



Wellington Circle Study Working Group Meeting #5

Thursday, December 8, 2022, 1:00 – 2:30 PM

Held Virtually via Zoom

Meeting Summary

On December 8, 2022, MassDOT conducted the fifth Working Group meeting for the Wellington Circle Study. At this meeting, the Study team reviewed the short-, medium-, and long-term alternatives, the alternatives evaluation process and results, and solicited feedback. The meeting was also open to members of the public, who were given the chance to share comments and questions at the end of the meeting after the Working Group discussion.

Meeting Notes

1. *Welcome and Ground Rules by Makaela Niles, MassDOT Project Manager*

Attendees are welcomed to the meeting and are informed that the meeting is being recorded. Makaela Niles (MassDOT) explains the Ground Rules for the meeting, including how Working Group members and the public can participate. Members of the public are made aware they can contact Sara Stoja (HNTB) if they require technical assistance. Makaela reviews the agenda for the Working Group meeting.

2. *Study Overview, Project Goals, and Objectives & Study Process by Makaela Niles, MassDOT Project Manager*

Makaela provides a background of the Study, its goals, and the process. She describes that this conceptual planning study will be used to evaluate existing and future multimodal transportation conditions. The Study aims to redesign Wellington Circle, providing better connectivity and multimodal mobility through the City of Medford and the surrounding region. A draft report with the short-, medium-, and long-term recommendations will be developed and shared for public comment before being finalized in a final report.

- Study Goals: Makaela reviews the Study goals which include the following:
 - Improve safety, mobility/access, and connectivity for all transportation modes and users in the Wellington Circle area
 - Improve quality of life for residents in the Wellington Circle area
 - Improve local and regional connectivity to support businesses and future development

- Study Process: Makaela reviews the steps of the study process, which build upon each other. This meeting will cover #4: alternatives analysis. The steps of the Study process include:
 1. Public involvement plan, study area, goals and objectives, evaluation criteria
 2. Existing conditions, future no-build conditions, evaluation of issues and opportunities
 3. Alternatives development
 4. Alternative analysis (this is the main step being discussed during the meeting)
 5. Recommendations
 6. Final report

3. *Alternatives Review: Alternatives Update by Gary McNaughton, McMahon Associates (Project Consultant)*

Gary McNaughton (McMahon Associates) provides an update on the study alternatives and explains that traffic projections for future year conditions with the various alternatives in place have been developed with assistance from the regional planning agency. This has led to the refinement of cross sections and access (e.g., abutting properties, lane designation, sidewalks, bike lanes, driveways). A transit enhanced alternative has been developed based on the at-grade triangle alternative and a pedestrian bridge is being considered.

4. *Alternatives Review: Short/Medium-Term Alternatives by Gary McNaughton, McMahon Associates (Project Consultant)*

Gary provides an overview of the Short/Medium-Term Alternative (options A & B).

- Option A: This option removes right turn channelization and relocates the Middlesex Avenue connection to open this area north of the parkway. Further, it prohibits eastbound left turns and relocates these to occur in the U-turn to the south.
 - Cost: \$6.2M
 - Impacts:
 - Small improvements to bicycle and pedestrian access and connectivity
 - Increases in open space.
 - Degrades right turn operation – the elimination of separated right turns results in less flexibility when operating the signals.
- Option B: This option maintains channelized eastbound (EB) and westbound (WB) turns to accommodate right turn volumes. Further, this option would allow for one of the through lanes to be repurposed so the pedestrian crossing could be shortened. Right turn lane crosswalks would be signalized.
 - Costs: \$6.2M
 - Impacts:
 - Small improvements to bicycle and pedestrian access and connectivity.
 - Increases open spaces.

5. *Alternatives Review: Long-Term Alternatives: At-Grade by Gary McNaughton, McMahon Associates (Project Consultant)*

Gary provides an overview of the Long-Term At-Grade Alternatives, explaining the various concepts and the associated costs.

- Long-Term At-Grade Alternative: Dual Quadrant
 - The At-Grade Alternatives include fewer lanes to better accommodate cyclists and pedestrians.
 - The names of the concepts are derived from the way they are configured to the north of Wellington Circle, resulting in either a square or triangle roadway configuration to the north of the parkway.
- Long Term At-Grade Alternative: Dual Quadrant – Square Concept
 - Cost: \$36.7M
 - Features dual quadrant roadways allowing for connections to and from the east. To connect between Fellsway south of the Parkway and Middlesex Avenue, vehicles would need to use the connector roadway in line with 9th Street. As part of this alternative, eastbound left turns are prohibited, and could occur at Commercial Street to access Fellsway north of the parkway. The crosswalk on the east side of the quadrant roadways & Revere Beach Parkway intersection is not included here.
 - Benefits:
 - Simplifies overall geometry
 - Creates open spaces for multimodal considerations and greenery
 - Provides mostly protected, single-phase crossings for pedestrians
 - Drawbacks:
 - Overall geometry maintains high number of vehicle lanes
 - Requires additional signalized intersection at Middlesex Avenue at 9th Street
 - Concurrent or multiple-phase pedestrian crossings at a few locations
- Long Term At-Grade Alternative: Dual Quadrant – Triangle Concept
 - Cost: \$36.7M
 - Features dual quadrant roadways allowing for connections to and from the east. The north south connection is focused on connecting Fellsway north to Revere Beach Parkway. Fellsway through traffic would need to turn at the intersection on the northern point of the triangle. Eastbound left turns are still prohibited in this alternative and could occur at Commercial Street to access Fellsway north of the parkway. The crosswalk on the east side of the quadrant roadways/Revere Beach Parkway intersection is also not included.
 - Benefits:
 - Able to handle existing vehicle volumes
 - Creates open spaces for multimodal considerations and greenery
 - Allows future bicycle connections to Fellsway and Route 16
 - Provides mostly protected, single-phase crossings for pedestrians
 - Drawbacks:
 - Overall geometry is slightly atypical and maintains high number of vehicle lanes
 - Concurrent or multiple-phase pedestrian crossings at a few locations
- Long- Term At-Grade Alternative: Dual Quadrant – Transit Enhanced Concept
 - Cost: \$38.3M

- Built upon the Triangle concept as the primary bus routes travel along Fellsway, north of the parkway
- Features dedicated transit lanes in both directions north of the circle
- Benefits:
 - The northbound transit lanes could be extended along Fellsway, if desirable.
 - Prioritizes and best serves route along Fellsway from Wellington Station with wider lanes for transit services
- Drawback:
 - Not practical to create an eastbound transit lane on Revere Beach Parkway due to number of turning conflicts
- Long-Term At-Grade Alternative Option: Pedestrian Bridge
 - Cost: \$35.7M
 - The evaluation of this bridge addresses the missing crosswalks to the east of the quadrant roadways/across Revere Beach Parkway. It requires a long span and lengthy ramps to meet accessibility requirements and includes stairs near the intersection. The pedestrian bridge could be added to any of the Long-Term At-Grade Alternatives.
 - The current design is very preliminary and would need further evaluation and design development if it were to advance into project development.

6. *Alternatives Review: Long-Term Alternative: Grade-Separated by Gary McNaughton, McMahon Associates (Project Consultant)*

Gary provides an overview of the Grade-Separated Alternative and explains that this alternative was advanced into the analysis phase.

- Cost: \$176.9M
- North-south volumes are lower than east-west and not considered for grade separation, whereas the east-west connection could be grade separated with a south to east connection
 - While the south to east grade separation serves the heaviest volume, it does not offer an advantage over the east-west connection and has a more complex geometry and structural design
 - An underpass option did not advance due to significant construction costs, utility impacts, and future flooding risk and operations
- Benefits:
 - Removes major movements from surface roadways, limiting the number of lanes required to handle existing volumes.
- Drawbacks:
 - Surface roadways still require high number of lanes in some locations
 - Bridge acts as a visual barrier, bisecting transit station from nearby residents and businesses

7. *Alternatives Evaluation: Evaluation Criteria Framework by Gary McNaughton, McMahon Associates (Project Consultant)*

Gary explains the evaluation criteria, which are based on the Study goals presented previously. The framework is based on three questions 1) does this area benefit from the proposed changes, 2) is the change neutral, 3) is this area impacted?

8. *Improve Safety by Jorden van Emmerik, McMahon Associates (Project Consultant)*

Jorden Van Emmerick (McMahon Associates) discusses how the alternatives compare regarding roadway safety. Initially, the Study team outlined how the complex roadway geometry, number of travel lanes, and high vehicle speeds have made Wellington Circle a high crash location with a particularly high number of side swipe vehicle collisions. This information has helped determine the safety improvements for each alternative.

- Safety – Key Design Elements
 - Several key design elements were outlined in the 4th Working Group meeting to improve safety for cyclists and pedestrians through enhanced facilities (e.g., protected bike lanes, accessible bus stops, and wider and more enhanced pedestrian crossings).
- Safety – Crashes All Long-Term Alternatives
 - Fewer approach lanes reduce the need for multiple-lane changes and the associated potential for sideswipe crashes
 - Prohibition of left turns reduces number of conflict points between vehicles, cyclists, and pedestrians
 - Simplified roadway geometry reduces potential for driver confusion
 - Reduced corner and turn radii encourage lower vehicle speeds, reducing expected crash severity
- Safety – Pedestrian & Bicycle All Long-Term Alternatives
 - Adds fully separated bicycle facilities - there are currently no bicycle accommodations at Wellington Circle, however there are signalized pedestrian crossings
 - Maintains protected crossings for crosswalks and bike crossings, with one exception
 - Provides additional signalized crossing opportunities for pedestrians
 - For at-grade roadways, lane reductions and elimination of unsignalized slip lanes reduces “highway” nature, potentially reducing vehicle speeds
- Safety – Summary
 - All build alternatives are expected to reduce crashes relative to existing conditions
 - Short/medium-term improvements are expected to result in minor reduction in crashes (safety benefit is not as great in comparison to long-term alternatives)
 - Among build alternatives, grade-separated results in fewer conflict points than At-Grade Alternatives

9. *Improve Mobility & Access by Maureen Chlebek, McMahon Associates (Project Consultant)*

Maureen Chlebek (McMahon Associates) explains how traffic operates through Wellington Circle and how this area is impacted, how it benefits, or how it remains the same with each alternative. Four modes (e.g., driving, transit, walking, and biking) are considered; however, there is no alternative where all modes benefit. The following was included in this analysis:

- Existing Vehicle Volumes – Peak Hours Comparison
 - Key takeaways:
 - There is a dominant pattern between the south and the east and there is a lot of competing movement
 - The highest overall volume is on Revere Beach Parkway east of the Circle
 - Typical commuter patterns are not seen on east/west roadways
- High-volume Intersections Comparison
 - A graph shows that Wellington Circle has the highest vehicle volumes (total PM peak hour volume is 8,964) based on a review of comparable complex, urban intersections
- Operations Summary
 - The existing Circle maximizes the number of vehicle lanes
 - Alternatives simplify roadway geometry, resulting in easier wayfinding
 - At-Grade Alternatives reduce vehicle capacity due to fewer lanes
 - All alternatives significantly enhance the pedestrian and bike experience
- Vehicle Operations
 - Maureen explains that vehicle operations for each alternative are assigned a Level of Service (LOS) rating
 - The LOS is used as a mechanism to understand how much traffic is getting processed, how queues between intersections can be managed, and identifies movements that are over capacity. Each rating is explained and comparisons of possible changes from year 2020 to 2040 are shown through a series of images.
- Vehicle Operations – Summary
 - Short/medium-term alternatives: reduce capacity for some movements while improving overall flow
 - Option A may result in major delay increases for eastbound and westbound right-turn movements during peak periods
 - Long-Term At-Grade Alternatives: these all result in a reduction of vehicle capacity
 - Long-Term Grade-Separated Alternative: slight increase to overall vehicle capacity
 - Grade separation results predominantly in increased capacity for eastbound and westbound through movements, not the heavier south/east traffic

10. *Improve Local & Regional Connectivity by Emil Gruber, McMahon Associates (Project Consultant)*

Emil Gruber (McMahon Associates) reviews the bicycle and pedestrian operations and explains how these modes are affected by the various alternatives. One metric used when comparing the alternatives is “connectivity” – results include the following:

- Pedestrian Connectivity
 - The following alternatives result in improved crossings along desire lines
 - Short/Medium-Term Alternatives
 - Long-Term At-Grade Alternative – Square
 - Lacks eastern crosswalk, however there is potential for a pedestrian bridge
 - Long-Term At-Grade Alternative:

- Both the Long-Term At-Grade Alternatives “Triangle” and “Transit Enhanced” lack an eastern crosswalk, however there is potential for a pedestrian bridge
 - Long-Term At-Grade – Separated Alternative
 - Also results in more short crossings
- Pedestrian Connectivity:
 - All alternatives result in fewer average pedestrian crossings for the fastest routes
 - Long-Term At-Grade Alternative - Square & Long-Term At-Grade Alternative - Triangle have the fewest crossings
- Pedestrian Travel Times Savings
 - Faster pedestrian travel times than existing for all alternatives
 - Long-Term At-Grade Alternative – approx. 1 minute & 34 seconds
 - Short-Term Alternative – approx. 1 minute
 - Long-Term Grade Separated Alternative – approx. 59 seconds
 - Existing – approx. 4 minutes & 45 seconds
- Pedestrian Experience
 - Shorter pedestrian crossings than existing for all alternatives – the metric used for this is number of pedestrian crossings of more than 3 lanes without a refuge island
 - Long-Term At-Grade Alternative - Square has the fewest crossings
 - More opportunity to provide pleasant visual and landscaped surroundings with the following alternatives:
 - Combines Short/Medium-Term Concepts
 - Long-Term At-Grade Dual Quadrant – Square
 - Long-Term At-Grade Dual Quadrant Transit Enhanced
- Elevated roadway creates unpleasant environment for the Grade-Separated Single Quadrant Alternative Bicycle Connectivity
 - Short/Medium-Term Alternative
 - Slightly better west to east bike connectivity than existing
 - Long-Term Alternatives
 - More east/west and north/south bike connectivity than existing
- Bicycle Experience
 - Most opportunity for high-comfort bicycle facilities with Long-Term Alternatives
- Transit Experience
 - Transit travel time savings for Long-Term Transit-Enhanced alternative, however, no transit travel time savings for other alternatives
 - Travel time savings are more significant in the inbound direction towards Wellington station, where buses make a left turn between Fellsway and Mystic Valley Parkway
 - A table is shown with the quality of service (QOS) for each alternative
 - All alternatives are the same or better than existing, with Transit-Enhanced showing the most improvement in QOS

11. *Improve Quality of Life by Joanne Haracz & Natalie Raffol, McMahon Associates (Project Consultant)*

Joanne Haracz (McMahon Associates) reviews various elements that impact the quality of life in and around the Wellington Circle, including environmental, land use and economic development, and enhanced development potential.

- Environmental
 - A table shows that there are minimal environmental impacts, however further coordination is needed regarding the historic nature of the Parkway
 - Long-Term Grade Separated alternative has worse environmental outcomes
 - Short- and Long-Term At-Grade alternatives have better environmental outcomes
- Land Use & Economic Development
 - All alternatives apart from Long-Term Grade-Separated are consistent with the Medford Master Plan
 - All alternatives will maintain access to driveways
- Enhanced Development Potential
 - A map shows there is a potential to create additional travel demand due to denser, mixed-use development. There is a need to increase travel via alternative modes to accommodate this increased demand.

Natalie Raffol (McMahon Associates) reviews various elements that impact the quality of life in and around the Wellington Circle, including public health, community cohesion, and environmental justice.

- Public Health
 - An analysis of public health indicators (e.g., air quality, active transportation facilities and connectivity, and safety) shows all benefited apart from air quality for Short/Medium-Term alternatives.
- Community Cohesion
 - The following alternatives are expected to reduce barriers for people between neighborhoods
 - Combined Short/Medium-Term Concepts
 - Long-Term At-Grade Dual Quadrant – Square
 - Long-Term At-Grade Dual Quadrant – Transit Enhanced
 - The Grade-Separated Single Quadrant reduces physical barriers for people, yet it creates a visual barrier between neighborhoods
- Environmental Justice
 - There are no disproportionate negative impacts to the environmental justice populations
 - All alternatives benefit car-free, minority, and low-income households by improving multimodal connections to Wellington Circle

12. *Alternatives Analysis Summary by Gary McNaughton, McMahon Associates (Project Consultant)*

Gary references a table summarizing the alternatives analysis that uses the evaluation criteria mentioned earlier in the presentation and includes estimated costs for each alternative. Overall, the short/medium-term and long-term at-grade alternatives have minimal negative impacts, with the most impact involving vehicle operations. As expected, the transit enhanced alternative has the

most benefit for transit operations and access. The long-term grade-separated alternative results in the least benefits, although it does have a benefit to vehicle operations.

13. *Working Group Members Feedback on Alternatives Evaluation and Public Comment by Makaela Niles, MassDOT Project Manager*

- Todd Blake, City of Medford – The Bus Network Redesign is still going through some sort of analysis and with that change, one of the routes would become east-west, although there is no alternate path where it could remain on the leg you are mentioning. If we went the transit option route, it would argue to realign that one bus route that was meant to be aligned with the other two.
 - Gary McNaughton, Project Manager, McMahon Associates: Thank you.
- Emily O'Brien, Medford Bicycle Advisory Commission – I am standing in for Jared Powell. I have a couple of comments of my own and a few from Jared. In terms of thinking about vehicular traffic volume compared to bike and pedestrian access - this is predictable because I am representing the Medford Bicycle Advisory Commission - but I think it is worth noting that bicycle traffic has room to grow and by making places like this less of a barrier to use by cyclists. It is possible to eventually reduce some of the vehicular traffic demands? A lot of trips people make through Wellington Circle are short. I doubt that this is an easy thing to study, but I would guess that even though there are a lot of trips that are 5-10 miles that go through this intersection, there are probably also a lot of trips that are 1-3 miles. With the current conditions, a lot of people going from a business in the Circle to the other side would drive that route. That is a potential way to reduce vehicular traffic. Another thing to keep in mind is that we are seeing more e-bikes and other minimalist personal transportation options, like e-scooters, and these can put a lot of additional demands on bike facilities. Bike facilities are not quite wide enough for safe passing with vehicles of drastically different speeds. A bike powered by a cyclist and an e-bike are drastically different speeds. I hope there could be room for expansion of bicycle facilities as the volume of those increases. And again, the number of increasing e-bikes means that it becomes that much more realistic for more people to travel on an e-bike or bicycle instead of in a car. On a longer term, it is worth accepting a reduction in vehicular traffic flow for a place like this, especially if the long-term development of the area is going to focus more on other travel modes because as you said, there is no capacity to add more vehicular space. Jared adds the following: asking people to walk under overpasses seems really behind the times. Look at I-93 near Assembly – that is a nightmare. Crossing under those ramps is terrifying. Also, why would you design alternatives that still have so many traffic lanes? Those new versions are still six lanes of traffic in some places if I am reading that right. We need real traffic calming, and perhaps reducing vehicle throughput is a feature, not a bug. It is just too complicated. The square and triangle option still look like spaghetti - better maybe, but that is a low bar. How about an actual rotary specifically designed to reduce motor vehicle traffic with some cool Euro-style separated bike facilities? This should not just be a highway. Maybe the other cited intersections in the area that have lower rates of motor vehicle travel should be used as models instead of viewing Wellington as an exception with lots of cars as if that could not change. They are talking about alternative travel, but if so, cut back the roadways. I have

one other comment to add. A lot of places like this that design an intersection to maximize the throughput for a lot of traffic build bicycle and pedestrian facilities around the edges, but do not necessarily pay sufficient attention to the detail of those to make them intuitive for users who go through there for the first time or occasionally as opposed to people who go through there every day. Some of this is just signage but this detail does often get lost or missed. With all these pedestrian crossings and additional bike facilities, it is important to look at what would you see if you were approaching this intersection and you wanted to go to the left, and the facility that you are on veers off to the right and you see no signs or indication of where it goes. Sometimes the consequence of the way these things are designed means they can be very unintuitive to use. Thank you for working on this.

- Gary McNaughton, Project Manager, McMahon Associates – If you recall earlier on in the concept development, we had several concepts. We tend to show almost everything. We looked at various circular configurations – whether it was a true roundabout or a series of roundabouts in a larger circular roadway map. None of those were able to work. We had other continuous flow at intersections. We looked at everything that is out there and the tools for trying to come up with a roadway map that would work. We kept coming back to the quadrant roadway that provides that connection between the south and the east and this is what we focused on as the alternatives for the at-grade options. This was a process of elimination from earlier on in this Study and it led us to this conclusion. In terms of the number of lanes, we are striking that balance as best we can. We understand that fewer traffic lanes can be attractive if you are biking or walking through the area, but we are trying to make sure that we are keeping some level of mobility for vehicles and as we have noted, delays will increase coming through here. We have tried to create an efficient system so we can reduce lanes from what they are. You have 5 and 6 lanes on many approaches – we are trying to bring them down to 2 or 3 lanes and this is shown in these alternatives. Taking them down further would create an issue where Wellington Circle would become the largest chokepoint within the roadway network.
- Peter Calves, Walk Medford – Thank you for working on this. Some of my comments will echo what Emily said since I am representing Walk Medford and we overlap on this. I think there is a value in looking at the at-grade separation, but I do not think we should be building highway overpasses over dense multi-use neighborhoods in 2022. It is not something anyone wants. If you do this, you will be saddled with this for 50 years and East Medford and Wellington Circle would be worse off. I am someone who makes those short vehicle trips that Emily referred to. I live right off Wellington Circle and I will often drive to the plaza across the street because I do not feel like putting my life at risk while crossing Wellington Circle. Decreasing the lanes and making the shorter pedestrian crossings would improve my life and I would walk to the grocery store more often if I did not have to mentally prepare myself to grocery shop. If the bike and pedestrian crossings fade out into nothing, they will be useless. It does still look like a major arterial roadway. That is a concern from a walkability and livability perspective. I do not want to live next to highway interchange right now or a major arterial intersection either. One other thing about the traffics analysis is that we know from the policies enacted by Boston, Cambridge, and

Somerville that in some point in the next decade they will try to reduce vehicle miles travelled in those municipalities. Is there any consideration given in line with Jared's comments regarding what lane needs may or may not be if traffic volumes are reduced based on what municipalities have said?

- Gary McNaughton, Project Manager, McMahon Associates – We have team members who live and work in this area and they provided similar feedback based on their experiences. This is two arterial roadways. We have not designed it to accommodate future traffic volumes. We work with the regional planning agency and CTPS is the technical arm that runs the regional model. They are the ones running that and telling us what future volumes will look like without this project and with the alternatives in place, and that is where we are seeing the projections for continued growth. We recognize the goals that are out there and encourage that – they are just not considered in the regional model. With existing numbers or the future growth, this is not designed to accommodate all those vehicles. We are trying to minimize the roadway where we can. The decrease in volume that would need to occur where most of the approach is – we've got two lanes at most serving any movement. We are not seeing areas where we can take out a lot of lanes. As far as the facilities we have for bicycles, these do give us space and the inner areas give us the flexibility to shift those roadways and provide additional space for bicycles and pedestrians. The network to the south is being expanded and will connect well. As other areas beyond the project limits are established, we will have a much more complete network.
- Joanne Haracz, McMahon Associates (Project Consultant) – There are more opportunities to switch the type of mode served and improve transit. The other issue we have is the amount of greenspace that these alternatives create. From a climate adaption standpoint, it allows you to create a stormwater management system to deal with excessive rainfall and plant more trees. The fact that we can add this amount of green space to a paved circle shows will be consistent with both regional and local climate change policies.
- Melissa Dullea, MBTA – From the MBTA perspective, we do have the Bus Network Redesign plan that was approved by our Board of Directors last month contingent upon completion of the Service Equity Analysis this month in December. Most of the bus service is going up via the Fellsway, as shown here. There is an east-west connection that continues to the other side of Mystic Valley Parkway with our proposed Route 134. We are excited about this because of the possibility of establishing a better connection to grocery shops, Cambridge District Courts, and newly planned developments in Medford that are further south from existing bus services that travel through the area. So, we should think of how to enhance that transit, but that said, this is a living document, and our network is subject to change. We drew the network without knowing what the priorities were and I would need to think about the goals we have had with better connectivity versus a potential time savings if transit priority lanes change the calculus. If there is anything that can be done to enhance the transit experience on the 16 and to the west of Wellington Circle and make it safer to get walk across by adding a bus stop, those are things to consider.
 - Makaela Niles, MassDOT Project Manager – Thank you, Melissa.

- Todd Blake, City of Medford – At various times throughout this process, we have tried to make comments to consider pedestrian bicycle grade separation. We would look at peds-bikes like the way we would look at vehicles in the past because grade separation for pedestrians and bikes, not just on approach but potentially over the whole thing, would negate wait times or conflict points even though it would require a vertical displacement to get over. Medford is working to improve pedestrian and bike facilities outside of this area. Architecturally and visually, we think there is an opportunity to do something nice for the pedestrian bridge as well.
 - Makaela Niles, MassDOT Project Manager – Thank you, Todd.
- Alicia Hunt, City of Medford – We appreciate the work that has gone into this. I would like to thank you for including pricing. We would have loved to do an underpass. We think there was potential for it at this level of development because it does not ruin the pedestrian and bicycle experience. I cannot get past the fact that we are not trying to get rid of these grade separated overpasses in a variety of places because of the horrible environment it creates for people walking and cycling since they are all over Medford. It is important to have it here and see how that impacts and compares. People will not use bikes until it is safer, but until it is safer, we cannot make it impossible for the cars to get through. Can car lanes be easily turned into bike lanes in the future as biking increases? Another thing to mention is seeing a reduction in vehicles – this is hard to do in some parts of Medford. The other piece that I know is baked into the CTPS modeling that is less obvious to everyone else is increased density throughout the region. Another thing to consider is Massachusetts' financial structure and the way our municipalities are funded. Proposition 2 ½ is not keeping up with inflation anymore and for us to remain financially viable municipalities, we need to have new growth which means increased residential density and increased commercial. If we do not maintain this, we cannot maintain the services we are currently providing. Until we change how we fund and cap our funds, we need to anticipate new growth, meaning additional vehicles, bicycles, and pedestrians. We will need to work with experts to come to the best solution. I also look at these green spaces and I know pedestrians will walk through them, but are these useable green spaces?
 - Gary McNaughton, Project Manager, McMahon Associates – The overpass is interesting. You must keep the grade separated alternatives through all this and stay objective, but I understand the benefits of not having overpasses in urban areas. Putting one here did not offer as many benefits as the at-grade alternatives and had a greater cost along with other impacts. As far as the growth and density, we are seeing a lot of projects in this area, some of which were included in this presentation. There is a lot of development and increased density and hopefully much of that can be accommodated via other modes and not just increase single occupancy vehicles. Also, if we could put open space on the outside that is better than when you put it contiguous to other areas of open space in the southwest quadrant. We did not have this opportunity with the roadway network. We tried to minimize the barrier on the east side of the square that connects to Middlesex Avenue. I agree – having it in the middle of a roadway is not as nice as it being in the middle of a field, but we have tried to work it in as best as we can. This process will lead to recommendations within the report. If these at-grade alternatives are

recommended, then there is a lot of design refinement that needs to happen and landscape architects will need to be brought in to further enhance the overall concept.

- Emily O'Brien, Medford Bicycle Advisory Commission – The pedestrian bridge is likely to be a critical aspect on that eastern side. If it does not get built, there will most likely be pedestrians walking across that eastern approach outside of intersections and this will be problematic. Bicyclists will want to use this pedestrian bridge for the same exact reasons. There are businesses on both corners and there are many reasons why people would want to go from one corner to another. A lot of pedestrian bridges have hazardous turns due to heavy bicyclists and pedestrians use. The expectation that people would walk their bikes up and over is not realistic. I hope as the pedestrian bridges get planned, those options include enough width and turning radii that will allow for bicyclists to use those facilities, stay on their bikes, and turn corners safely. It is worth pointing out that as we anticipate more growth and increased population density, if we continue to expect that every new resident of driving age will follow the ratio of one car per resident, that is strictly not sustainable in terms of parking. Parking is a complaint at every public forum in Medford and surrounding areas, so rather than thinking about car-free household, we should think about car-light households where adults share one car. With fewer vehicles, there is more of an incentive to make less trips.
 - Gary McNaughton, Project Manager, McMahon Associates – There is not a lot of design or architecture that has gone into the pedestrian bridge. A lot more work is needed to further develop this concept. We agree with all your points and these need to be considered. The hairpin turns depend on the real estate available. We are also trying to balance it as best we can by not accommodating future growth. It still has a great deal of capacity for vehicles, but this project lives within the larger regional context of what is the development going to look like – are they going to be car-light developments that do not accommodate these vehicles? We cannot assume that will happen and we need to work with where we are at. Municipalities and regional planning agencies need to think about this because there is no reserved capacity, so we need to shift people towards other modes of mobility.
- Brad Rawson, City of Somerville – I think the last time we met was prior to the Orange Line shutdown, so I will us that to frame a few comments. Back in August and September, this region came together to say that it was unacceptable for our transit community to not be able to go where they needed to on time. Credit to all of those who helped with the emergency bus lanes that we collectively installed in places like Wellington Circle. We learned that road diets and reallocation of right-of-way from general purpose automobile travel to low carbon modes of travel do not automatically equal unacceptable levels of motor vehicle queues and motor vehicle delays. At previous Working Group meetings, this Working Group has asked the Study team to investigate dedicated bus lanes as part of future Wellington Circle alternatives. You have responded, so thank you. I am not surprised that travel times are reduced when buses are given dedicated space. One thing we learned in Somerville with our bus lane projects is that the reduction in travel time is directly associated with increase in ridership. I would like to see the project team take the next step and investigate more bus facilities. The MBTA had approved a conceptual Bus Network

- Redesign that realigns bus Route 134 along Route 16. We see one bus lane to accommodate that east west movement out of four approaches. Can we do better? That bus needs to run on time for this region and these neighborhoods to work well. I would like to see the project team continue to allocate resources and investigate an option that speeds up the Route 134 in the eastbound direction. I would encourage everyone to think about pedestrian safety benefits of road diets of protected bike lanes etc. When there are fewer lanes to cross, people who walk and use mobility-assisted devices are reduced to the hazards of traffic. I think we are moving in the right direction and that everyone has a “people first” approach.
- Makaela Niles, MassDOT Project Manager – Thank you, Brad.
 - Amanda Belles, Malden Disability Commission – A lot has been said about the pedestrian bridges at past meetings. These comments include concerns for walkers, bicyclists, etc., however people with disabilities have been overlooked. I know that legally, ramps must be of a certain grade, but we can take that further. Gary said we are not in the development phase, but I think we need to get people with disabilities to participate and be present during these conversations. Just because it is legal at a certain grade does not mean it is functional.
 - Makaela Niles, MassDOT Project Manager – Thank you, Amanda.
 - Amy Ingles, City of Medford – In addition to Alicia's comment - induced demand works for all modes. Build bikeways and people will bike. The newer Frances Appleton bridge at Charles/MGH in Boston is a great example of a well-designed and attractive shared use bridge.
 - Makaela Niles, MassDOT Project Manager – Thank you, Amy.

14. *Public Comment*

- Christian MilNeil, Public Attendee – Is there any funding currently programmed in the state Transportation Improvement Plan (TIP) for implementing the short-term or long-term recommendations?
 - Gary McNaughton, Project Manager, McMahon Associates – This Study is identifying what can be done, what some of the viable alternatives are, and which ones will be recommended. There are benefits from all of these. The next steps include wrapping up the public process, produce the report, and get through the comment period. The report will include recommendations for implementing these improvements and potential funding sources. They must go through the project development process and be identified as a project. Funding needs to work through the TIP and with the regional planning authorities to ensure these projects make sense and go through the design and construction phase. There is quite a bit of design development that would occur and depends on the specific alternative.
 - Brad Rawson, City of Somerville – The question is about federal highway funding that is administered through the Boston Region Metropolitan Planning Organization. This is a crucial opportunity for local priorities and state agency projects to be advanced. The TIP is an annual capital plan document that administers \$100M in construction funding on a rolling basis.

15. *Next Steps by Makaela Niles, MassDOT Project Manager*

Makaela reviews the next steps for the Wellington Circle Study and shares the timeline for future Working Group and public meetings. The second public meeting will be held virtually via Zoom on December 15, 2022, and the sixth Working Group meeting will take place in Winter 2023. Information is shared on how to sign up for study updates and access the study's comment form.

Wellington Circle Planning Study Working Group Meeting #5 Attendees

MassDOT/Study Team:

- Makaela Niles - MassDOT
- Gary McNaughton – McMahon Associates
- Joanne Haracz – McMahon Associates
- Natalie Raffol – McMahon Associates
- Maureen Chlebek – McMahon Associates
- Emil Gruber – McMahon Associates
- Nick Hart - IBI Group
- Patrick Marvin - HNTB
- Mikayla Jerominek – HNTB
- Sara Stoja – HNTB

Working Group Members & Alternates:

- Alicia Hunt - City of Medford
- Amanda Belles - Malden Disability Commission
- Amanda Linehan – City of Malden
- Amy Ingles – City of Medford
- Bill Carlson – Resident Association 9th Street Coalition
- Brad Rawson – City of Somerville
- Doug Carr – NAACP, Mystic Valley Branch
- Emily O’Brien – Medford Bicycle Advisory Commission
- Fangyun Xi – MassDOT
- Jared Powell – Medford Bicycle Advisory Commission
- Jeff Parenti – DCR
- Melissa Dullea – MBTA
- Paul Stedman - MassDOT
- Peter Calves – WalkMedford
- Susan Bibbins – Medford Commission for Persons with Disabilities
- Todd Blake – City of Medford

Public Attendees:

- | | |
|----------------------|-------------------|
| • Carla Norris | • Kristin Scalisi |
| • Christian MilNeil | • Matt Hartman |
| • Elaine Lombardozzi | • Matthew Harrity |
| • John Alessi | • Nancy King |
| • John Goggin | • Sam Silverman |
| • Karl Alexander | |