

TECHNICAL ADVISORY COMMITTEE

City of Saint Paul

Parks and Recreation
Forestry
Operations & Maintenance
Transportation Planning & Safety
Civil Engineering & Street Design
Structural Engineering
Traffic Engineering
Planning and Economic Development (PED)
Heritage Preservation Commission (HPC)
Natural Resources
Real Estate

Mary Norton
Brett Hussong
Katie Hamerlinck

Bolton & Menk, Inc.

Minnesota Department of Transportation (MnDOT)
State Historic Preservation Office (SHPO)
Department of Natural Resources (DNR)
National Park Service (NPS)
Capitol Region Watershed District (CRWD)
Capitol Area Architectural and Planning Board (CAAPB)
Ramsey County
Metropolitan Council
Metropolitan Environmental Services
Metrotransit
Community Development

Scott McBride
Maddie Dahlheimer
Cody Christianson
Mikaela Isaacson

PROJECT CONTACT

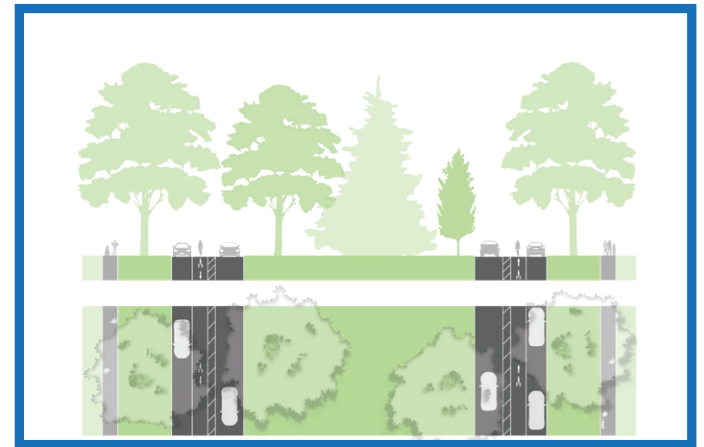
Mary Norton (She/Her)

Landscape Architect | Project Manager
City of Saint Paul Parks and Recreation
mary.norton@ci.stpaul.mn.us | 651-266-6407

VISION

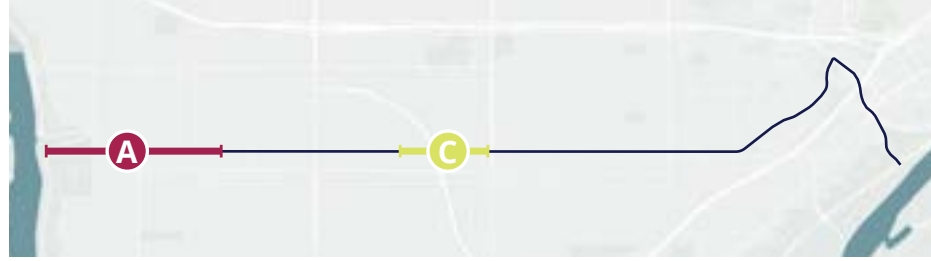
Breakout Rooms

- GROUP A - **Blue**: Single Median
- Group B - **Green**: Double Median
- Group C - **Orange**: No Median



Typical Roadway Sections

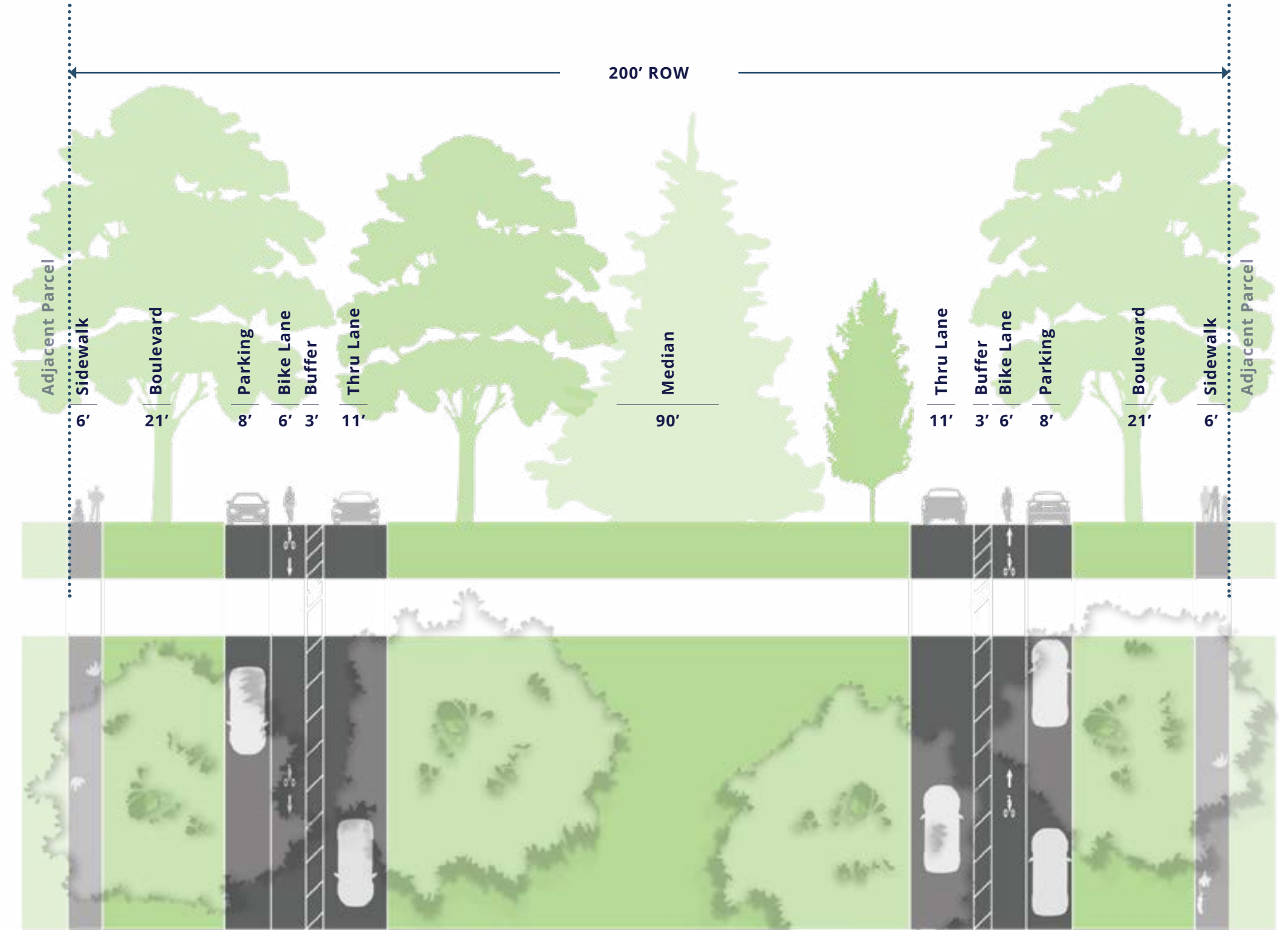
200' ROW, Single Median



TAC MEETING #1
FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP

Meeting Breakout
Group

A Single Median



Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

TAC Member Comments

SINGLE MEDIAN SECTION

Makes the most sense to me for the trail to be in the Center median, especially if some of the existing roadway crossings through the median could be eliminated or narrowed. I like this option because it is consistent with how people use Summit Avenue today, and leaves the existing sidewalks in place. Primary question to explore is whether this would allow narrowing the roadway segments to remove the bike lanes and/or buffers to offset the additional pavement.

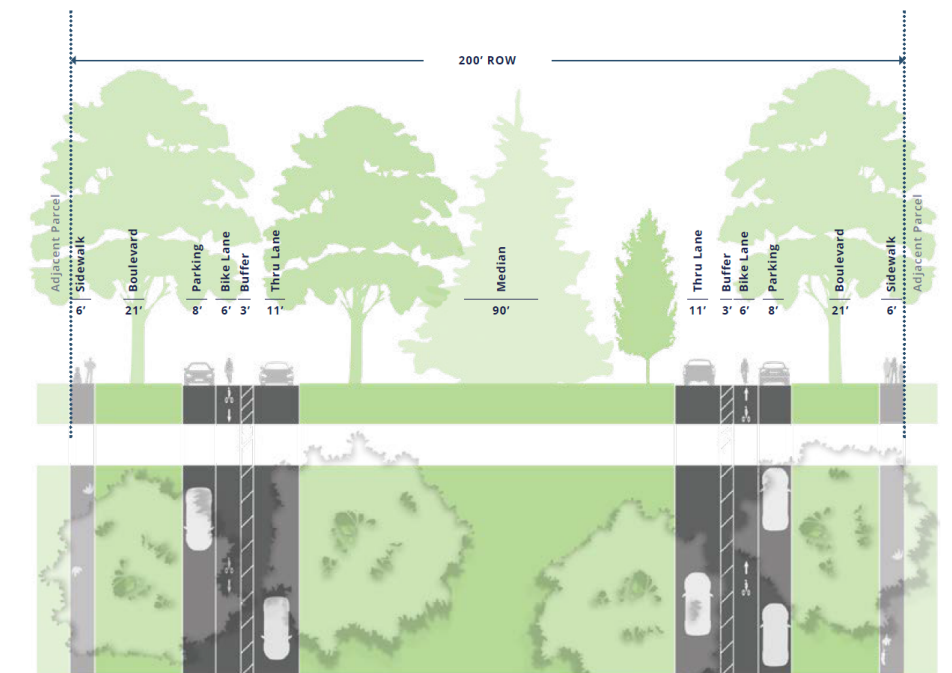
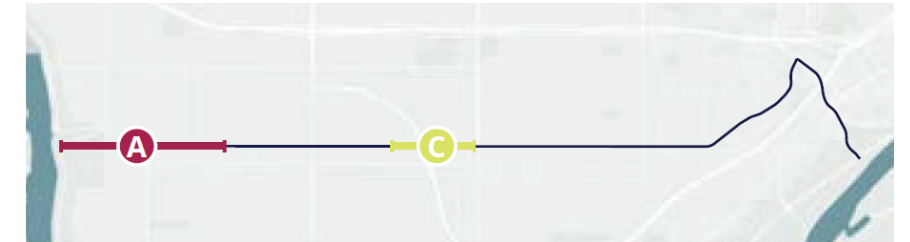
Remove bike and buffer from roadway. Add bike facility behind the curb on the sidewalk side. One way on each side.
 Advantage is that you are basically swapping space by narrowing the roadways and putting bike and buffer behind curb, so no major impact to trees or how the corridor functions. Disadvantage is that some bikers may not adhere to the indicated one way direction

one way bikeway against the curb on either side (9' including some vertical separation/buffer | parking | 11' travel).
 - Adv: doesn't mess with the curb lines; doesn't impact trees or green space; doesn't add new impervious surface; one way bikeway makes traffic intuitive from a bike perspective and a driver perspective - no median crossings of cross streets for people biking on median; no real change to the median at all!
 - Disadv: unique design in Saint Paul (parking protected bikeway; cars parked in "middle" of street), so unique maintenance, but wouldn't add NEW maintenance (relative to a bikeway in the median)

two way bikeway on median (gotta be wide enough to acknowledge the fact people walking and biking will both want to use it)
 - Adv: A new bituminous surface on the median will likely last longer/ require less maintenance; this would likely be the most comfortable facility...outside of street crossings (which is a big source of discomfort!!); major advantage is that we could decrease the width of the street if no bike lane if/when we reconstruct these segments (could be AT LEAST 9' narrower of a crossing without the bike lane/buffer). This would be in line with modal hierarchy and policy from the Comp Plan
 -Disadv: I think street crossings of a median running bikeway will be the biggest challenge: visibility, legibility (which mode yields to which at conflict points); tree removal will be contentious; you'll get walkers and bikers both wanting to use the bikeway, whether you sign it as bike only or not

TAC MEETING #1

FEBRUARY 4, 2022
 TAC RESPONSE EXERCISE FOLLOW UP
 SEGMENTS A AND C - SINGLE MEDIAN



Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

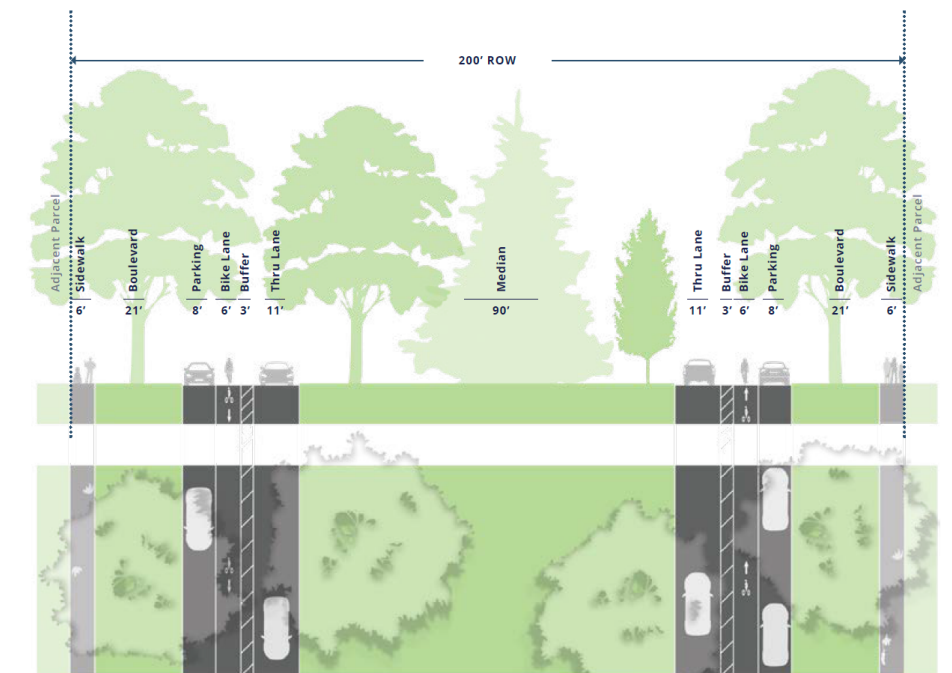
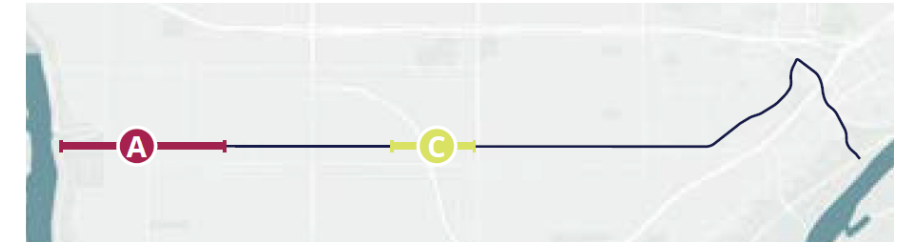
1. As is with reduced parking to improve sightlines and reduce likelihood of cyclists being doored. Pros: keeps cyclists moving with flow of traffic, preserves natural space. Cons: Some folks just won't be comfortable riding on the road. This is okay, but I think I'd like the design team to try to do something different to see what is possible. Especially if the above curb stretch could continue to Ayd Mill.

2. Above curb bike trail on both sides of median. Pros: keep moving with direction of traffic. accessible to users that aren't comfortable on road. Cons: "cliff" feeling if the trail is so close to the road without a buffer. Not sure how cyclists would respond if this ends up being crowded. Challenge: Make it easy to get on and off at side street intersections - right turns. This is what I would love to see the design team explore.

I do not like the idea of a Bike trail down center of median. It would introduce too much pavement and conflict with pedestrians who naturally walk down the center of the median. Since there are sidewalks on both sides of the street, I think the median center pedestrian path should remain unpaved. Perhaps with crushed limestone?

TAC MEETING #1

FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP
SEGMENTS A AND C - SINGLE MEDIAN



Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

I envision a two way raised trail with a buffer, on either side of the road, whichever side can be made continuous (ie. not jogging of the trail back and forth through the corridor) with the other roadway sections. This has the advantage of using the existing road area and is within the existing curblines and will preserve the historic and park like nature of Summit. This alignment also prevents vehicle traffic from degrading the path and allows for separate snow removal of the path and provides space in the buffer for snow plowed from the road. This has the disadvantage of potentially confusing two-way bike traffic for cars (though Wheelock and Como both have a similar alignment) and removing parking on one side of the road.

One-way raised trails could also be on both sides of the road, against the curb, with parking between the bike trail and the travel lanes. A visual buffer would be provided to separate the trail from the parking strip. This has the advantages of keeping cars from entering the trails and degrading the pavement and may be easier to connect with other road sections. It also keeps bikes moving with the direction of traffic and utilizes the existing road section. Snow removal may be more of an issue, as plowed snow from the parking strips may get on the paths.

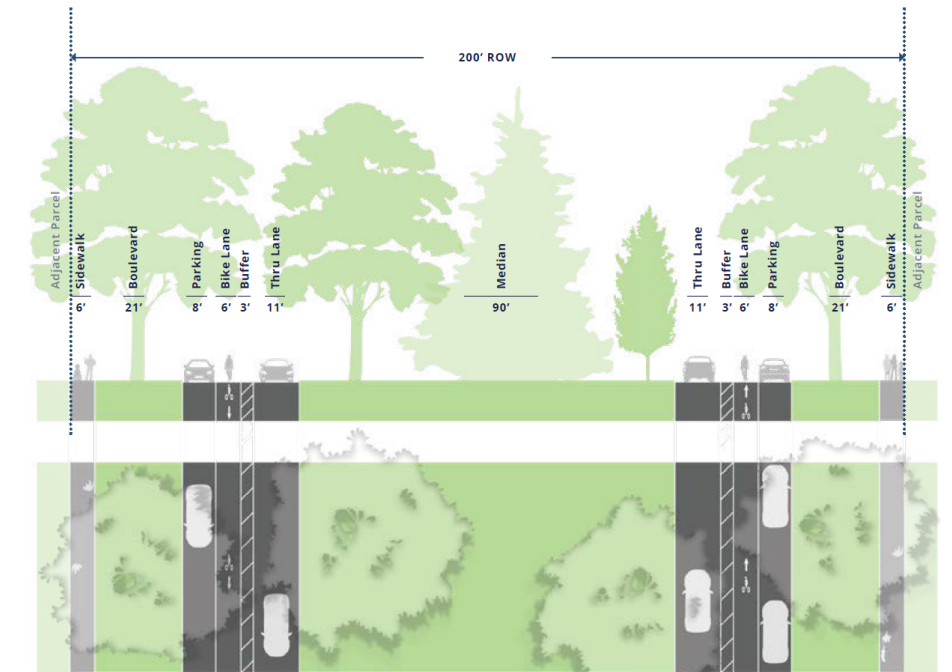
If a trail is put within the median it will increase the impervious areas that will need stormwater treatment as well as impacting the park like feel of Summit and likely requiring tree removal or damaging tree roots. It also creates a dangerous situation of bikes crossing in the center of intersections, which may not be expected by drivers. This is the most difficult alignment to connect with the other sections of the road.

Down the center; similar to Victory Memorial Trail; advantage would be a grade separated bike trail and disadvantage would be rerouting trail through intersections.

Through the median, winding open space park-like feel around the trees. Or on one side, replacing sidewalk, as a wider shared-use trail (respecting the urban setting and causing less impact to the center median and its formal lawn-like setting).

TAC MEETING #1

FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP
SEGMENTS A AND C - SINGLE MEDIAN



Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

I think that separate bike and ped facilities are key. I would envision 2 one-way bike trails to be located adjacent to the travel lanes, either 1) as part a new extended boulevard where the parking lane is currently (and the parking lane be shifted over to next to the travel lane), or as 2) part of a new extended median where the travel lane is currently (and having the travel lane get shifted over to be next to the parking lane. For 1), we would need to make sure that there is enough space between the parking lane and the bike trail to avoid doors swinging into bicyclists. Disadvantages to both of these would be if the existing trees would have to be removed.

I personally think that this cross section is so wide and there would be enough space for both parking and a travel lane even with the pavement being narrowed as the curbs are extended for a bike trail. On-street parking can also help with traffic calming and I don't think that the residents and institutions along Summit would be happy to have their parking removed considering that many of the blocks are long and there are not too many side street connections. If necessary to remove parking, I would advocate that only one side would be removed.

I could see also see the new bike trail being in the middle center median, but it appears that there already are non-maintained unpaved trails that get heavily utilized by runners, and I think that having the trails be near the driving lanes is a better option because it doesn't disrupt that and the existing vegetation/trees. I also think that it would be more pleasant for bicyclists to be closer to the street and sidewalk vs. in the center median. I personally like biking with close views of the nice/historic houses along Summit.

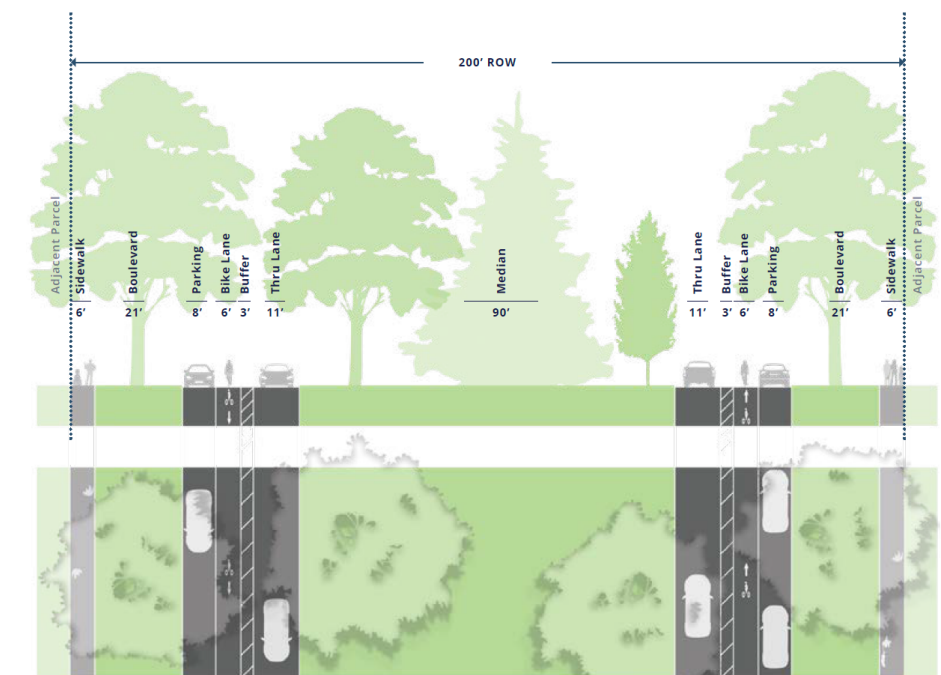
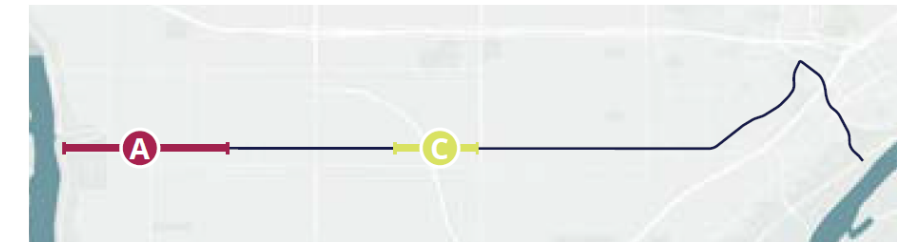
First choice would be to widen the ROW on each side of the central blvd by shrinking the width of the central blvd a bit, but that isn't okay if it cuts a lot of tree roots for large trees and make them die. The added width would be for more bike lane space on each side. Second choice would be to make one side of the blvd for cars (2-way) and the other side of the blvd for bicycles. In either case, on street parking on both sides of the blvd is important because people can't reasonably be expected to cross a blvd and 2 lanes of traffic to get to their car.

I can envision a trail going right in the median. People love running and hiking between the trees in the median. I prefer to see separate bike and pedestrian facilities to avoid potential collisions and prevent becoming a victim of bike trail accidents. In terms of the bike facility itself, I'd prefer to see 2 separate facilities for the bike trail (1 in each direction). I bike on the Dakota Rail Regional Trail with my family and it's a single shared-use facility. It's impossible to push a stroller or enjoy the trail while hiking. It's a regional trail and it tends to attract hardcore bikers who see pedestrians as more of a nuisance. The trail feels highly dangerous especially for a family with young kids who may be pushing a stroller or who may happen to have a child that's just starting to bike. We're constantly worrying about having a head-on collision with opposing bike traffic. The disadvantage of having multiple facilities is the upkeep it requires and the difficult transitions one has to navigate while crossing one segment of the trail to the next.

Parking access to a regional trail is important if the goal is to make the trail more accessible. Otherwise, it risks becoming a neighborhood trail.

Right down the middle.
Keeps people off the roadway

TAC MEETING #1
FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP
SEGMENTS A AND C - SINGLE MEDIAN



Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

Near road on the median for cyclists; sidewalk for pedestrians. Separates peds/cyclists/vehicles and still gives use to the green space in the median. A big disadvantage could be any intersection. Anyone taking a left or trying to cross the street has around 4 or 5 intersections to cross. Mitigated with good signage? Could there be a way to connect Summit to Ayd Mill? Maybe a better way to get to Grand via Griggs? Could see people trying to get access to that corridor.

First choice within the existing road bed to avoid impacts to, or the removal of the existing parkway trees as well as the loss of available soil volumes. The large boulevards and median provide beneficial growing conditions to establish large canopy trees. These conditions are not found widely in the city and provide a unique opportunity to a diverse mix of large trees not suitable for narrower boulevards.

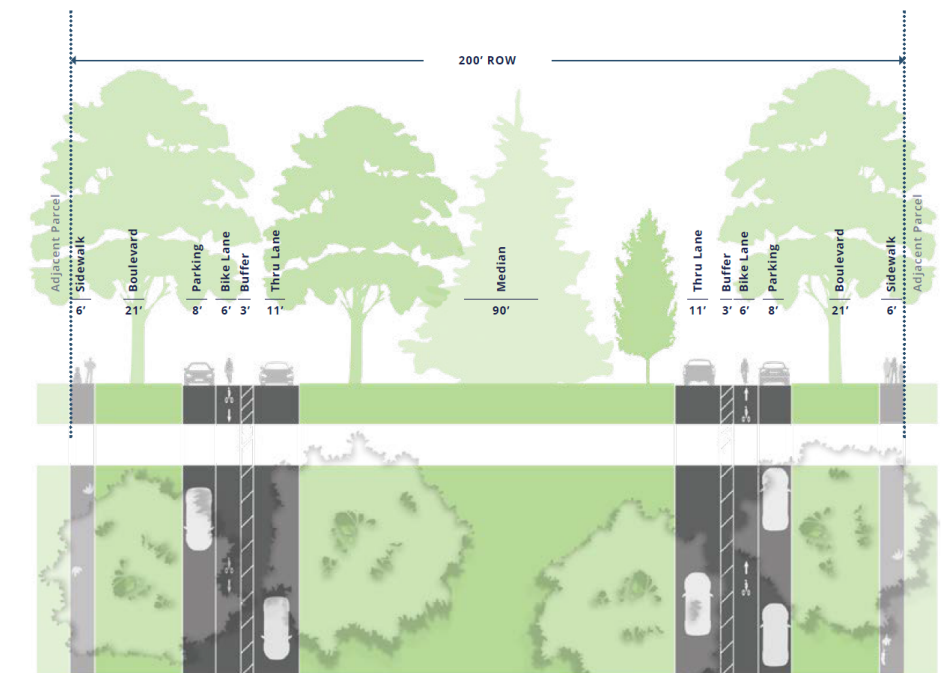
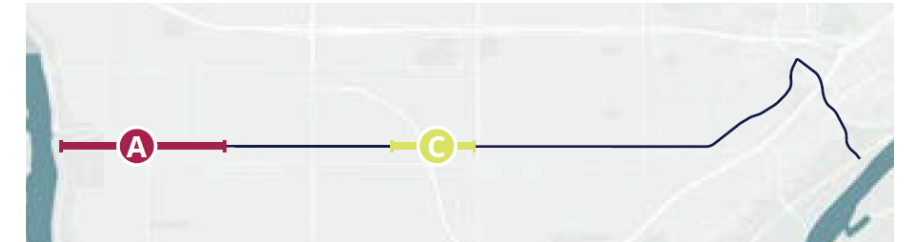
Second choice would be to locate the trail in the median. The pathway would ideally be routed to avoid impacts to large, existing trees - especially any designated landmark trees or other significant trees.

Narrowing the north and south boulevards is not preferred as it could cause damage to the existing trees and reduce available soil volumes for the establishment of large trees. Narrowing the median raises similar concerns.

Yes. A trail can be added where the parking exists today. Locating the trail above the curb and adjacent to the boulevard seems safer for the bikers as compared to being between parked and moving cars.

TAC MEETING #1

FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP
SEGMENTS A AND C - SINGLE MEDIAN



Typical Roadway Sections

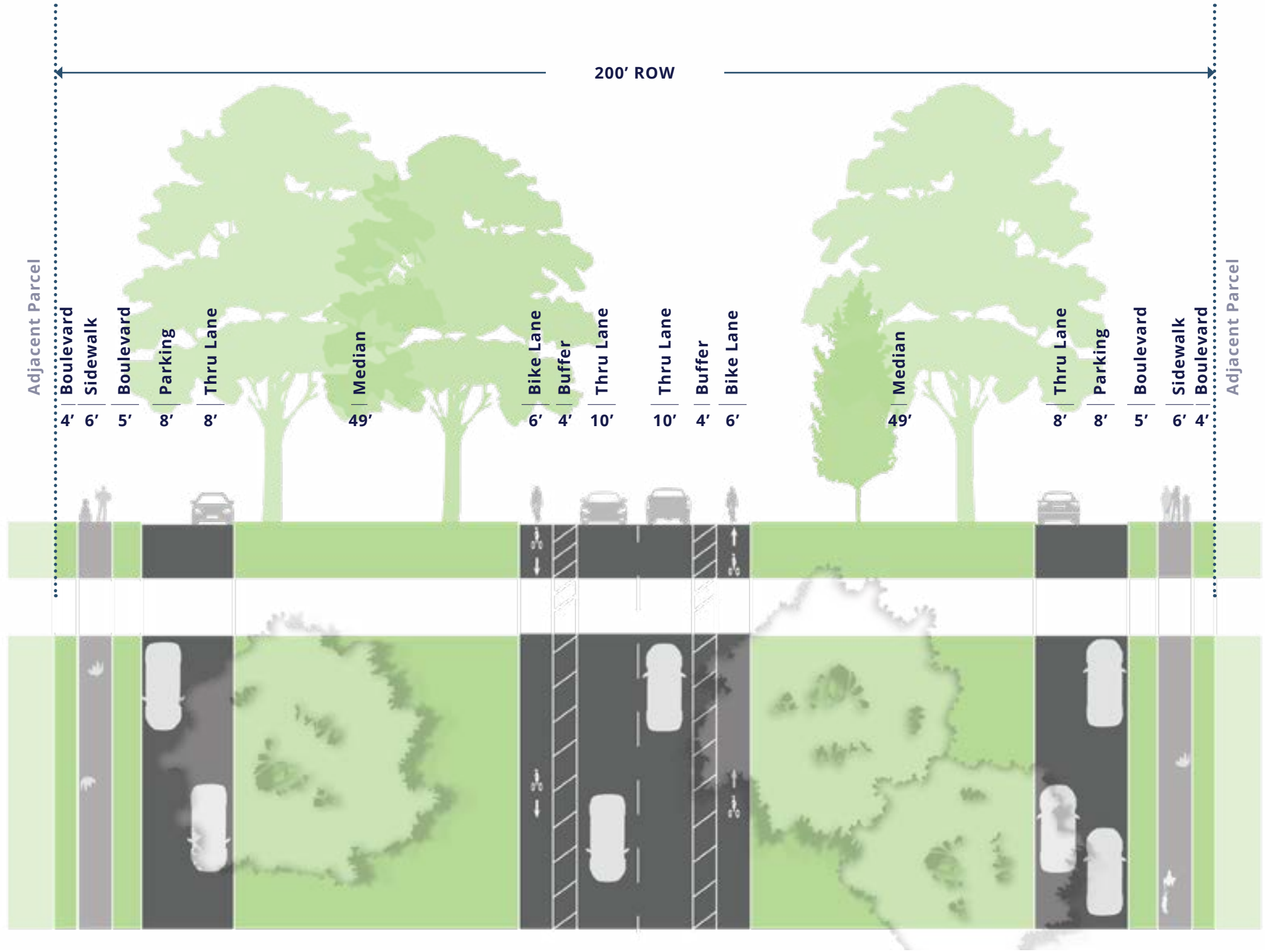
200' ROW, Double Median



TAC MEETING #1
FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP

Meeting Breakout
Group

B Double Median

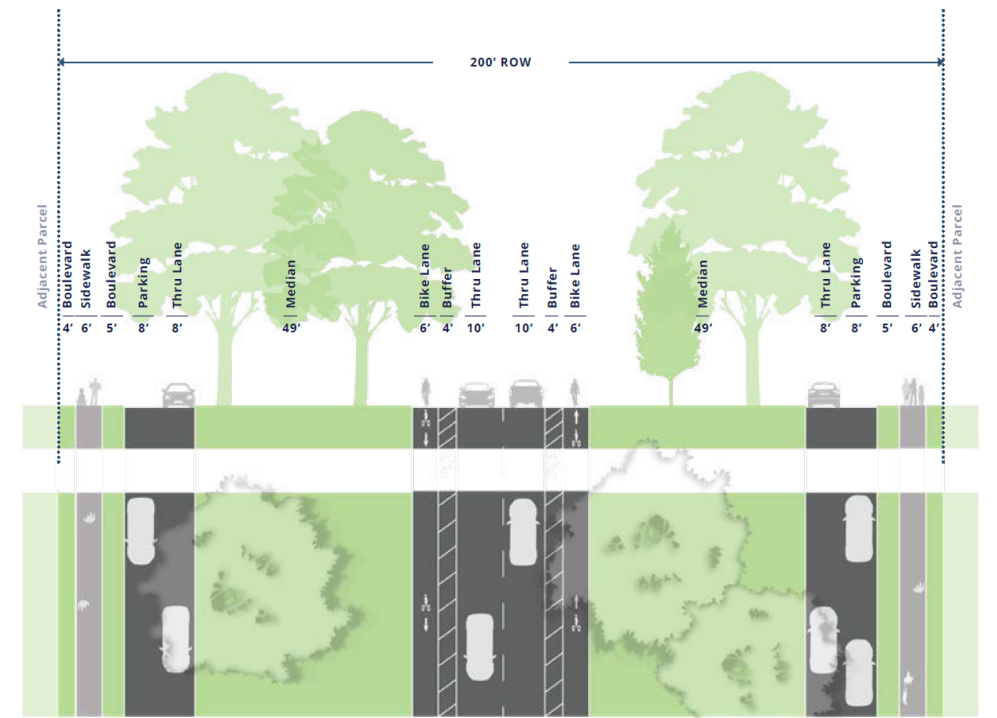
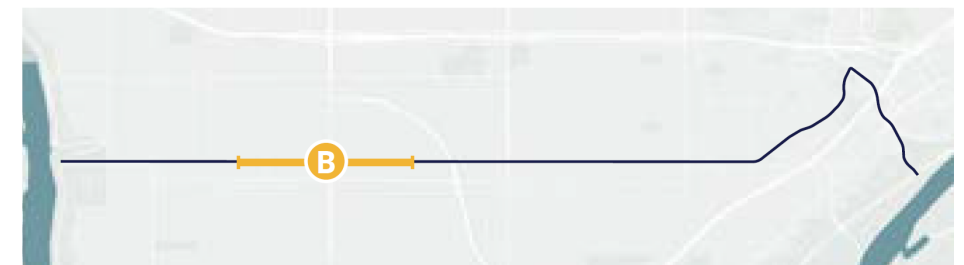


Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

TAC Member Comments2
DOUBLE MEDIAN SECTION
Would recommend placing the trail in one of the two medians. The existing bike lanes and/or buffers could be removed from the central roadway to allow it to be narrowed to offset the addition of new pavement for the trail.
same as previous section
<p>Remove or limit car access on "frontage" roads, turn these into one way bike ways, move parking to the space now occupied by the bike lanes</p> <ul style="list-style-type: none"> - Adv: no new pavement; no loss of trees; no new plowing; likely the frontage roads will last longer as bikeways than as they exist now; no loss of parking - Disadv: driveway access (though several have alley access); people parking would have to walk across the medians to access properties on Summit - how do they do that with snow/how do you make it accessible <p>One way bikeways on each median - similar adv and disadv to what I list previously</p> <p>Two way bikeway on one median - similar adv and disadv to what I list previously</p>

TAC MEETING #1

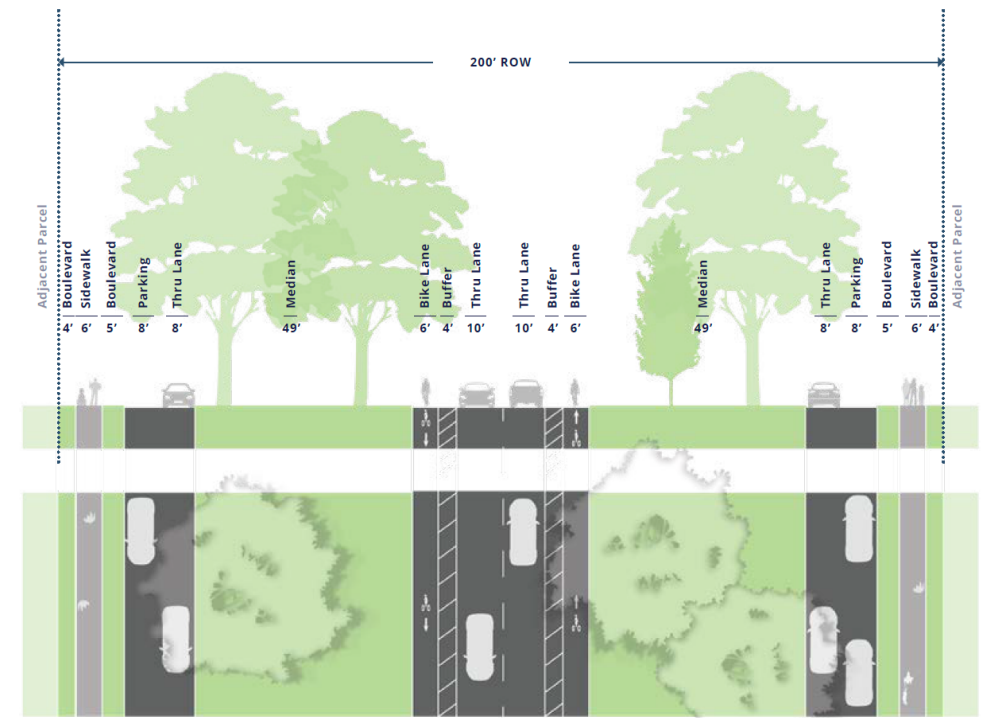
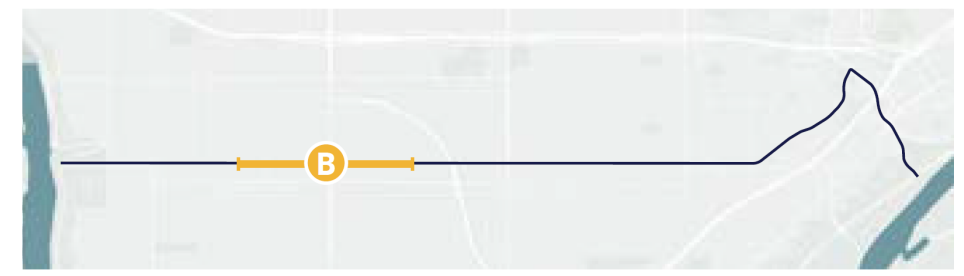
FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP
SEGMENT B - DOUBLE MEDIAN



Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

I think a trail on each side, going with traffic direction, would be great. So, just pushing into the median a bit and using the space from the on road buffer to build a curb and keep the vehicle lane narrow. Prevent the "cliff" feeling of being on a trail without separation from the road. I think you have a lot to work with. The status quo is fine for most of this stretch since the bike lane does not pass parked cars, but, since it's on road some folks will not use it.

TAC MEETING #1
FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP
SEGMENT B - DOUBLE MEDIAN



Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

I participated in the break out session for this cross section. Several excellent options are available, including using either one of the frontage roads for a two-way, completely separated cycle track. This could easily be connected with a two-way trail from the single median section. It creates easier maintenance and snow removal while utilizing existing road infrastructure and preserving Summit's trees and park-like feel. Any parking lost on the frontage road could be replaced on the main road. Ensuring that houses that use the frontage road have alley access will be critical. This option may also allow for capping of the frontage roads, except for the bike trail, removing pavement, potentially creating additional greenspace and allowing better access to greenspace in the medians and better traffic control at intersections.

A two-way cycle track on either side of the main road and shifting the travel lanes is another option. This has the advantage of using the existing road area and is within the existing curblines and will preserve the historic and park like nature of Summit. This alignment also prevents vehicle traffic from degrading the path and allows for separate snow removal of the path and provides space in the buffer for snow plowed from the road. This has the disadvantage of potentially confusing two-way bike traffic for cars (though Wheelock and Como both have a similar alignment) and removing parking on one side of the road.

One-way raised trails could also be on both sides of the road, against the curb, with parking between the bike trail and the travel lanes. A visual buffer would be provided to separate the trail from the parking strip. This has the advantages of keeping cars from entering the trails and degrading the pavement and may be easier to connect with other road sections. It also keeps bikes moving with the direction of traffic and utilizes the existing road section. Snow removal may be more of an issue, as plowed snow from the parking strips may get on the paths.

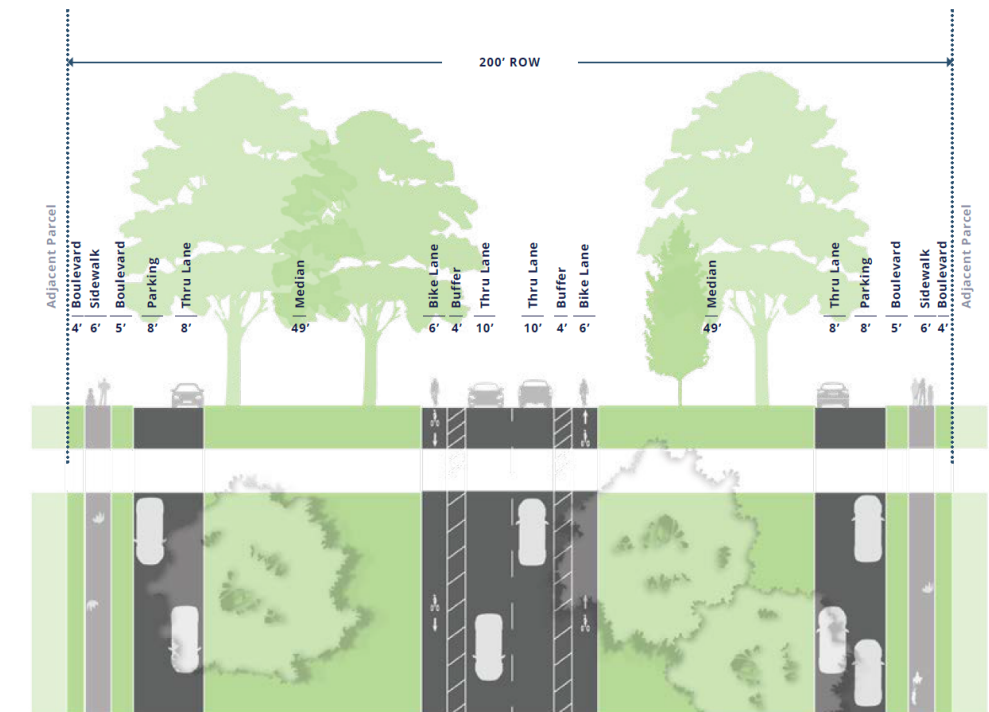
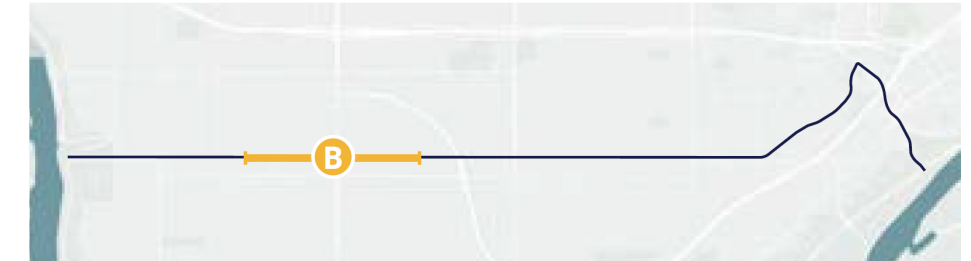
A trail within the medians should not be considered, as it will create dangerous crossings at intersections, will create additional pavement that will need stormwater treatment and will remove trees and other vegetation.

Consolidate both bike directions and walkway on north of Summit; make the other into a closed off frontage rd (up to Snelling) for home driveway access.

Remove bike lanes, add parking to the center - devoting the central corridor to vehicles. The parking provides access to users (non-residents) and to residents (especially those who are about to 'lose' their frontage). On one of the frontage roads, remove vehicles entirely OR restrict entry to single-block resident access only (bollards or similar) such that the frontage can be reconfigured for shared multi-use regional trail (predominantly bike use). This approach would seem to transition best to a shared-use trail on one side when the road section converts to one road with wide center medians. Some bicyclist types will oppose loss of on-road bike lanes. However a balance must be struck - IMHO to provide separate facility for every mode may be possible without losing character of the district or functionality of the road -but taking that the extra step to provide separate bike facility for every bicyclist TYPE is unsustainable and not warranted. All facilities on all roads does not make complete streets.

TAC MEETING #1

FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP
SEGMENT B - DOUBLE MEDIAN



Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

I would advocate for trails separate from the pedestrian space and to be one-way because of the wide cross section. I think that a separate one-way bike trails could go close to where the bike lanes are now, but above the curb either within an extended median or shifted to be within the existing median. This would maintain the current bike/ped separation that it has now and maintain the median for other uses. I could also see one-way bike trails go adjacent to the outer travel/parking lanes within the current median space, but this might result in tree removals, which would be a disadvantage. But, I think that having the bike trails further away from the center travel lanes could provide a quieter/more pleasant bicycling experience.

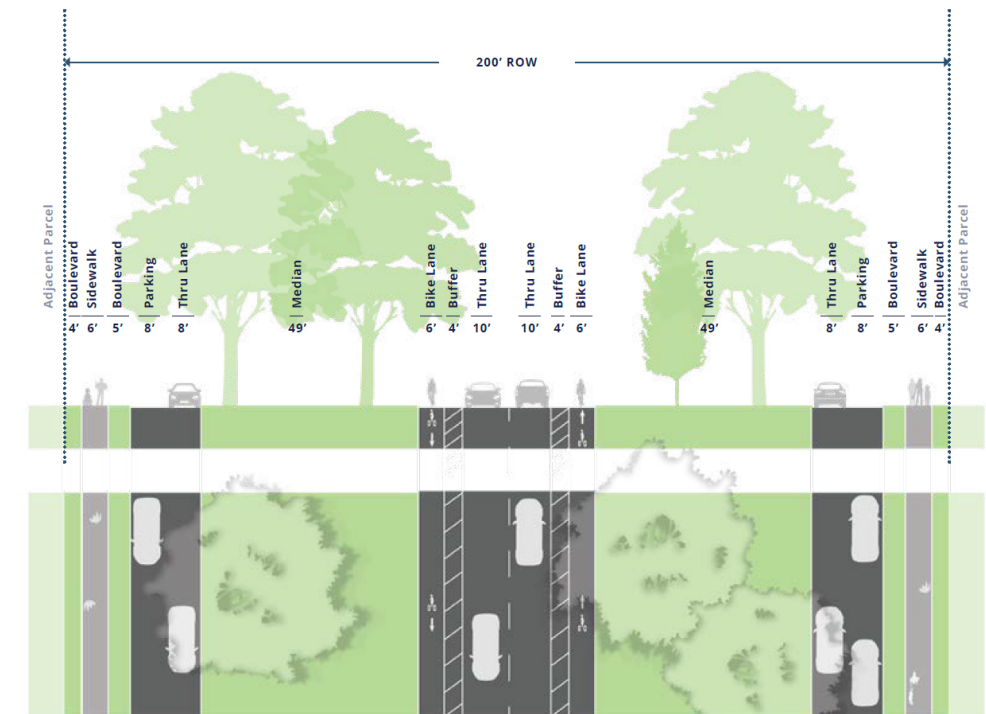
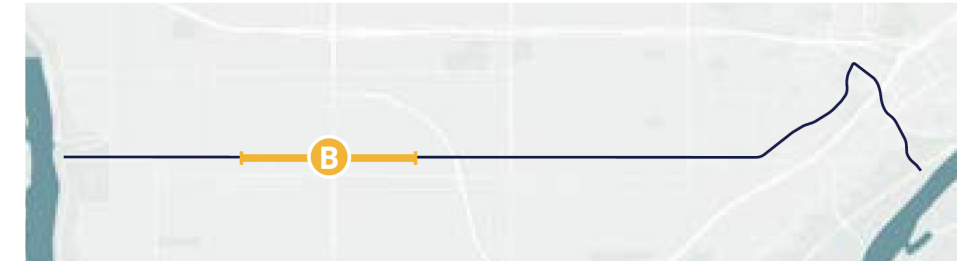
I think the bike lanes work where they are, but with a more defined barrier between them and the cars.

I envision a pedestrian trail in the median(s), and separate one-way bike facilities on the frontage roads. The question I would ask is will I feel safe biking with my 4 year old on the frontage roads? Probably not, but as long as there is a way to keep bike facilities separate from vehicular traffic, there will be a sense of increased security for bikers. The challenge with this configuration is that it will be difficult for residents, the Ramsey Middle school, etc. to lose parking on the frontage roads.

3 roadways seems a little excessive. turn one of the side roads into a trail.
Plenty of room for a mixed use trail

TAC MEETING #1

FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP
SEGMENT B - DOUBLE MEDIAN



Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

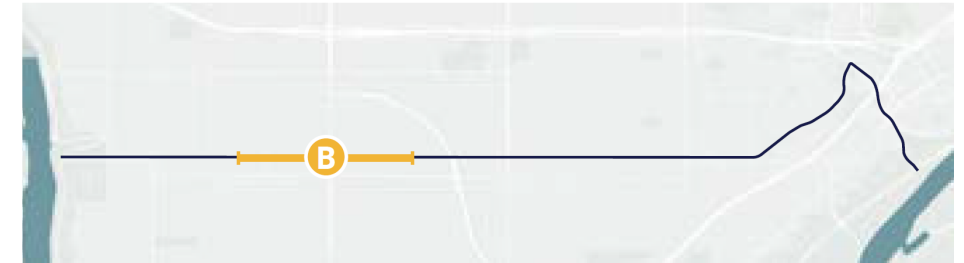
2) 2 one-way bike paths located on the inside of the medians near the road. Could make a good transition from single median section. Keep sidewalks for pedestrians This can keep parking on Summit, separate road users, and keep most of the medians.

Again, a trail within the existing roadbed is preferred to avoid the damage or removal of existing parkway trees. Adding a trail to either median would reduce both the existing and future tree canopy. I'd agree with the idea that the frontage streets (?) present a unique opportunity to explore.

A trail could be added in the existing location of this segment with the addition of it being above the curb.

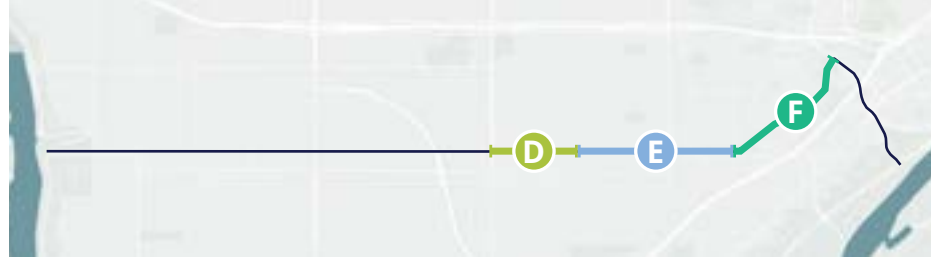
TAC MEETING #1

FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP
SEGMENT B - DOUBLE MEDIAN



Typical Roadway Sections

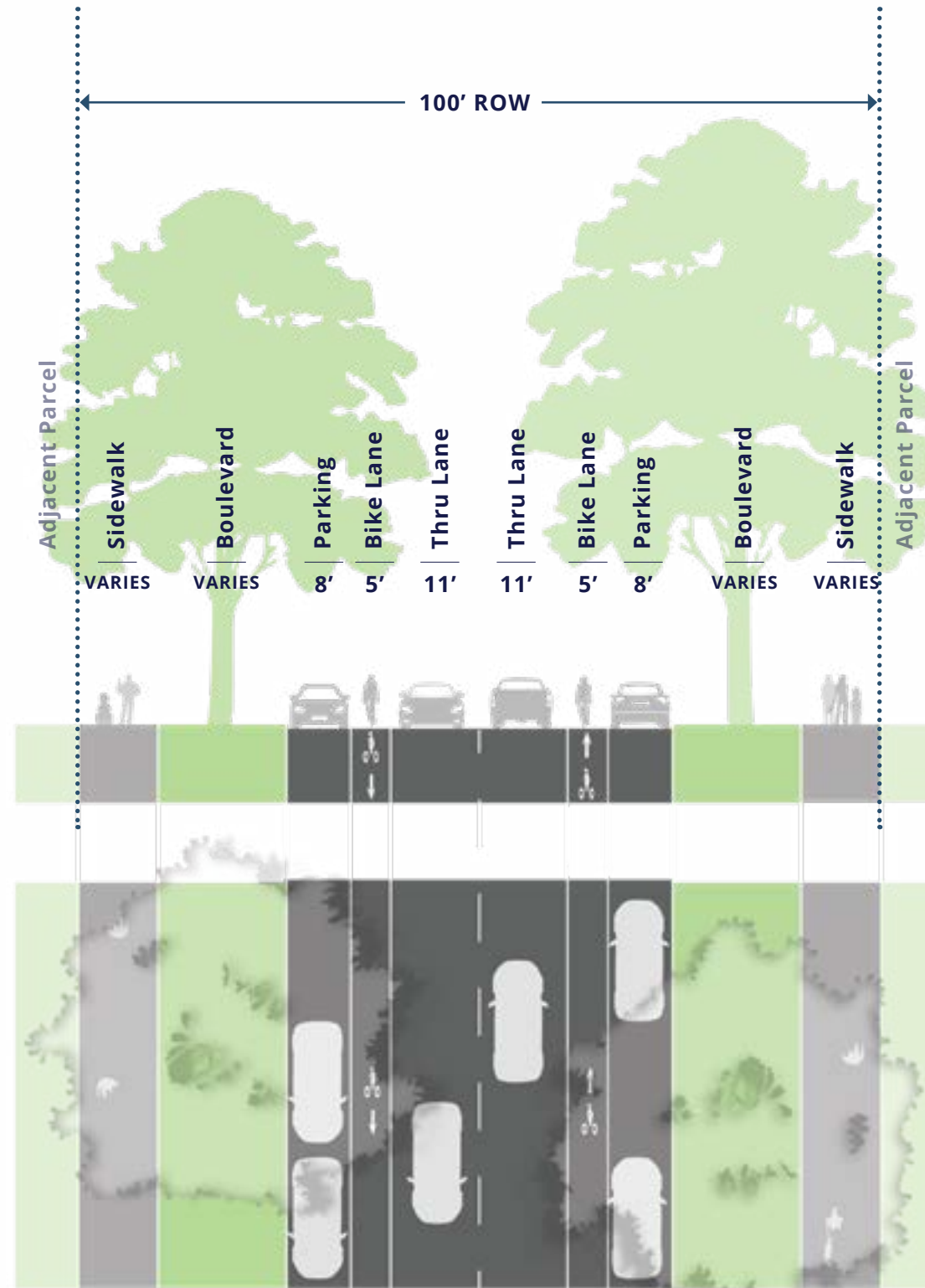
100' ROW, No Median



TAC MEETING #1
FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP

Meeting Breakout
Group

C No Median



TAC MEETING #1

FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP
SEGMENTS D, E, AND F - NO MEDIAN

Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

TAC Member Comments3

NO-MEDIAN SECTION

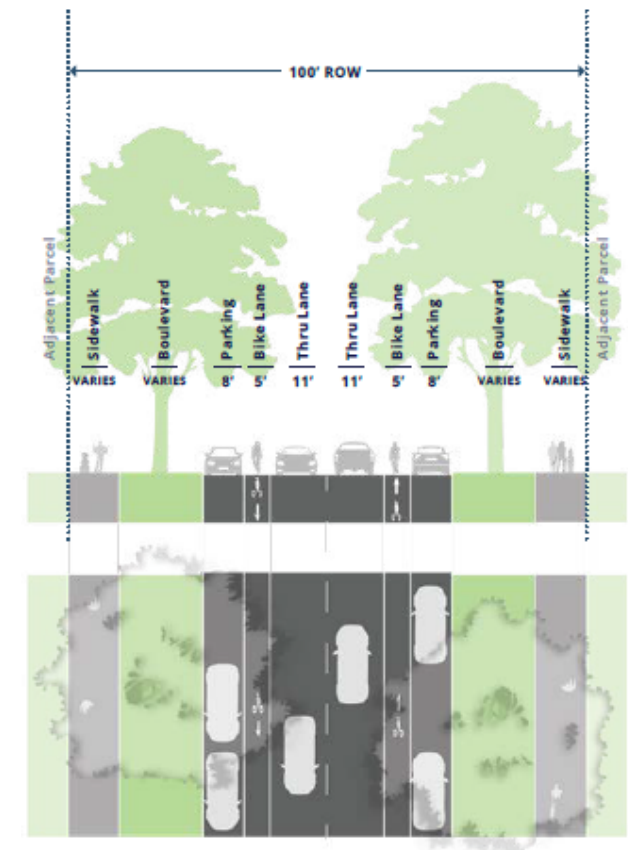
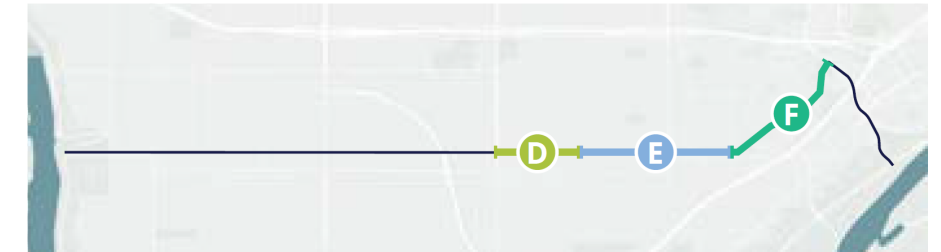
Trail would best be located within one of the boulevards. Existing sidewalks should be left in place. Should explore removing on-street parking from one side. If parking is removed, and if bike lanes are also removed, a trail and boulevard could largely fit within existing roadway footprint.

Remove bike lanes from roadway. Add bike facility behind curb, either one-way on both sides or a two way on one side. If a two way on one side, one curb line would move and restriping for the roadway. A two way would lessen maintenance effort.

One way parking protected bikeways against curb + carve out a litttttle bit of the existing boulevard.

- Adv: maintains parking, hopefully minimal impact on trees
- Disadv: doesn't give maximum comfot to people biking; longer crossings remain for people walking.

This segment is tough. obviously.

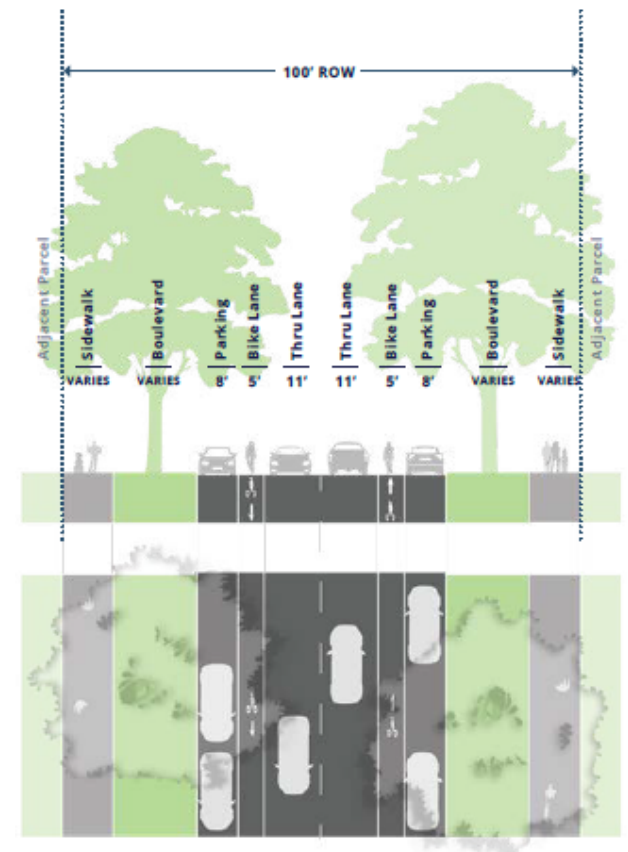
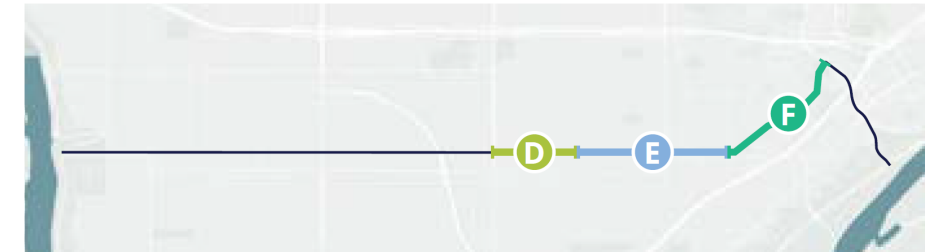


Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

Same as section 2. Maybe reduce parking to one side of street to free up room. I think this is the tightest section and where cyclists are most likely to be doored.

TAC MEETING #1

FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP
SEGMENTS D, E, AND F - NO MEDIAN



Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

I envision a two way raised trail with a buffer, on either side of the road, whichever side can be made continuous (ie. not jogging of the trail back and forth through the corridor) with the other roadway sections. This has the advantage of using the existing road area and is within the existing curblines and will preserve the historic and park like nature of Summit. This alignment also prevents vehicle traffic from degrading the path and allows for separate snow removal of the path and provides space in the buffer for snow plowed from the road. This has the disadvantage of potentially confusing two-way bike traffic for cars (though Wheelock and Como both have a similar alignment) and removing parking on one side of the road.

One-way raised trails could also be on both sides of the road, against the curb, with parking between the bike trail and the travel lanes. A visual buffer would be provided to separate the trail from the parking strip. This has the advantages of keeping cars from entering the trails and degrading the pavement and may be easier to connect with other road sections. It also keeps bikes moving with the direction of traffic and utilizes the existing road section. Snow removal may be more of an issue, as plowed snow from the parking strips may get on the paths.

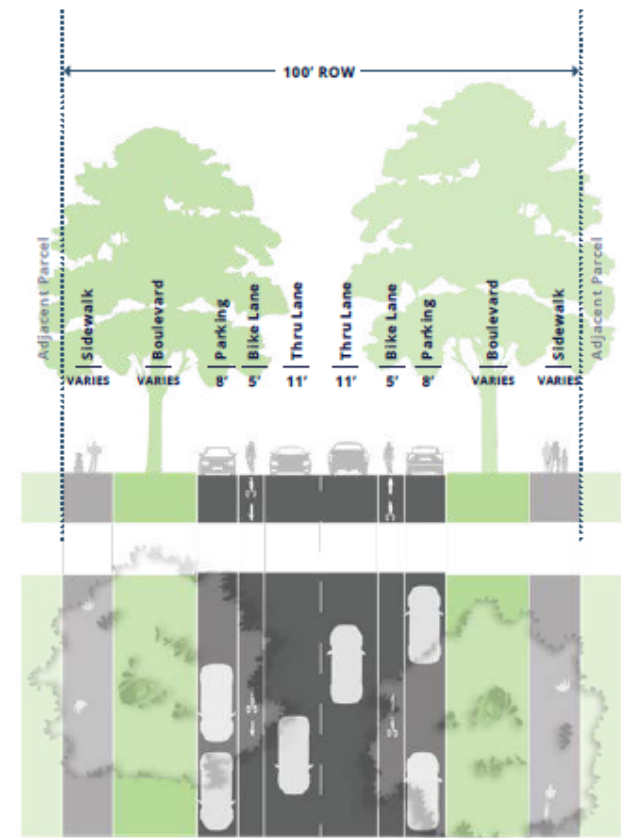
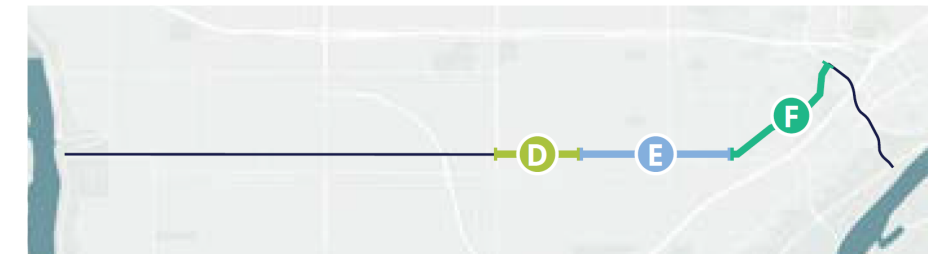
The sidewalk on one side of the road (whichever better connects with other sections) could also be widened to accommodate bike traffic. This has the advantage of separating bike traffic from the road - lengthening the life of the path and making snow removal easier and preserving parking. It has the disadvantage of creating additional pavement that requires stormwater treatment (extra cost), removal of trees and potential conflicts with pedestrians.

Consolidate both bike directions on south or north of Summit; remove parking on the other side. Disadvantage is no grade separation.

My previous sections #1/#2 seem to tend towards a two-way or shared-use facility on one side. Sticking with that approach (otherwise there seem to be serious challenges with users crossing vehicle thru lanes), sidewalks would remain as-is to accommodate peds, whereas bike/regional multi-use could be supported by eliminating bike lanes, shifting thru lanes to one side (against a parking lane), then removing the other parking lane and using the remaining curb-to-curb for a two-way cycle track. Advantage with respect to historic district is that curb lines remain unaltered (assuming curbs are part of the HWS Cleveland design).

TAC MEETING #1

FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP
SEGMENTS D, E, AND F - NO MEDIAN



Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

I could see two one-way bike trails going on the other side of the parking lane within an extended boulevard. However, there would need to be enough space to avoid passenger doors swinging into the bike trails. I'm not sure if there would be enough space for this without removing the trees, which would be a huge disadvantage. A consideration to add more space for the trail would be to remove parking on one side of road, but I think that any removal of parking, especially so close to Grand Ave, would get pushback from residents.

Another option could be widening the existing sidewalk to be a wider multi-use trail. Even though I think separation of bike/ped would be ideal, conflicts from doors of parked cars is a bigger concern. Removal of the boulevard trees is also a concern.

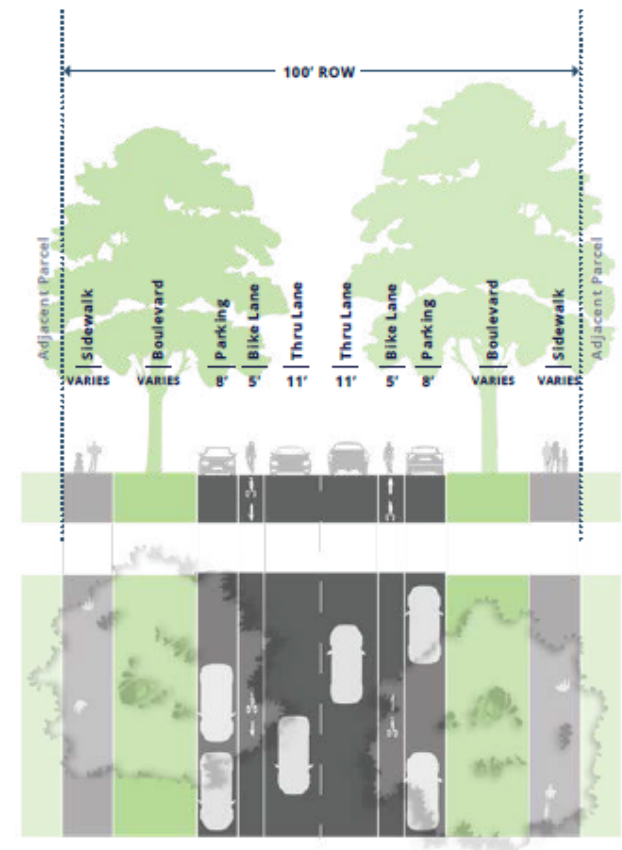
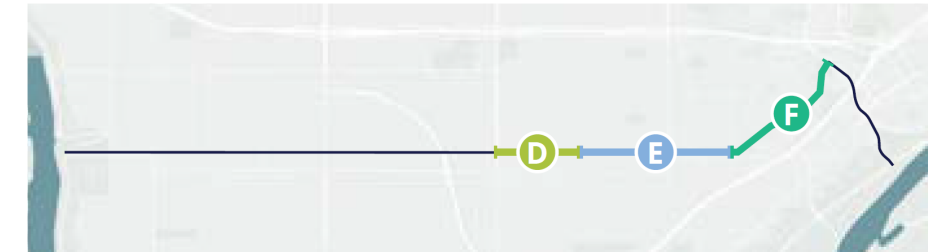
Ditch parking on one side of the street and shift both bike lanes to that side of the street. Retain current bike lane widths, plus the parking lane, to have enough width for safe 2-way biking and a barrier between drive lane and bike lanes.

It would be ideal if parking can be removed on the south side (or north) of Summit Avenue and if a pedestrian trail can be added in its replacement. I would still keep the bike facilities as separate one-way facilities. The challenge will be the transition space at intersections and where the ROW narrows at Lexington, etc.

Turn one of the sidewalks into a trail

TAC MEETING #1

FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP
SEGMENTS D, E, AND F - NO MEDIAN



Where can you envision a trail in the existing cross section? What are the advantages and disadvantages of various locations?

Just thinking about giving cyclists more space - remove parking on one side of road and permit parking to residents of the street. All this to add buffer zones to the bike lane. I don't think it's possible to put the bike path on the boulevard because of trees. This plan might also not be possible as it would likely have neighborhood pushback. If anything, make these bike lanes more usable.

Within the existing roadbed, eliminating parking on one side of the street if additional space is needed.

Yes. The above the curb trail could be added where the parked cars exists today. Locating the trail adjacent to the boulevard seems safer as compared to sandwiching the bikers between parked and moving cars.

TAC MEETING #1

FEBRUARY 4, 2022
TAC RESPONSE EXERCISE FOLLOW UP
SEGMENTS D, E, AND F - NO MEDIAN

