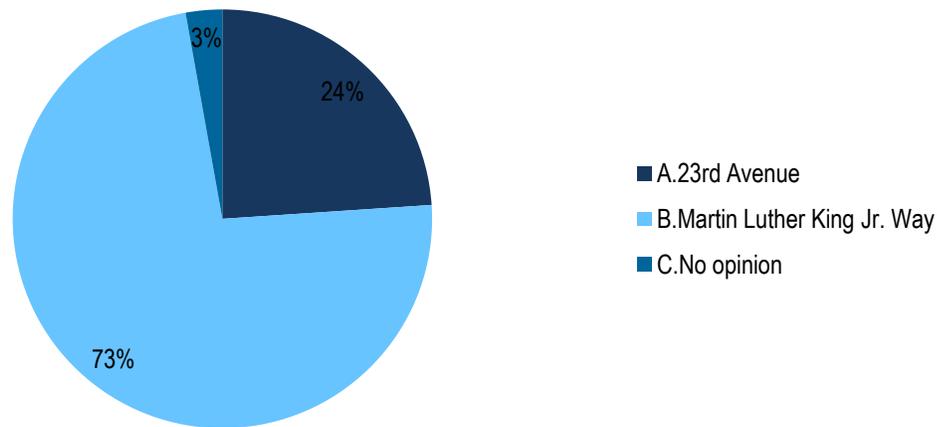


Comment	Number of Comments
<p>Support for the Spring Street Alignment</p> <ul style="list-style-type: none"> Definitely like the Spring St alignment. Spring is better than Marion. The DSTT and library are very important destinations and will probably get more riders and a wider cross-section of the public throughout the day than the ferry terminal. Spring St Route. Spring St looks like a clear winner for downtown routing. Please use the Spring/1st terminal for better connections to other transit options. 	5
<ul style="list-style-type: none"> Neither Marion/Madison nor Spring/Madison are close enough to Link to be good transfer locations. 	1
<ul style="list-style-type: none"> Spring vs Marion - choose an option that is best for bus speed and reliability. 	1

23rd Avenue vs. Martin Luther King Jr. Way Eastern Terminus

Both the polling exercise and comments confirmed strong support for an MLK Jr. Way eastern terminus, as opposed to a terminus at 23rd Avenue. Only 3 percent of those polled preferred 23rd Avenue, while 73 percent preferred MLK, and 24 percent had no opinion. Commenters expressed additional support for an MLK Jr. Way terminus as well as some concerns about implementation and impacts to East Arthur Place, where buses would turn around and layover if the terminus were at MLK Jr. Way.

Figure 11 Polling Exercise and Comment Card Responses: 23rd Avenue vs. Martin Luther King Jr. Way Eastern Terminus



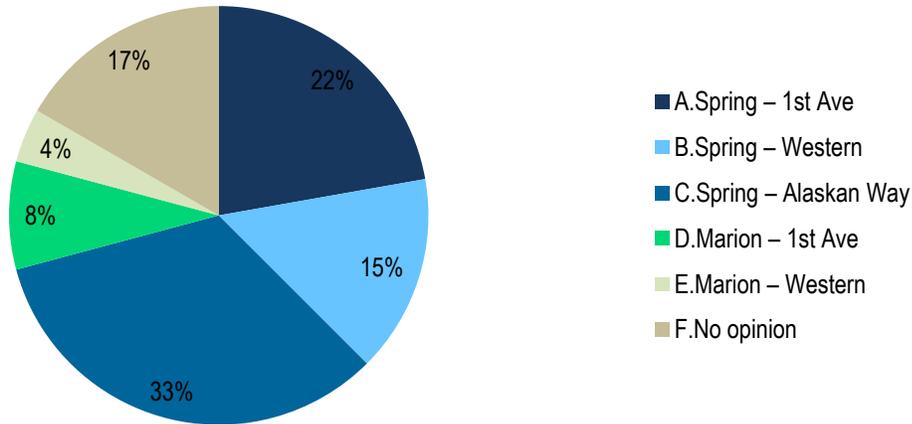
Comment	Number of Comments
<p>Prefer MLK terminus</p> <ul style="list-style-type: none"> ▪ Definitely like the MLK Jr terminus. ▪ MLK terminus is important to serve the most kinds of trips. ▪ Please continue the line to MLK. ▪ Choose MLK negligible cost difference but more riders and serves commercial node. ▪ MLK Extension is critical for expanding the area that can quickly access downtown jobs. It should be combined with an upzone. ▪ I support the MLK terminal, it seems much better than ending at 20th/21st. Better connections and station locations for neighborhoods west of 19th. 	6

Comment	Number of Comments
<p>Concern about East Arthur Place Terminus</p> <ul style="list-style-type: none"> ▪ There is a daycare with pickup & dropoff traffic at 2825 E Arthur. ▪ East Arthur Place is too small to accommodate bus traffic. Multiple acute angle turns required. Turning right from E Arthur to an immediate left onto Madison will effectively block the MLK & Madison intersection while the buses wait for oncoming southbound traffic. This will exacerbate wrong way traffic on E Arthur Pl. ▪ Consider not having overhead wires off of Madison (not on E Arthur). ▪ Tight turns on MLK/Arthur terminus – how much parking loss? Make sure cars can back out of driveways. 	4
<p>Extend Service to Madison Park</p> <ul style="list-style-type: none"> ▪ Extend trolley wire. Busway terminus at MLK (if not further east). ▪ This study is the Madison BRT, therefore it should serve all of Madison Street, Lake Washington to Puget Sound. MLK and Madison is one of the lowest elevations on the east side of the city, access from MLK to 23rd is essential with a 400' ft elevation change. ▪ #11 unreliable. ▪ Sure, residents opposed the #11 electrification but that was 30 years ago! 	4
<ul style="list-style-type: none"> ▪ If using 23rd terminus, consider a terminus using 24th Avenue and E Denny Way to save the big loop. 	1

1st Avenue, Western or Alaskan Way Western Terminus

Seventy percent of polling exercise respondents supported one of the Spring Street alternatives. The most popular option was Spring/Alaskan Way (33%), followed by Spring/1st Avenue (22%), and Spring/Western (15%). There was only one comment regarding the western terminus options on the comment cards.

Figure 12 Polling Exercise and Comment Card Responses: 1st Avenue, Western or Alaskan Way Western Terminus

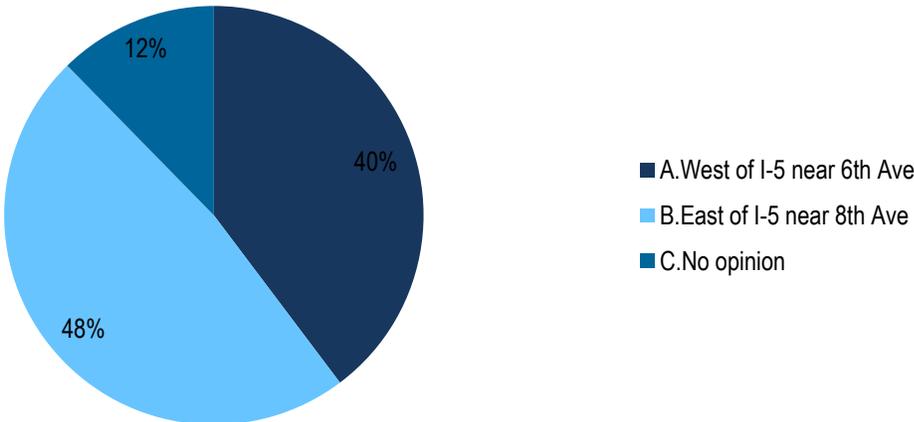


Comment	Number of Comments
<ul style="list-style-type: none"> Prefer Alaskan Way Western terminus 	1
<ul style="list-style-type: none"> Alaskan Way terminus would make WSF connections easier 	1
<ul style="list-style-type: none"> First Avenue shared streetcar stop would require wrong-side doors! Expensive?! 	1
<ul style="list-style-type: none"> Shouldn't both Alaskan and 1st have stations given the steep hill? 	1

Downtown/First Hill Station Locations

A station near 8th Avenue had greater support than one near 6th Avenue. Among polling exercise respondents, 12 percent supported the 6th Street station and 42 percent had no opinion. Based on the comments, it is possible that some of the respondents who indicated “no opinion” would prefer that both locations be selected. Other comments related to station locations emphasized the importance of locating stations where transfers to other routes will be most convenient.

Figure 13 Polling Exercise and Comment Card Responses: Downtown/First Hill Station Locations



Comment	Number of Comments
<ul style="list-style-type: none"> Library Stop: Both 5th-6th and 8ths! It’s a steep hill and the library needs access/5th Avenue needs a stop for library access. 	1
<ul style="list-style-type: none"> Should have stops at both 6th and 8th. 	1
<ul style="list-style-type: none"> Also, regarding station placement, connections to high-frequency perpendicular corridors should have priority over connections to lower frequency facilities like Colman Dock. 	1
<ul style="list-style-type: none"> Station location – really prefer 8th Ave stop on east side of I-5, 	1
<ul style="list-style-type: none"> Tossup between 8th Ave or 6th Ave stop. 	1
<ul style="list-style-type: none"> Station at 6th/8th should be away from I-5 as it is terrible place. 	1
<ul style="list-style-type: none"> Locate station at Broadway for easy transfer. 	1
<ul style="list-style-type: none"> Stop at Spring & Third should be shifted as far east as possible to leave clear pocket for turning Route 2 if BRT bus is at the stop. 	1

Capitol Hill Station Locations

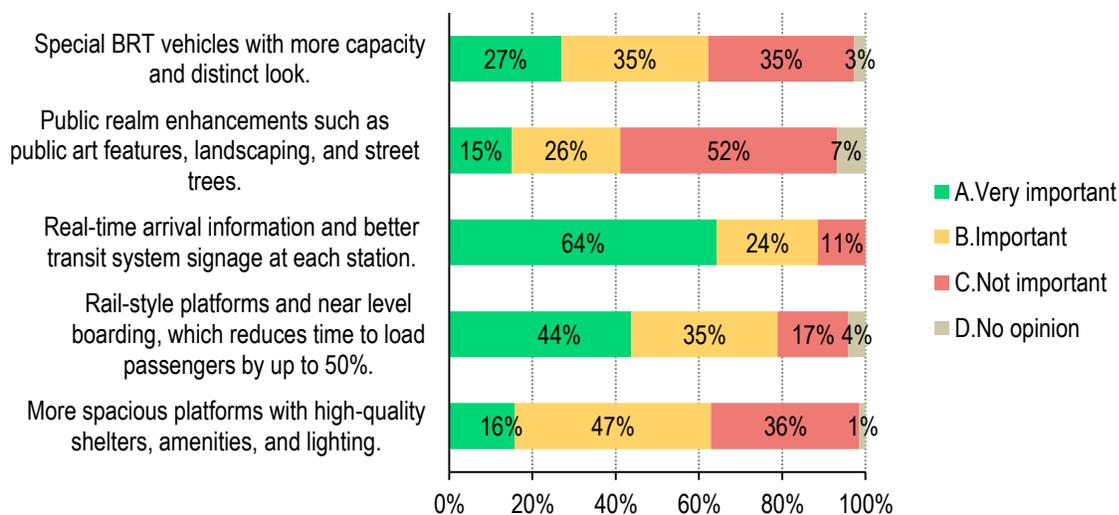
Commenters also expressed opinions regarding station locations farther east on Capitol Hill.

Comment	Number of Comments
Station and Madison and 12th <ul style="list-style-type: none"> ▪ Move station to existing stop west of 12th at Madison and 13th EB. ▪ Put station between 12th and 11th EB to coincide with Route 2 and serve Route 2. 	2
<ul style="list-style-type: none"> ▪ Station at Broadway – Transfer to Streetcar – Whole Foods 	1

BRT Features

The polling exercise asked respondents to rate the importance of a series of BRT features. Support was strongest for real-time arrival information and better transit system signage at each station, with 64 percent of respondents rating this as “very important”. Other important attributes were rail-style platforms and near level boarding, with 44 percent rating this as “very important” and 35 percent as “important”. A majority of participants did not feel that public realm enhancements such as public art, landscaping, and street trees were important, with 35 percent rating this as “not important.” Special BRT vehicles and more spacious platforms with high-quality shelters, amenities, and lighting were also rated as “not important” by more participants than those rated them “very important.”

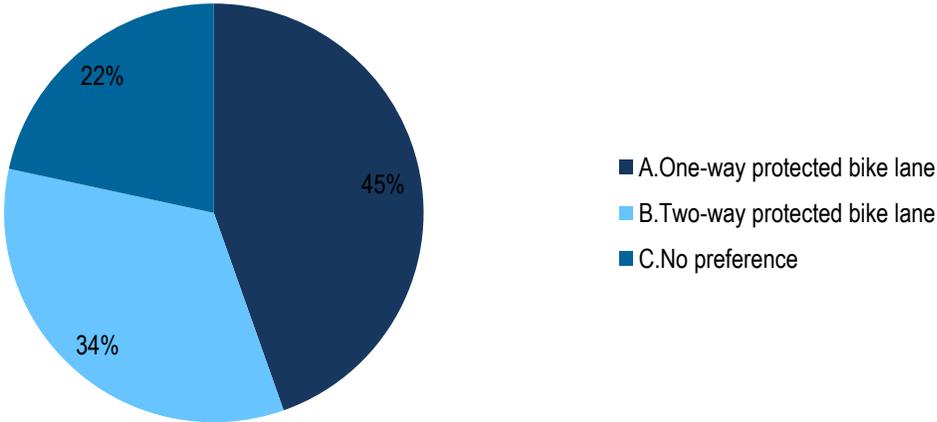
Figure 1 Polling Exercise Responses: BRT Features



Bicycle/Pedestrian Issues

In the polling exercise, support was highest for the one-way protected bike lane on Union Street, with 45 percent of respondents supporting a one-way facility, 34 percent supporting a two-way facility, and 22 percent expressing no preference. Numerous comments were made regarding the design of the intersection of Madison, 12th, and Union. Additional comments were made supporting the one-way facility on Union as well as a variety of pedestrian improvements.

Figure 16 Polling Exercise and Comment Card Responses: Bicycle/Pedestrian Issues



Comment	Number of Comments
<p>Madison/Union/12th Intersection</p> <ul style="list-style-type: none"> ▪ Excellent rendering of the east end of Union at 12th and Madison - more eastbound turners further into Madison will greatly improve safety and comfort for pedestrians. ▪ I'd also like to see pedestrian advance signals at 12th/Madison/union - or right-turn. advances (as at 15th and John) - whatever makes sense to keep vehicles from careening into pedestrian crosswalks. ▪ Fix the pedestrian nightmare at Union and 12th - very dangerous to cross union at this spot. ▪ Accommodate bus (route 2) and vehicle travel from Madison to Union both east and westbound. 	11

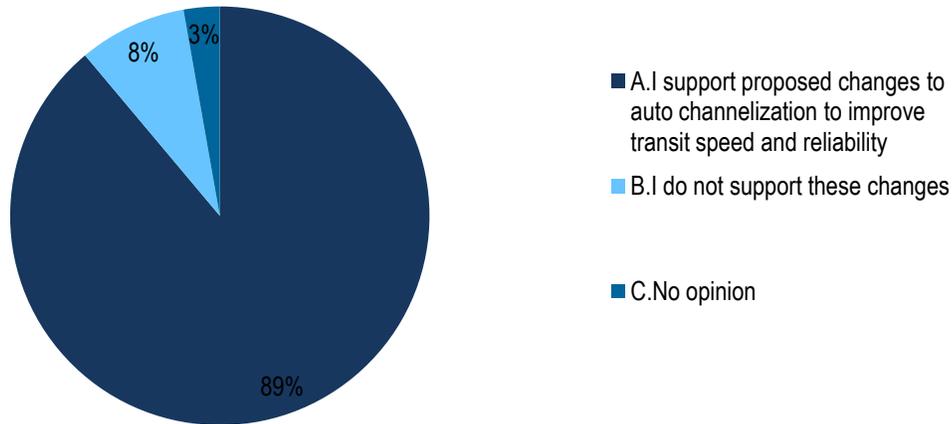
Comment	Number of Comments
<p>Madison/Union/12th Intersection (cont.)</p> <ul style="list-style-type: none"> ▪ E Union at 12th and Madison connection does not work!!! As shown cars and buses need more direct traffic flow . ▪ Install scramble to connect south side of Madison @ 12th. ▪ Left on 12th or 14th Westbound. ▪ Right turn phasing of peds and vehicles at 12th and Madison. ▪ Need to accommodate emergency vehicle access and bus access at Union and Madison. ▪ Advanced ped light at 12th and Madison. ▪ Scramble on north of Madison doesn't work, would impede all access to Union. 	7
<ul style="list-style-type: none"> ▪ Improve pedestrian experience along Madison. Allow streateries and other amenities to be developed! 	
<p>One-Way versus Two-Way Protected Bike Lane</p> <ul style="list-style-type: none"> ▪ 2-Way PBL on Union is problematic. Consider 1-way PBLs east of 13th Ave. ▪ Split to one-way PBL at 13th and Union 	2
<ul style="list-style-type: none"> ▪ I am pro better foot access on the biased intersections between Broadway & 15th. 	1
<ul style="list-style-type: none"> ▪ I walk, bus, and drive the Madison Corridor. I am very concerned about cars moving about this area especially left turns east bound on 19th and 15th. I'm really concerned about left turns on 12th and 14th Westbound. Traffic has to move left between 12th and 19th. A huge number of people live there. Traffic has to be able to move. People need to move on foot, bus, and car. Left turn lights at these intersections would be great. 	1
<ul style="list-style-type: none"> ▪ Keep bikes off Madison. 	1
<ul style="list-style-type: none"> ▪ At the intersection of Madison and 16th Avenue, move the stop line for eastbound traffic to the west side of 16th. 	1

Support for Overall Project and Other Issues

Overall, open house attendees expressed strong support for the project. In the polling exercise, nearly 90 percent of respondents supported the proposed changes to auto channelization to improve transit speed and reliability, while only 8 percent opposed the changes.

A wide variety of comments related to the project and the open house itself were also received on the comment cards and post-it notes.

Figure 2 Polling Exercise and Comment Card Responses: Overall Project



Comment	Number of Comments
<p>Left Turns</p> <ul style="list-style-type: none"> ▪ Be mindful of left-turn needs on Madison ▪ Left on 19th eastbound. ▪ Co-op exist needs to be able to go east – turn left on Madison or left on 16th. ▪ There's no lefts for cars allowed between 23rd and Broadway. This might force a lot of turning traffic to Broadway and overload the intersection. Maybe add a left at 14th? ▪ Keep as many left turn options as possible (10th and Madison) ▪ Left on 12th or 14th westbound 	6

Comment	Number of Comments
<p>Transit Lanes</p> <ul style="list-style-type: none"> ▪ No mixed use lanes! Exclusive only even if it means removing parking! ▪ Don't choose an alternative with a mixed-use lane! The bus will still get stuck in traffic! Just like now! ▪ Exclusivity of lanes - don't use mixed-use lanes because traffic will delay buses. The point of this project is fast and reliable service so use exclusive lanes the entire route. Impacts to free on-street car storage are not important. 	3
<p>Implementation</p> <ul style="list-style-type: none"> ▪ I strongly encourage you to implement some of the changes immediately - try bus-only lanes on the sides of Madison on First Hill, implement signal changes at 12th & Madison to reduce pedestrian/car conflicts, for example ▪ Build this project as fast as you can! The people of Seattle need better transit now! Expand BRT to every bus route! ▪ Look to building this more cheaply with paint than doing a full street rebuild. We need quality dedicated transit now! Tactical urbanism way like the 2nd Ave bike lanes but for buses - a demonstration project first then permanent build. Doesn't a dedicated transitway save operating costs by preventing wasted operating hours stuck in traffic!? 	3
<p>Overhead Wires</p> <ul style="list-style-type: none"> ▪ Add express wire (2 sets of wire in each direction) and passing wires (reduces/eliminates wheelchair delays). ▪ If fixed route on corridor overlaid make sure separate overhead wire system 	2
<p>Open House</p> <ul style="list-style-type: none"> ▪ I am impressed with the effort to get public input, but the vast majority of potential riders are absent, ie persons between 25 and 40 ▪ Impressed by the thorough presentation ▪ I enjoyed the clicker exercise, but shutting questions down cold was borderline rude. Next time, start the presentation on time instead of being so strict. 	3
<ul style="list-style-type: none"> ▪ Aurora and 15th need to be upgraded. 	1

Comment	Number of Comments
<ul style="list-style-type: none"> ▪ Concerned about transfers to/from the 48 (23rd Ave). People shouldn't have to walk a block or two. 	1
<ul style="list-style-type: none"> ▪ 10min peak/off peak is better. Off-peak frequency has been persistently neglected, and your study shows more passengers for lower cost. 	1
<ul style="list-style-type: none"> ▪ For me this is all within walking distance. I would only use the bus if I can't physically walk or the weather is wretched. That said, I totally support frequent bus service as the best way to minimize reliance on cars. Other important considerations: level boarding, pay outside. Glamorous buses are great but not as essential as other station amenities (covered, lean bars). 	1
<ul style="list-style-type: none"> ▪ Give this project to Metro so it becomes a new RapidRide line. 	1
<ul style="list-style-type: none"> ▪ I think the best alternative is not a Madison BRT. A lot less money could buy us many more buses and services on and near Madison on existing routes. 	1
<ul style="list-style-type: none"> ▪ Avoid too many brands. Rapid Ride, Swift, ST's future BRT are already too many. Coordinate with ST and Metro. 	1
<ul style="list-style-type: none"> ▪ 2+1 seating to fit more people and make it easier to get on/off. 	1
<ul style="list-style-type: none"> ▪ Parking "loss" is irrelevant - no mitigation is needed. It only accommodates more auto traffic and usage to clog up central Seattle streets - it is car owners taking away parking from other car owners. ▪ Auto travel time is absolutely irrelevant. It is cars clogging up the streets which only encourages auto use and absolutely is counter to this transit project and the goals of making neighborhoods more walkable. ▪ Make this busway a trunk line for multiple routes like the current at union, 11- Madison Park. 12-19th Ave, the branches can be in mixed traffic. 	3
<ul style="list-style-type: none"> ▪ I lived ON Madison. It is noisy. I call it "siren alley". How do you accommodate emergency vehicles with the proposed BRT? 	1

Comment	Number of Comments
<ul style="list-style-type: none"> ▪ I am very concerned about any impact this has to the #12. It is very unfriendly to older, less able & women. I will not transit crosshill after dark. The 12 is the only bus that traverses Cap Hill and goes to south Downtown. 	1
<ul style="list-style-type: none"> ▪ Be aware of increased "park & ride" incidences/situations in neighborhoods east of 23rd & Madison 	1
<ul style="list-style-type: none"> ▪ Make sure you buy nice buses and make payment off-board or on-board but after boarding. No queues to board! 	1
<ul style="list-style-type: none"> ▪ Build & aspire to best BRT line in the country. 	1
<ul style="list-style-type: none"> ▪ Thanks so much for the presentation. Preserve Route 2!! 	1
<ul style="list-style-type: none"> ▪ I am concerned about parking between 23rd and MLK on Madison. It is already extremely limited. 	1
<ul style="list-style-type: none"> ▪ Consolidate 7 & 9 into a Boren service that connects to Link. 	1
<ul style="list-style-type: none"> ▪ Can bus order leverage other funds and broaden fleet modernization? Economy of scale. 	1
<ul style="list-style-type: none"> ▪ Don't increase auto travel time at the expense of transit. Transit can be improved with little or no impact on auto travel times. 	1
<ul style="list-style-type: none"> ▪ How will crossing bus routes be affected? 	1

4 E-MAIL COMMENTS

A number of e-mail messages were received following the open house. These messages are summarized below. Due to the length of the e-mail messages received, comments have been paraphrased and reduced in length.

Several themes emerged from the follow-up e-mail and comments after the open house:

- Residents of East Arthur Place wrote to say they did not receive notice that their street was under consideration as a terminus/layover location earlier in project planning and expressed serious concern about a variety of potential quality of life impacts and impacts to businesses.
- Several residents wrote to ask or express concern that the Route 11 and service to Madison Park would be eliminated as part of this project (note: this project will not result in an operating plan, and service to Madison has not been proposed for elimination).
- Several comments felt that the traffic analysis was not sufficient to evaluate potential cut-through traffic and diversion impacts.
- Several comments expressed support for a one-way bicycle facility instead of a bidirectional facility.
- Some comments expressed general concern about transportation planning and impacts to auto traffic.

Comment	Number of Comments
<p>Pedestrian Facilities</p> <ul style="list-style-type: none"> ▪ A commenter noted that pedestrians need a walkway 2 meters wide (6'-6")as much as possible. 	1
<p>East Arthur Place Terminus</p> <ul style="list-style-type: none"> ▪ One resident and property owner of E Arthur Place was strongly opposed to a bus layover location on E Arthur Pl. Objections included lack of notification about potential impacts, challenges for buses turning back onto Madison due to heavy traffic, impact to the residential character of the neighborhood, impact to the patio at Jae’s restaurant, parking removal, impact to recycling and other trucks using the street to serve businesses, lower property values, and noise. 	5

Comment	Number of Comments
<p>East Arthur Place Terminus (cont.)</p> <ul style="list-style-type: none"> ▪ Another resident cited similar concerns included the narrowness of the street, the fact that it was originally converted to one-way to stop drivers from avoiding the light at MLK and Madison - however many still do - so changing the direction would increase the number of cars speeding through, impacts to the daycare center, noise and quality of life disruption from buses, reduced parking, increased bus and auto traffic, and idling buses. ▪ A resident of Madison Valley was disappointed with outreach surrounding the open house (residents of E Arthur Pl. did not receive notice and have heard about the project through word-of-mouth) and by the lack of information available regarding parking impacts, wiring on Madison, other Madison Valley layover alternatives, an extension to 43rd, consideration of driveway access, consideration of utility trucks, plans for the MLK and Madison intersection, and concern about the daycare and music school. The comment included concern about other impacts of the terminus such as noise, idling, etc. ▪ A comment from the music school on E Arthur Pl. mentioned that the site has hundreds of kids being dropped off and picked up for music every day, in addition to the need to move music equipment in and out of the building. Because of this the commenter would support a terminus on another street but not on Arthur. ▪ Another homeowner expressed concern that an E Arthur Pl. terminus would force residents to relocate and sell their homes at reduced value due to the severity of impacts such as increased traffic, removal of parking, and buses laying over. The concern is amplified by the narrowness of the street and residential character with existing traffic concerns due to cut-through traffic. 	
<p>Western Terminus</p> <ul style="list-style-type: none"> ▪ A comment from the Waterfront Place Residential Condominium Association expressed concern about access to the passenger, delivery, and moving access on the west side of Western, halfway between Madison and Spring. 	1

Comment	Number of Comments
<p>BRT Design and Amenities</p> <ul style="list-style-type: none"> ▪ One comment expressed support for 18-meter long (60') buses, effective transit priority, off-board payment including fare vending machines, stops that are 30-35 cm high, high frequency service (5-7.5 minutes at peak, 10-15 minutes off-peak). ▪ Another comment supported bus-only lanes but did not support stop consolidation, especially at 12th, 17th, 20th, and 23rd in order to maintain access. This comment also supported side-running lanes, at least east of Broadway. ▪ One comment would like to see a station at 3rd Avenue; stations at 1st and 6th/8th leaves quite a gap. This comment also suggested extending the line farther east to McGilvra or Madison Park. The comment also cautioned against building fancy stations in favor of something more similar to Swift stations because they are comfortable, efficient, stylish, and have good brand identity and passenger flow. ▪ A Madison Park resident expressed the opinion that the BRT project is fatally flawed and will not serve Madison Park residents, particularly due to stop consolidation. This comment also suggested that removing parking and stop consolidation alone could solve most of the problems the BRT project is addressing. The same commenter expressed strong preference for improvements to Route 11 instead of BRT and a desire to avoid a forced transfer from Madison Park. ▪ Two comments expressed concern that the Route 11 would go away entirely, leaving Madison Park without service. ▪ One comment questioned why a streetcar wasn't under consideration. 	7
<p>23rd Avenue Terminus</p> <ul style="list-style-type: none"> ▪ A business and property owner expressed support for a layover location on 20th and Madison, noting that park improvements/trash collection would be necessary. This person would not support a stop location further east and questioned whether 4 parking spots would provide layover for 3 buses. 	1

Comment	Number of Comments
<p>Bicycle Facility</p> <ul style="list-style-type: none"> ▪ A citizen who learned of the project through the Seattle Bike Blog strongly supported two one-way bicycle facilities instead of a bi-directional path due to safety concerns about a bi-directional path, citing findings from the Organization for Economic Cooperation and Development (OECD) recommending that bi-directional facilities be avoided. Specific concerns include downhill speeds, passing in oncoming traffic, slower travel speeds. The writer was also concerned that cyclists will not use a two-way facility for the above reasons, which provokes harassment from drivers. ▪ Another comment supported a bicycle facility buffered by a curb, not just bollards or parking. This person preferred a wide protected bike lane of 3.5 meters minimum with good drainage and colored pavement. A protected intersection/roundabout concept was also suggested. This comment also suggested bicycle parking, including possibly secure bicycle lockers at each BRT stop. ▪ A comment from the Seattle Bicycle Advisory Board supported a one-way bicycle facility due to safety concerns particularly regarding the speed difference between downhill and uphill cyclists, and also due to ease of entering and exiting the protected bike lane and safety at intersections. 	3
<p>Auto Impacts</p> <ul style="list-style-type: none"> ▪ A commenter expressed opposition to anything that would increase auto travel times on Madison and to expenditures on special buses and stops. ▪ Another comment expressed support for increased transit service, but was doubtful that the traffic analysis sufficiently analyzed potential traffic diversion from the project. 	4
Comment	Number of Comments
<p>Auto Impacts (cont.)</p> <ul style="list-style-type: none"> ▪ One comment was concerned generally with the city's approach to transportation planning and impacts to auto travel. ▪ A comment expressed concern about cut-through traffic and 	4

questioned the assumption that increasing transit service will prevent a noticeable increase in traffic and congestion in the future.	
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