



Central Maryland Regional Transit Plan Commission Meeting

Howard County Miller Library

September 20, 2019

9:00 AM – 12:00 PM

Meeting Notes

Commission Members in attendance:

Name	Title	Role
Ramond Robinson	Director of Transportation, Anne Arundel County	Anne Arundel County Executive's designee
Theo Ngongang	Planning Director, Department of Transportation, Baltimore City	Baltimore City Mayor's designee
Elisabeth Sachs	Director of Government Reform & Strategic Initiatives, Baltimore County	Baltimore County Executive's designee
Bradley Killian	Director of Planning & Zoning, Harford County	Harford County Executive's designee
Sameer Sidh	Chief of Staff, Howard County	Howard County Executive's designee
Jim Shea	Chairman Emeritus, Venable LLP	Senate President's appointee
Kirby Fowler	President, Downtown Partnership	Speaker of the House's appointee
Gina Stewart	Executive Director, BWI Partnership	Governor's appointee
J.C. Hendrickson	Member, MDOT MTA MARC Riders Council	Governor's appointee
Katie Collins-Ihrke	Executive Director, Accessible Resources for Independence	Governor's appointee

OPENING

Michael Kelly, Executive Director of the Baltimore Metropolitan Council, opened the fourth Regional Transit Plan for Central Maryland (RTP) Commission meeting. Mr. Kelly



introduced Calvin Ball, the Howard County Executive, who delivered introductory remarks.

COUNTY EXECUTIVE'S WELCOME

Dr. Calvin Ball, County Executive for Howard County, commended the Regional Transit Plan team for spending six months studying the region and developing a vision and goals to guide the future of transit in Central Maryland. He noted that he appreciates the team's efforts to improve connectivity, integrate and optimize future transit service, and enhance fiscal sustainability in Howard County and the region. Dr. Ball emphasized the importance of looking at the entire region's interconnectivity, which will in turn enhance economic competitiveness.

The region has successfully cooperated in areas such as workforce development, health and human services, and emergency management; the Regional Transit Plan will now help to propel cooperation between the jurisdictions on transportation. In Howard County, transportation is a top priority because of its role in attracting and retaining residents and businesses. Sixty percent of commuters in Central Maryland commute across county borders and Howard County has the highest rate of commuters in the region. While Howard County has a growing and vibrant economy, the existing transit system does not do a good enough job of connecting the county to the region or providing the level of regional transit service that other jurisdictions enjoy.

Howard County's local transit service is the Regional Transit Agency (RTA) of Central Maryland, which operates in Howard County, Laurel, and parts of Prince George's and Anne Arundel Counties. RTA provides 16 percent of locally-operated fixed-route trips in the region, with nearly a million passenger trips in 2018. RTA also provides 13 percent of all paratransit trips in the region. After years of declining ridership and reliability, Howard County is committed to improving the system by providing more service and replacing the bus fleet. RTA's May service change restructured bus routes and increased service hours by five percent, including expanded Sunday service.

Howard County is working hard to create policies and allocate funding to improve the quality of transit, bicycle, and pedestrian infrastructure. A Complete Streets ordinance is currently before the County Council and the County has secured a record amount of funding for bicycle and pedestrian projects. The County is also investing in a mobile ticketing and fare payment system for the RTA system next year, procuring five new transit vans for increased ADA and GPT service, and expanding bus service on several routes. Dr. Ball noted that the State recently cut funding for Howard County's Bus Rapid Transit (BRT) efforts but emphasized the importance of reinstating funding for the project. He also stressed the importance of advocating for additional Statewide Transit Innovation Grant (STIG) funding.



Dr. Ball introduced Maryland State Senator Clarence Lam, Chair of the Howard County Delegation, who provided additional remarks about the importance of advocating for transit funding in Maryland. He recognized Delegate Brooke Lierman as a champion for the RTP. Mr. Lam noted that the reduction in Consolidated Transportation Program (CTP) funding for transit is a significant concern. MDOT's projected revenues are insufficient to meet the needs of the region, which will impact the ability to deliver transportation improvements. The RTP plays a significant role in crafting recommendations to advance the cause for transit.

JUNE MINUTES REVIEW

Kirby Fowler presented the June RTP Commission meeting minutes. Mr. Fowler proposed one edit to the minutes on page 2, paragraph 6, to revise the statement “no majority runoff between the top two” to “*with a* majority runoff between the top two.” No further changes were proposed. The Commission unanimously approved the June minutes with this change.

MEETING SET-UP

Holly Arnold, MDOT MTA Deputy Administrator, explained the purpose and focus of this Commission meeting **[see slide deck]**. Ms. Arnold explained that the RTP Project Team is entering the “Propose” phase of the planning process. The team met with jurisdictions over the summer to verify the data and analysis, and is now proposing corridors and transit network improvements. The Commission will review and discuss draft corridors, identify missing corridors, and discuss which data or other evaluation measures are needed to prioritize the corridors. The maps presented at this Commission meeting are drafts and are still open to comments.

The team will focus on the customer journey at the October Commission meeting.

PUBLIC INVOLVEMENT

Teddy Krolik, MDOT MTA Chief of Engagement, presented the public outreach process that the RTP Project Team has completed to date **[see slide deck]**. The project team conducted outreach throughout the region to communicate with the public about the RTP and gain input on goals, strategies, projects and priorities. Several outreach locations were suggested by Commission members for previous outreach events and the project team welcomes additional Commissioner recommendations for future outreach locations. The Project Team will conduct five open houses in October to continue to communicate with the public about the project and solicit input.

RTP GOALS WRAP-UP

Kimiya Darrell, RTP Project Team, provided an overview of the goals development process and outcomes **[see slide deck]**. Ms. Darrell presented the three goals and supporting bullets. No additional comments or input was provided, and the Commission voted and approved these goals as written.

IDENTIFYING TRANSIT NEEDS: METHODOLOGY AND ANALYSIS REVIEW

David Miller, RTP Project Team, presented the methodology and analysis that the team used to identify transit corridors for the RTP **[see slide deck]**. The methodology consisted of a market analysis, service and travel flow analysis, and stakeholder outreach and existing plans. Each of these categories include several factors that identify transit needs, such as how much demand exists for transit service, where and when people have access to transit service, and what service qualities are important to the public.

Mr. Shea: These are good inputs, but the analysis is missing commute times.

Mr. Miller noted that the Project Team has looked at commute time data but has not yet presented the analysis. The commute time analysis looks at where need and demand for transit exist, where existing transit service provides connections to these areas, how much time and how many connections are required for these trips, and where the gaps are.

Mr. Shea: Job density is comparatively high around the light rail and Metro lines. Is this a result of transit being available or was the job density high before these rail lines were developed?

Mr. Shea requested an analysis of job density around Metro and light rail to determine whether the rail lines led to development or responded to job density.

Mr. Miller responded that the Project Team will look at historical BMC data to identify how employment density changed over time on these corridors.

Mr. Sidh: Is the list of projected job and population growth is organized in a particular order?

Mr. Miller: The list is ranked by projected growth, which includes growth in several sub-areas and is thus challenging to quantify.

Mr. Shea: Does this growth projection represent percent growth or total number of jobs?

Mr. Miller: This analysis looks at total number of trips, not percent increase.

Mr. Sidh: Is this analysis focused on localized growth or commuter growth outside of the jurisdiction?

Mr. Miller: The analysis represents origin-destination pairs from both within and outside the county.

Ms. Sachs: Does the analysis consider only employment, or does it also consider other reasons for travel, such as education and recreation?

Todd Lang, BMC: The analysis focused on commute trips and does not reflect other reasons for travel.

Mr. Kelly, BMC: It includes anything that generates a commute trip- residents, jobs, and other factors that would draw someone to a place via transit.

Mr. Sidh: Does this analysis reflect peak hour or other demand for service?

Mr. Miller: The model provides both all-day and peak flows.

Mr. Ngongang: Could the data underlying this analysis be provided to the Commission?

Ms. Stewart: Is the list of projected job and population growth areas in order of importance?

Mr. Miller: Some have the same amount of growth in trips, but they are ranked in order.

Ms. Stewart: I am surprised that Fort Meade's growth is towards the bottom of the list.

Mr. Kelly: Fort Meade's baseline of commute trips is higher, so the growth in trips is lower than the other projected growth areas.

Mr. Robinson: The Commission would like to see the percentage growth in trips.

Mr. Fowler: Are all RTP proposed corridors reflected in this list?

Ms. Arnold: We overlaid the proposed corridors on this map and all corridors hit one of these growth areas.

Mr. Shea: It would be helpful to see where we currently have transit-supportive land uses.

TRANSIT CORRIDORS OF OPPORTUNITY – JURISDICTIONAL PRIORITIES – COMMISSION MEMBERS

The Commission Members each presented their jurisdictions' priorities for transit corridors.

Anne Arundel County – Ramond Robinson



In identifying priority corridors, Anne Arundel County focused on the major corridors included in the county's priority letter and the transportation functional master plan, Move Anne Arundel. Anne Arundel's major corridors are numbers 2 and 3 on the corridor map. These corridors currently have limited and fragmented transit but need transit connections because they are areas where the development plan is taking place and adequate infrastructure on these corridors is needed to manage congestion.

Light rail and regional rail stations are also important nodes of regional connectivity in the county, and the County is looking at transit-oriented development possibilities in coordination with the State of Maryland. A lot of intercounty travel takes place in Anne Arundel County and contributes to the trip volumes we will see. The availability of high-capacity transit is important. The County advocates for regional transit and is interested in seeing the practicalities of putting it in place.

Baltimore City – Theo Ngongang

Baltimore City remains the biggest job creator in the region and this should be a central element of this plan. Baltimore City will continue to collaborate with MDOT MTA, which is the City's best ally for transit. Baltimore City has worked with MDOT MTA to implement dedicated bus lane corridors, which has helped to prioritize transit over cars. It is a priority for MDOT MTA to get more funding for capital needs. The Consolidated Transit Program (CTP) is providing less funding to MDOT MTA this year for capital investment and we need to focus on advocating for more investment in transit. MDOT MTA provides important regional connections, such as the MARC, which links Baltimore City to many job areas within the Central Maryland region and Washington, DC.

We need to connect residents to job centers with reduced commute times. The City also seeks a better connection with county partners on its borders and looks to collaborate on land use policies.

Baltimore County – Elisabeth Sachs

Baltimore County's new County Executive is focused on transit and transportation and appreciates the opportunity to put transit needs on the map through this process. A corridor focus is necessary, and many of the origins and destinations on the map link to Baltimore County. East-west connectivity is missing across the jurisdiction and is not provided on any clear existing corridors. We need to figure out how to incorporate the east-west connection into the plan. One of the County Executive's priorities is closing the first- and last-mile gaps to get people to jobs. Because much of Baltimore County is suburban, transit does not get people to job centers and home directly. Baltimore County looks to expand County Ride and hope that this can happen with the support of MDOT MTA to connect to the regional transit network. Connections to job locations are the top priority, but there are also areas for the Commission to make new connections over other needed routes and corridors.

Mr. Fowler: Looking at the I-695/ Towson area, the proposed new list of corridors shows many north-south connections, rather than east-west. Will the east-west connection be sponsored by Baltimore County?

Ms. Sachs: There has been some progress in making east-west connections from the center of Baltimore City out to the east and west, but no continuous connection to get people on the west side to job centers such as Tradepoint Atlantic on the east side. We also need to look at a transit option on I-695.

Harford County – Bradley Killian

The RTP Project Team has demonstrated thorough knowledge of Harford County in selecting preliminary corridors. Harford County has unique geography and does not have high population or job density, which makes it challenging to support transit. Harford County has seen growth along the I-95 and Route 40 corridors, which are intra-county corridors. The jurisdiction is split along the I-95 corridor. People live on the west and north sides of this corridor and most jobs are on the east or south sides. We need to be able to transport our residents to the county line and to destinations beyond by improving connectivity between the counties. Getting into the county and away from the county remains a sticking point and we want to make it smoother.

Howard County – Sameer Sidh

Howard County recognizes the need for a connected region. Howard County is sandwiched between two major metropolitan areas and two major transit systems. Anything to connect Howard County to MDOT MTA transit and other major transit systems is important. East-west transit is an important focus and connecting Route 40 to Route 29 and Route 1 is a priority. There is an opportunity to expand east-west on Routes 40 and 29. Looking at growth corridors, Columbia is on the top of the list. Route 29 runs right through Columbia and it is disappointing to see that BRT funding for Route 29 was cut. Howard and Anne Arundel Counties are forgotten connection points in the region, as evidenced by low Locally-Operated Transit Systems (LOTS) support compared to Montgomery County. Howard County will have a growing need for transit funding for RTA as the Columbia development comes online.

Howard County also supports state of good repair (SGR) investments for MDOT MTA to maintain the existing transit system. One of Howard County's greatest needs is additional investment in RTA's paratransit system due to the increase in paratransit ridership.

TRANSIT CORRIDORS OF OPPORTUNITY

Mr. Miller presented the potential corridors and service improvements identified by the RTP Project Team **[see slide deck]**. The RTP legislation requires that the RTP identify corridors for new transportation assets and improvements to existing assets. The Project Team defined the features of transit corridors and other transit network improvements. Regional transit corridors serve major job and activity centers and have demand for additional infrastructure investment(s) and all-day service. Other transit network improvements address other transit demands; for example, local circulation, commuter service and first/last mile access would fall under this category.

These corridors that will be included in the RTP do not include specific routes or termini. Specific routes will be determined after further studies are conducted. The discussion in this Commission meeting will inform corridors to add to or take out of the plan. The RTP Project Team provided two maps: one shows existing transit corridors and the other shows both existing and potential transit corridors.

Mr. Fowler: Could you add ways to improve existing rail infrastructure?

Mr. Miller: Yes, next meeting will cover connecting rail stations, improvements to rail service, and supporting TOD and pedestrian connections.

Mr. Robinson: The inter-connectivity of regional rail is important. If you do this right, people could get to Virginia and West Virginia. We should consider super-regional connectivity.

Mr. Shea: I am glad to see three new corridors going east-west (Corridors 16, 17, and 19), but they appear to be bus routes. The pattern of these routes looks like they would have to be bus routes, not rail, because they have 90 degree turns. We also might have too many corridors.

Mr. Miller: We are being mode-agnostic right now. These locations warrant additional investment in transit. That could be higher frequency or longer span, bus priority treatments. We are not assigning a mode to these corridors. All these corridors would need to undergo alternatives analysis before we could identify a mode. We can't say that they would not support a rail line

Mr. Fowler: Would these corridor improvements mean no transfers?

Mr. Miller: We wouldn't be able to determine this until an alternatives analysis is conducted.

Mr. Hendrickson: What drove the development of these lines on the map?

Mr. Miller: We looked at the transit propensity- where there is need now, travel demand flows of where people are moving now and in the future – and compared them with



existing service and identified gaps. This included months of workshops with people throughout the region and that's how we developed the actual lines on the map that show where we are serving this market demand, type of service, model flow now and in the future.

Mr. Shea: I am not sure where we go from here. This map has areas of troublesome space. In East and West Baltimore, where we have very large populations and very high unemployment, our routes are sparser. There needs to be a focus on how to connect East and West Baltimore to Fort Meade and other job centers.

Mr. Miller: It is always going to be difficult to serve individual origins and destinations. What we have here is a network. It is usable to get between many origins and destinations within a reasonable amount of time.

Mr. Shea: Regardless of the number of connections, the network will not be useful if it has too many transfers. We tend to route everything through downtown Baltimore, which is the densest area, rather than arcing north of the downtown business district to get past the downtown bottleneck.

Mr. Miller: Corridors 20 and 22 do arc over Baltimore and we have spokes that feed into these routes.

Ms. Arnold: The overlapping corridors might lead to confusion. Is it more helpful to show these as just one corridor?

Mr. Shea: No, I understand the map a little better now. We still have some ways to go before we get to a complete regional transit plan.

Mr. Robinson: We are establishing the bones here; these are not the actual applications or solutions. From Anne Arundel County's perspective, these are the bones that we need to connect from a transit perspective, but this doesn't tell us exactly what kind of transit we should put there.

Mr. Fowler: In terms of gaps, would we have more circular routes if we didn't have the Chesapeake Bay? We should look at how to use ferry service to complete the service to places like Sparrow's Point.

Mr. Miller: Potential commuter service is also not reflected and there is potential for peripheral express buses connecting to the outlying areas without going through the Central Business District (CBD). Water transit follows a lot of little corridors that wouldn't need high frequency all day.

Mr. Shea: I would still like to see the commuter times in the existing transit systems as an overlay on the map.



Ms. Sachs: In Baltimore County, one concern is the lack of transit service in off-peak times. We should factor this in when talking about improvements.

Mr. Miller: We also will need to think about how people will connect from transit to their final destinations - will they walk or take another mode? Multiple levels of improvement are needed to make trips possible across the region.

Mr. Sidh: The time of day that trips are occurring is an additional layer that should be added to the map.

Mr. Hendrickson: Is the list of corridors in a particular order?

Ms. Arnold: The list is not prioritized or ranked.

Mr. Fowler: Another transit gap is in Harford County. Thirty-five percent of commuters' travel to Baltimore County and Baltimore City, but there is not a strong connection to Bel Air and White Marsh. There is a commuter bus to Belair, but this connection missing. It is hard to get from Belair to Downtown.

Mr. Miller: This is not shown as a corridor because demand is limited to peak period.

Mr. Fowler: Belair has retail jobs that Baltimore City residents can benefit from. The reverse commute should be considered.

Mr. Miller: We looked at an all-day express to connect Harford and Baltimore City.

Mr. Killian: We discussed this in the small group meeting. One thing to be cognizant of is that we cannot try to solve all problems at once. Existing densities do not support transit between Fallston and White Marsh and Route 1. A reverse commute route was previously in place, but it was discontinued because of low ridership. We should be realistic in what we can improve. An east-west connection from Bel Air to Hunt Valley should be on the 25-year horizon and may be considered in the plan update in five years.

Ms. Sachs: We could think about the UMBC area more. We flagged that connection in our small group to think more about improvements because of potential growth there.

Mr. Killian: We also discussed the outer ring in the small group.

Mr. Sidh: There is a donut hole between Howard and Anne Arundel Counties that forms a gap between the two corridors in Howard County. East-west travel from Columbia is an important gap on Route 100.

Mr. Robinson: Route 100 is also identified as a corridor in the long-range transportation plan, but it doesn't specify transit.

Ms. Arnold: We identified that as a highway expansion corridor but can look at it again.



Mr. Robinson: It didn't identify a mode. There is an MDOT MTA study from years ago that looked at the connection between Dorsey and Arundel Mills. This should be identified as a corridor in the RTP.

Ms. Arnold: We're looking in plans for corridors specifically identified as transit corridors. We did look at that corridor in the process and the transit propensity wasn't showing up as significant.

Mr. Shea: Tentatively, there could be a gap in West and East Baltimore within the region and both of those areas out to job centers.

Mr. Hendrickson: In the small group meeting, we discussed connecting the BWI and Dorsey rail stations.

Mr. Miller: This is in the list of potential network improvements.

Mr. Killian: When will we see the analysis to determine which the corridors do connect people to the job center?

Ms. Arnold: That will be future feasibility studies. [RTP Project Team passed out handouts summarizing high-level next steps in the planning process following the RTP]. It is an extensive process to identify which corridor is best. For example, connecting east Baltimore to jobs at Tradepoint Atlantic could go on several alignments, and we are not there yet. We are trying to understand now if these are the right locations to connect. These corridors would be advanced through a prioritization process for future feasibility studies.

Ms. Sachs: Are feasibility studies included in this process?

Ms. Arnold: We envision prioritizing the corridors and those that are ranked highest will move forward to feasibility studies.

Mr. Shea: Is that a political process or through jurisdictional DOTs?

Ms. Arnold: We will prioritize the corridors. Some corridors still need work to be a better candidate for transit service.

Ms. Sachs: Will the RTP include detail about what localities should do to be ready for these improvements to happen?

Ms. Arnold: Yes, these will be included in the plan, ranging from sidewalks to zoning.

Ms. Stewart: Some people who work at Fort Meade live around Pasadena and Marley Mall. This connection is not shown on the map.

Mr. Robinson: The County's plan identified that connection. We must consider adequate infrastructure to allow the trip to take place and what kind of frequency will allow the

connection. Some corridors need improvement before others, but this doesn't negate the plan in its entirety. The plan should never put itself into a box and should be implementable when we find funding to implement it. Priority can sometimes be a limiting term.

Ms. Arnold: I agree that we don't want to give up on lower-priority items, but we are required by legislation to prioritize the corridors. Each corridor would have an associated action item and prioritization can give us an idea of where to start.

Robinson: We should add Route 75 to Route 100 from Ellicott City all the way down to Glen Burnie. Also, the corridor from Annapolis to BWI is important.

CORRIDOR PRIORITIZATION EVALUATION

Alvaro Sifuentes, RTP Project Team, presented the draft corridor prioritization methodology for the Commission's input **[see slide deck]**. The legislature calls for the corridors to be prioritized.

Mr. Shea: I don't think that "Crossing Jurisdictional Boundary" is a good evaluation measure and should be removed.

Ms. Arnold: I do not feel strongly about keeping this evaluation measure. What do the other commission members think?

The commission voted and approved to remove "Crosses Jurisdictional Boundary" from the evaluation measures.

Mr. Shea: I believe that the methodology on the previous page does not work. The measures are not all equal. Many would say that some measures are more important than others, yet we are assigning the same value to all of these. The problem with the methodology is that it takes subjective judgements and turns them into a numbered system as if a higher number is a higher priority than another. This doesn't consider overlapping measures, which double-counts some factors. I am against taking these data and moving them into a number system.

Ms. Arnold: All these factors have a data point associated with them, so they are objective measures. One option is to weight the measures.

Mr. Shea: We couldn't weight the measures because each of us thinks the measures have various levels of importance. We should take these measures into account and describe how each corridor performs on them but should not come up with an overall score. The overall score might say that Corridor B is better than Corridor A, but some don't agree with that.



Ms. Arnold: The legislation requires us to develop a methodology for prioritizing the corridors.

Mr. Shea: This creates artificial objectivity and it is misleading.

Ms. Arnold: Should we run the corridors through this methodology and see how they perform to illustrate how it would work?

Mr. Shea: You can do that, but I will object. To make this methodology perfect, we would have to weight the measures and people would have to agree. It cannot be done in any practical sense, but you will come up with a number that appears to be objective. Commissioners must exercise judgment and vote on the measures' weights. How much more important is jobs than the fact that the corridor is in existing plans?

Ms. Sachs: After visiting the jurisdictions and receiving input, will there be an opportunity to come back with input from Planning, Economic Development, and Transportation from each jurisdiction to see if there is accuracy in what is proposed?

Mr. Sidh: You could apply a weight to it, but weighting is different based on the values of the person who is doing the weighting.

Ms. Arnold: Is your suggestion that you vote on which are first, second?

Mr. Shea: You should show the results of each of the corridors. Some will be clearly ahead on jobs.

Ms. Arnold: We can use the data and score, show it to the Commission and the Commission can move up or down based on the results. You can vote to move it up or down. We will share all data that goes behind it.

Mr. Miller: This scoring is not meant to be sole arbitrator of what comes out of the plan. It is only meant to be an input. We still need public, stakeholder, and Commission input. Without a data-driven process, we risk a plan that is not defensible to the public or legislature.

Mr. Shea: We should have data-driven analysis, but a simple number ranking obfuscates that.

Ms. Arnold: Are we all in agreement that we can start putting together an analysis?

Mr. Shea: I object to putting numbers to corridors.

Ms. Killian: We can evaluate MDOT MTA's evaluation. We need a place to start.

Mr. Miller: Another option is to report the results of the evaluation measures and we can see which corridor is higher or lower based on the data. We will share the background data.



Ms. Collins-Ihrke: I am curious to know how these are operationally defined and where the numbers are coming from. For example, people with disabilities are defined in different ways. We want to know the sources and methodology.

Ms. Arnold: We will have small group meetings in November and will present and discuss the results there.

Mr. Sidh: The evaluation measure for existing transit routes creates a bias towards areas that already have existing transit.

Mr. Miller: This measure tells us the network value of the new transit connection.

Mr. Robinson: We'll just have the data, but the evaluation measures and ranking need to be refined.

Mr. Ngongang: We won't be able to shy away from objectivity. I want to ensure we're including equity. We can't look at an evaluation without embracing the fact that there has been a lack of equity in transportation.

Ms. Stewart: I agree that data is important because we all know our parts of the region well, but it is important to look at the whole region. Data is important, and we can figure out the evaluation from there.

Ms. Collins-Ihrke: How do other areas of the country rank their corridors?

Mr. Miller: Each region develops their own evaluation measures based on their goals.

The RTP Project Team and Commission agreed that the data would be compiled for each corridor and discuss further at the November small group meetings.

PUBLIC COMMENT

The public comment session was facilitated by Simon Taylor, RTP Project Team. Members of the public were given three minutes to testify; those representing an organization were given five minutes.

- A. Brian O'Malley, Central Maryland Transportation Alliance, Member of Get Maryland Moving Coalition: Mr. O'Malley applauded the RTP Project Team and Commission for having substantive conversations about the corridors and how to prioritize them so early in the RTP process. The Get Maryland Moving Coalition will provide comments on the draft corridors and prioritization methodology and looks forward to seeing the public's reaction as well.

Pollution from transportation is the top source of climate change pollution in the United States and in Maryland. VMT is at an all-time high in Maryland and

revenues from fuel sales are up from last year, but the draft CTP is reducing investment in MDOT MTA. This summer's capital needs inventory shows a \$2 billion funding gap to bring MDOT MTA to a state of good repair. Mr. O'Malley encouraged the Commissioners to attend the upcoming road shows taking place in each Maryland jurisdiction to emphasize the importance that local governments play in the success of transit.

Mr. O'Malley recognized Howard County for providing a model for public input on its Priority Letter and Baltimore County for identifying in its recently-released Priority Letter that funding for regional public transportation is critical. Jurisdictions can do several things to support transit, including providing transit-supportive land use around existing transit stops. Mr. O'Malley applauded the transit-oriented development (TOD) in Owings Mills, the Circulator in Towson, the TOD around the Aberdeen MARC station, and Columbia's walkable and transit-friendly development. However, he noted that there are other places with existing light rail and MARC stations that are not walkable or accessible. Mr. O'Malley noted that there are tools, such as VDOT's access tool, for evaluating access to residences, transfer routes, and jobs that capture the network effect.

- B. Marlene Hendler; private citizen, Chair of Howard County Transit and Pedestrian Advisory Group Chair of Citizens Advisory Council for Accessible Transportation (CACAT): Ms. Hendler explained that she is a transit user who frequently travels between Howard County and Baltimore City. She emphasized the need for a better connection between these counties without having to travel up to Anne Arundel County to make the connection. On fixed-route transit, this journey takes up to three hours, and without Express BusLink 150, it takes four to five hours each way. While there is a corridor that goes from Ellicott City to Route 40, there is no other connection besides the 150 and it does not run all day or every day.

Ms. Hendler noted that one of the reasons she moved to Howard County is because she had fixed-route choices. She would like it to be even easier to make this corridor connection and stressed the importance of continuing to talk about this corridor in the RTP.

- C. Anna Ellis, Member of Get Maryland Moving Coalition: Ms. Ellis encouraged the RTP Project Team to include some improvements that will benefit riders in the short term. Transit from Baltimore City to Annapolis is time-consuming and the only express buses run in the morning and afternoon. The only other way to get to Annapolis is to take the light rail and then transfer to the bus, which can take two hours. Ms. Ellis suggested that express buses run both ways in the morning and afternoon and increase the frequency of Route 70.

Reliability is key and choice riders will not use transit unless it is reliable. Ms. Ellis noted that enhancements such as transit-signal priority (TSP) and bus priority lanes can speed buses. Getting people out of cars is essential to meeting our environmental goals and short-term improvements can help while larger projects are in the works.

- D. Ted Cochran: Mr. Cochran explained that he spent his career performing multi-dimensional, semi-objective evaluations. He suggested that the Project Team ensure that the dimensions they use to rate these options are not correlated; otherwise, they will be double-counted. For example, if there are two measures of cost and one measure of equity, cost would override equity. Mr. Cochran suggested that the Project Team have the Commissioners rate the importance of these measures ahead of time if they want to weight them. He also suggested that additional measures such as reducing traffic congestion be considered.
- E. Ed Cohen, CACAT: Mr. Cohen expressed concern about the discussion he heard today about where the region needs transit. He suggested that the first thing MDOT MTA must deal with is that it does not have enough buses to take people where they need to go. Mr. Cohen noted that the RTP Project Team is looking at other systems but should not compare the Central Maryland region to Denver or Seattle because it struggles with more congestion, substandard lane widths, short blocks. He said that replacing rail with BRT will not work and that the bus lane on Pratt works, but the one on Fayette does not because of geometries.

Mr. Cohen said that transfers undermine transit and are an obstacle to a system's success, suggesting MDOT MTA needs to make sure that as many transit lines are connected as possible. Instead of trying to make routes shorter, MTA needs to make routes longer, so they connect to more routes, so riders require fewer transfers. Mr. Cohen emphasized that transit mode matters a lot, as evidenced by the fact that Metro is three times faster than Light Rail.

NEXT STEPS

Holly Arnold presented an overview of next steps:

- The next RTP Commission meeting will be in Baltimore County at Community College of Baltimore County (CCBC) on October 29 from 9 a.m. to 12 p.m. The meeting will focus on the rider experience and transit readiness.
- Because Mr. Fowler will not be able to attend the meeting, Elisabeth Sachs was selected to be the Commission Chair for this meeting. The Commission approved this.



- Ms. Arnold challenged the Commission to take transit once or twice before the next meeting to help inform the conversation.

Chicago Transit Authority

LOOP LINK

MODE

BUS RAPID
TRANSIT "LITE"

OPENING YEAR

2015

PROJECT COST (APPROX.)

\$32.5M

LENGTH



WHY THIS MODE

- BRT and Streetcar were both considered as modes for Chicago's premium transit service.
- The BRT concept began with 2040 MPO Long Range Transportation Plan (LRTP) Go To 2040 recommending BRT as the only cost-effective way to build new lines.
- LRTP update Go To 2050 continued to recommend BRT for system expansion.
- Loop Link moved forward as a cost-effective option to address slow-moving bus congestion through downtown.
- Project included dedicated lanes and upgraded transit shelters, but never operated the proposed BRT service with dedicated lane infrastructure.
- The BRT Lite service made use of 7 queue jumps, and local bus routes also use the lanes. Service does not have off board fare collection.

FUNDING SOURCES

Loop Link funded at 80/20 using Federal Highway Administration, rather than FTA funds:

- \$24.6 M FHWA Congestion Mitigation and Air Quality (CMAQ) grant
- \$7.3 M Local Tax Increment Financing (TIF)

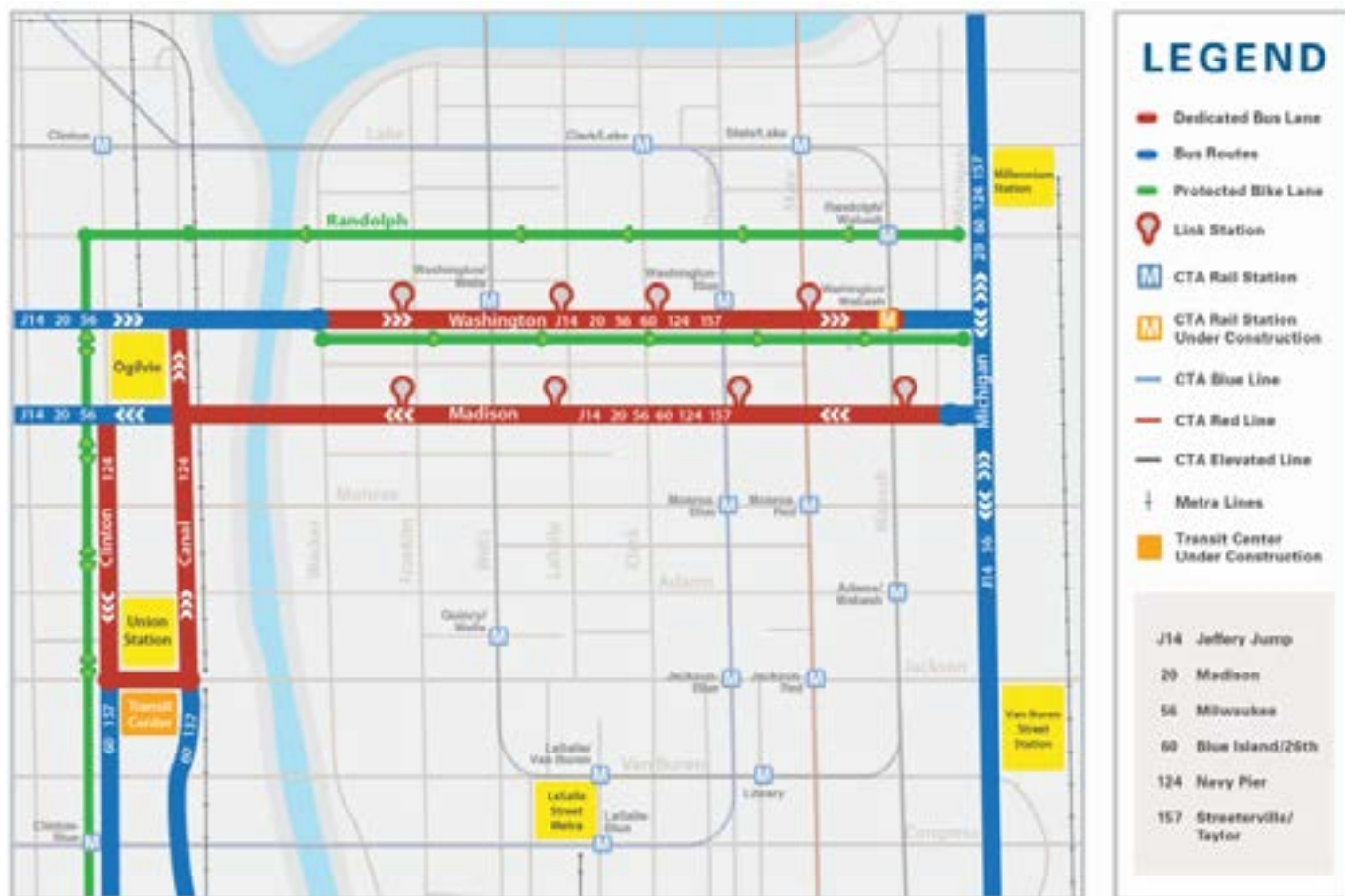
Additional info:

- TNC Fees -a per-ride charge from ride-hailing passengers. The City of Chicago and the Chicago Transit Authority (CTA) have earmarked an increase so that \$0.15 of the \$0.67 fee will directly fund transit, including CTA.

- The 2019 TNC fee is expected to raise approximately \$30M in 2019 before an additional \$0.05 increase comes into effect. The fee will pay for long-deferred rail system maintenance, including upgrades to the track, structure, signal, and power systems to reduce commute times and improve the overall reliability of the 'L'.
- Transit-Tax Increment Financing - is also being used for the rail Red/Purple Modernization. Rail corridor (RPM) Transit TIF can be used only for specified Chicago transit projects - including RPM. It provides a local match for federal funding.

Chicago Transit Authority

LOOP LINK



Cleveland/RTA

HEALTHLINE

MODE

BUS RAPID
TRANSIT

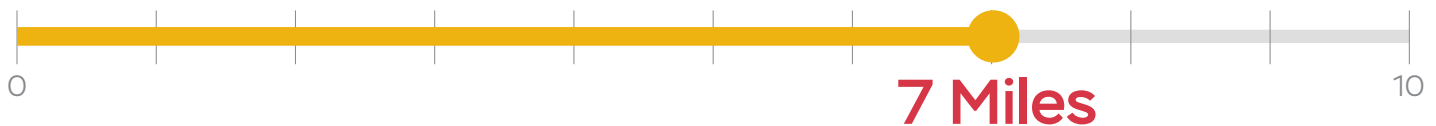
OPENING YEAR

2008

PROJECT COST

\$200M

LENGTH



WHY THIS MODE

- City had been working on this project (as either LRT or BRT) for approximately 20 years.
- Significant economic investment was occurring along the Route 6 bus line. Development was happening in a pattern unsupportive of transit; transportation was to help development be more compact and walkable.
- LRT was the original desire (due to LRT's redevelopment success in Portland, OR).
- LRT cost estimate was \$700-800 M and found to be cost prohibitive and too slow to meet redevelopment opportunity due to time needed to get approvals.
- FTA noted in the mid-90s that BRT was a more affordable option to explore than LRT. Service design inspiration came from BRT in Curitiba, Brazil.
- By the time the project was ready to start, the funding split was 50/50, not 80/20, meaning that the local contribution would be much higher than expected. Project's anticipated value to the city increased funding support.
- Economic development revenue along the corridor has been 2x more than expected.

FUNDING SOURCES

Full Funding Grant Agreement (FFGA):

- \$82.2 M - FTA New Starts Grant
- \$0.6 M - FTA Rail Modernization Funds
- \$50 M - Ohio DOT / TRAC Funds
- \$17.6 M - RTA / Local Funds
- \$10.0 M - NOACA (MPO)
- \$8 M - City of Cleveland

Non-FFGA funding below helped to improve the competitiveness of the project's FTA application:

- \$25 M - ODOT
- \$3.75 M - RTA
- \$2.85 M - Cleveland Clinic added to the project elements serving that segment of the corridor

Cleveland/RTA

HEALTHLINE

HealthLine Stations

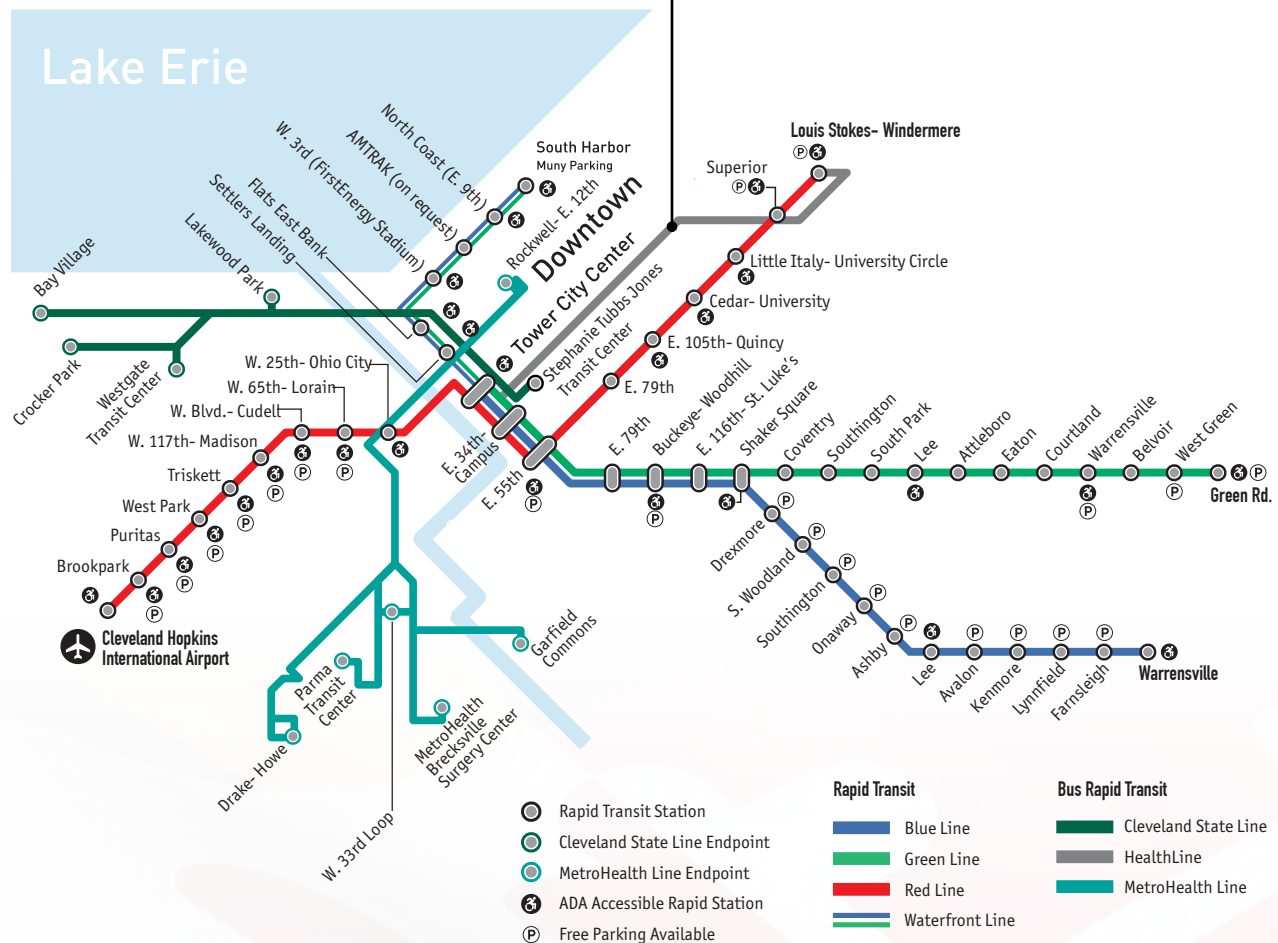
THE HEALTHLINE IS SPONSORED BY:



Euclid Ave.



Rapid Transit System



Connecting Our Future

A Regional Transit Plan for Central Maryland

Los Angeles County Metro

CRENSHAW LINE

MODE

LIGHT RAIL
TRANSIT

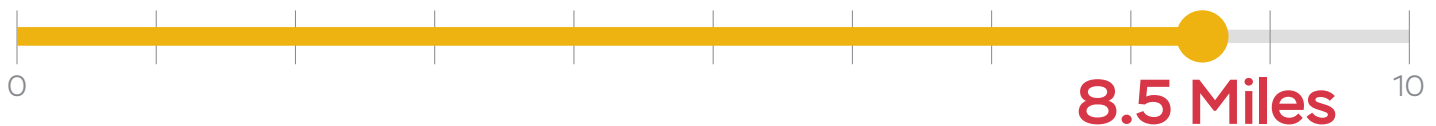
OPENING YEAR

2020

PROJECT COST

\$2.1B

LENGTH



WHY THIS MODE

- LRT, heavy rail, commuter rail, and BRT modes considered:
 - Heavy rail / commuter rail / passenger rail options sharing existing freight rail (used by BNSF but owned by Metro) track considered initially but all were eliminated
 - Not enough residential / employment density
 - Required track rehabilitation and upgrades to systems
- BRT operating within freight rail ROW cited as an option, if designed to allow for freight rail service to continue.
- BRT and LRT perceived compatible with existing and future modes.
- Mode evaluation criteria: Regional Connectivity; Environmental Effects; Economic Development/ Land Use; Community Support; Capital and Operating Costs; Cost-Effectiveness; Financial Capability; Federal New Starts Funding Criteria; Ridership; and Travel Time Savings.
- LRT was selected over BRT due to:
 - Travel time reliability
 - Accommodates future capacity and growth
 - Community support

FUNDING SOURCES

- Local dedicated funding sources:
 - Local sales tax: Measure R, the ½ -cent sales tax approved by Los Angeles County voters in 2008 (82% of budget).
 - Los Angeles County Proposition A and Proposition C Countywide Transportation Sales Tax
 - Los Angeles County local cities and county contributions
- TIFIA loan from Federal Government, repaid with sales tax revenue
- Caltrans' Environmental Justice: Context-Sensitive Planning Grant.
- State Proposition 1B Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA)

Los Angeles County Metro

CRENSHAW LINE



Connecting Our Future
A Regional Transit Plan for Central Maryland

MOT MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION

New Orleans/RTA

LOYOLA AVE/RAMPART ST CLAUDE STREETCAR

MODE

STREETCAR

OPENING YEAR

2016

PROJECT COST

\$42.2M

LENGTH



WHY THIS MODE

- The North Rampart Street and St Claude Avenue project was a planned extension of a connection between Amtrak's Union Passenger Terminal (UPT) across the existing Canal Street Line past the French Quarter to areas redeveloping post-Hurricane Katrina.
- As the extension of an existing route, the Loyola Avenue line completed in 2013 and funded with federal TIGER funds, an alternative mode was not considered.
- The initial intent of the completed route was to leverage the tourism-based areas of New Orleans to attract investment; streetcar was the only transit mode considered and evaluated.
- The initial decision to invest in streetcar was based more on its aesthetic and placemaking value with strong support from streetcar advocates, developer and business interests to support revitalization adjacent to popular tourist destinations and new development within the Central Business District.
- Another planned extension of this line that was to begin design has been shelved due to concerns that it reduced RTA resources for the region's long commutes by residents who rely on transit, particularly those in the service and tourism sectors.

FUNDING SOURCES

- Locally funded through a Series 2010 Sales Tax Revenue Bond for \$40.6 M
- The first phase of the line, the 1.5-mile Loyola Avenue to UPT segment, was built for \$60 M and funded through a combination of private sector investment and a \$45 M Federal Transportation Investment Generating Economic Recovery (TIGER) Program Grant.

New Orleans/RTA

LOYOLA AVE/RAMPART ST CLAUDE STREETCAR



Connecting Our Future
A Regional Transit Plan for Central Maryland

M-DOT MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION

Phoenix/Valley Metro

LIGHT RAIL NW PHASE 1

MODE

LIGHT RAIL
TRANSIT

OPENING YEAR

2016

PROJECT COST

\$327M

LENGTH



WHY THIS MODE

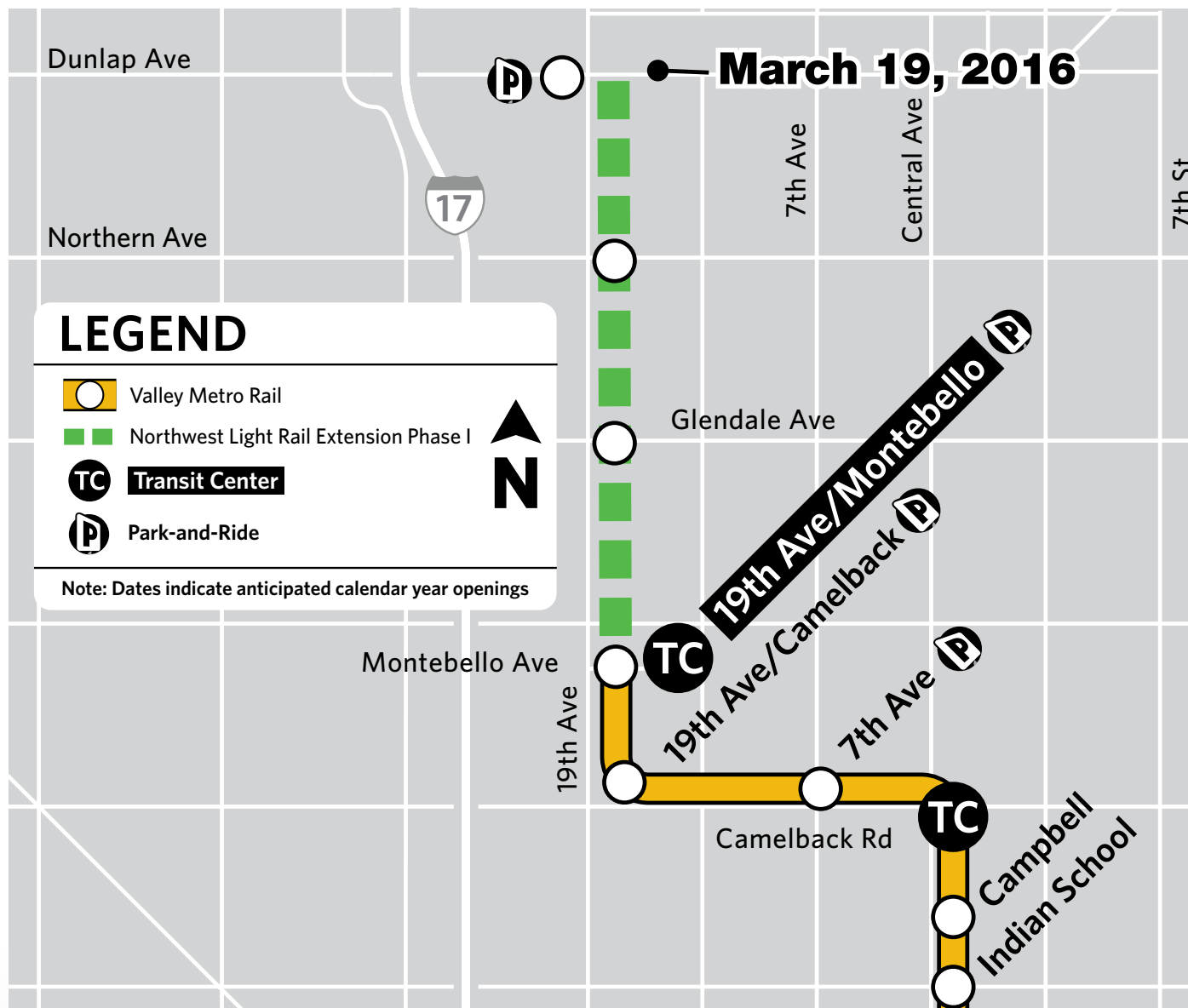
- Extension of the original 20-mile LRT line. Project included three stations, a 415-space park-and-ride, underground infrastructure replacement, widened sidewalks, public art, and business assistance.
- LRT was selected over BRT due to:
 - Use of existing LRV fleet and O&M facility
 - Lower long-term life cycle costs
 - Higher predicted ridership
 - Passenger carrying capacity - up to 5x higher
- Reduced passenger travel times
- Greater economic development opportunities
- Improved air quality due to electric rather than fossil fuel propulsion
- Future enhancement of regional transit connections; opportunity for a larger regional park-and-ride facility

FUNDING SOURCES

- Local dedicated funding sources. Several voter-approved initiatives to dedicate a share of sales tax increases to transportation and transit:
 - City of Phoenix T2000 - voter approved tax (0.5% sales tax) dedicated to public transit - \$85 M
 - City of Phoenix, part of Proposition 104, a 0.7 % sales tax to implement the Transportation 2050 Plan - \$60 M
 - Proposition 400 funds collected from a voter-approved regional transportation tax; a 0.5 cent sales tax for transportation projects in Maricopa County- \$182 M

Phoenix/Valley Metro

LIGHT RAIL NW PHASE 1



 **Connecting Our Future**
A Regional Transit Plan for Central Maryland

 **MARYLAND DEPARTMENT OF TRANSPORTATION**
MARYLAND TRANSIT ADMINISTRATION

Phoenix/Valley Metro

CENTRAL MESA EXTENSION

MODE

LIGHT RAIL
TRANSIT

OPENING YEAR

2015

PROJECT COST

\$199M

LENGTH



WHY THIS MODE

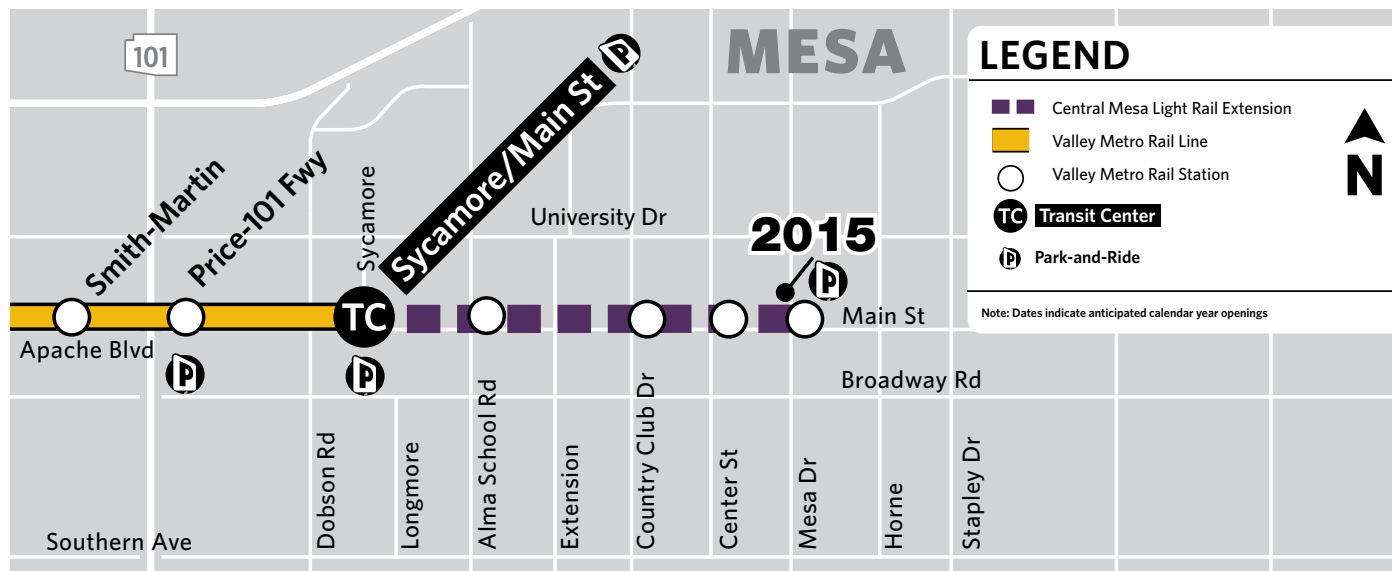
- Considered LRT and BRT modes (BRT would operate in mixed traffic as a limited stop express service).
- Mode evaluation criteria compared ridership potential, capital costs, land use and economic development impacts, traffic issues, major environmental factors, conceptual engineering, community goals, and public input.
- Mesa's planning process involved developers -Mesa held a summit prior to construction to allow developers' input on how to revitalize Downtown.
- LRT was chosen despite identified disadvantages versus BRT:
 - Decreased auto capacity downtown that could result in congestion
 - Longer construction time than BRT
 - A new transit mode and loss of two through travel lanes would impact the existing character of Downtown Mesa

FUNDING SOURCES

- Federal 5309, Small Starts \$75 M
- Federal Congestion Management Air Quality (CMAQ) \$53 M
- Proposition 400 funds collected from a voter-approved regional transportation tax; a 0.5 cent sales tax for transportation projects in Maricopa County \$71 M

Phoenix/Valley Metro

CENTRAL MESA EXTENSION



 **Connecting Our Future**
A Regional Transit Plan for Central Maryland

 **MARYLAND DEPARTMENT OF TRANSPORTATION**
MARYLAND TRANSIT ADMINISTRATION

Seattle/King County Metro

RAPIDRIDE FREQUENT TRANSIT NETWORK G LINE

MODE

**BUS RAPID TRANSIT
LIMITED STOP SERVICE**

OPENING YEAR

2022

PROJECT COST (APPROX.)

\$121M

WHY THIS MODE

BRT was selected over LRT and streetcar due to:

- Lower capital costs and ability for targeted and phased-in investment
- Opportunity to include bike/ped facilities
- Buses shorter than LRVs; allowing for shorter platforms and increased flexibility for platform placement and street integration
- BRT has fewer disruptive / newly introduced impacts on existing traffic. Integration of BRT signal systems and streets is simpler and cheaper than for LRT
- Simplified construction and operating characteristics, possibility of providing off-guideway service; faster construction with fewer noise and vibration impacts

Mode evaluation criteria:

- Community, Economy, Environment and Human Health, Social Equity, and Efficiency factors
- Corridors evaluated for speed and reliability, viability for high-capacity transit (e.g., grade, availability of ROW), and overlap with current and planned light rail or other major transit investments

Priority given to routes that:

- Have high ridership and unmet demand
- Serve major regional destinations
- Can be improved to increase travel speeds
- Have partner jurisdictions willing to help with roadway improvements, permitting, or regulatory changes

FUNDING SOURCES

- \$60 M - FTA CIG small starts funding
- \$9.7 M - FHWA Congestion Mitigation/Air Quality Grant
- State: \$2.6 M - Connecting Washington grant
- Local:
 - \$28.50 M - Sound Transit Sales and Use Tax, Motor Vehicle Excise Tax, Property Tax and Rental Car Tax Revenues and Bonds
 - \$15.7 M - Levy to Move Seattle Property Tax Revenues
 - \$3.5 M - King County Local Sales Tax Revenues
 - \$1.6 M - City of Seattle Real Estate Excise Tax, Vehicle Licensing Fee, Development Mitigation
 - Fee and Other Transportation Revenues
- Local dedicated funding sources:
 - The 'Levy to Move Seattle,' a 9-year transportation improvement program approved by Seattle voters in 2015.
 - Local taxes and fees (from King County and City of Seattle), including property, sales, parking, and business and occupation taxes; vehicle license fees; and private funds through partnerships.
 - Regional sources, including Sound Transit State sources, including Washington State Department of Transportation (WSDOT) programs and other state appropriations
- Federal sources through the Puget Sound Regional Council (PSRC) and nationwide discretionary sources

Seattle/King County Metro

RAPIDRIDE FREQUENT TRANSIT NETWORK



Transportation Project Prioritization and Decision-Making

During the Central Maryland Regional Transit Plan's (CMRTP) fourth Commission meeting, members expressed interest in learning about how other agencies or jurisdictions evaluate and prioritize transportation projects. This document will summarize a few examples from across the United States.

The Transportation Research Board (TRB) recently held a "Conference on Performance and Data in Transportation Decision-Making," which included presentations by several agencies. This document discusses only two examples from the conference (ATL and VDOT), but the full program and presentations can be found on the link below:

<http://onlinepubs.trb.org/onlinepubs/Conferences/2019/PerformanceData/program.pdf>

1. Atlanta-Region Transit Link Authority (ATL) – Regional Transit Plan
 - <http://onlinepubs.trb.org/onlinepubs/Conferences/2019/PerformanceData/Sand.pdf>
 - Regional Transit Plan with a 6-year and 20-year time horizons
 - Included all projects to be funded through the new HB930 sales tax
 - Prioritization process was based on governing principles
 - Measures were created based on the following four prioritization criteria:
 - Performance impacts
 - Market potential
 - Deliverability
 - Cost effectiveness
 - Projects were scored on each measure with a total maximum score of 100, but with different weighting based on the type of project (Expansion, Enhancement or SGR) (Figure 1).

Multi-Criteria Prioritization Model

Performance Measure Category	Project-Level Performance Measures	Expansion	Enhancement	SGR
Market		42	27	15
	Existing, Projected Population Density	6	4	3
	Existing Population - Communities of Interest	8	6	6
	Existing Employment Density	5	3	2
	Existing Low Wage Employment Density	7	5	4
	Land Use Mix - Existing, Planned (+/- Community Impacts) (Re) Development Potential	8	4	0
Performance		30	50	70
	Transit Trips	10	10	15
	Transit Reliability	15	20	25
	Increased Useful Life	0	10	25
	Elements to Improve Safety/Security/Environment	5	10	5
Deliverability		28	23	15
	Financial Plan	15	10	10
	Documented Project Support	4	4	0
	Project Readiness - Schedule, Environmental Impacts	4	4	0
	Regional Integration / Connectivity	5	5	5
Cost-Effectiveness	Cost per Point	NA	NA	NA

Figure 1: ATL Multi-Criteria Prioritization Model – Maximum Points by Measure and Project Type

2. Virginia Department of Transportation (VDOT) – SMART SCALE

- <http://onlinepubs.trb.org/onlinepubs/Conferences/2019/PerformanceData/Tucker.pdf>
- Developed the SMART SCALE methodology to score and evaluate transportation projects funded in Virginia's six-year improvement program (SYIP)
- Projects submitted for evaluation by local governments, MPOs/PDCs and transit organizations
- Measures developed to work for both urban and rural areas and for all modes of transportation based on the following goals:
 - Safety
 - Congestion
 - Accessibility
 - Economic Development
 - Environmental Quality
 - Land Use
- Projects are scored on either five or six goals and weighted using one of four typologies based on the location of the project (Figure 2).

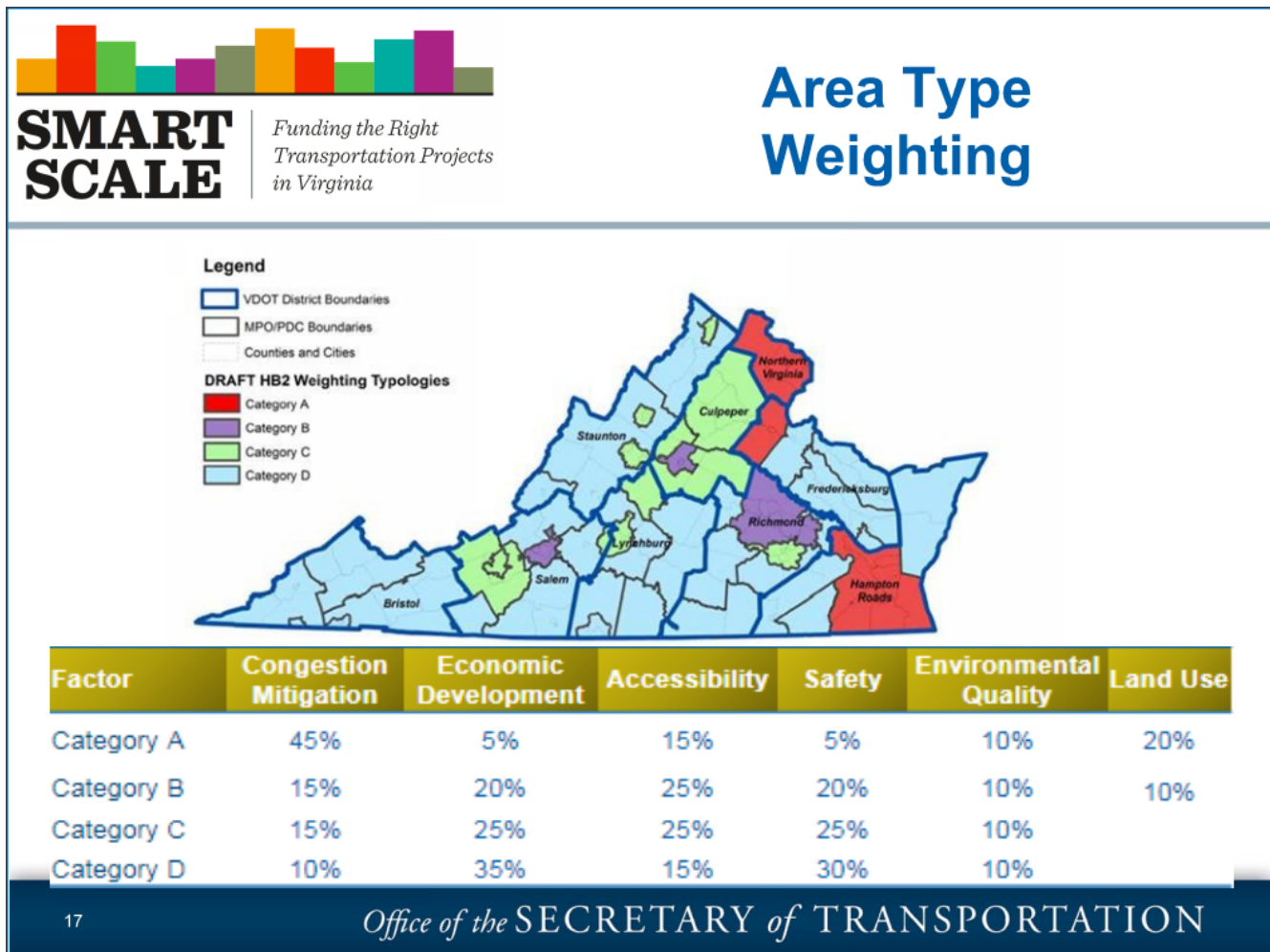


Figure 2: Virginia SMART SCALE – Area Type Weighting

3. Baltimore Metropolitan Council – Maximize 2045

- https://baltometro.org/sites/default/files/bmc_documents/general/transportation/long-range/2045/Maximize2045_appendices-A-B.pdf
- Regional long-range transportation plan by the area's Metropolitan Planning Organization (MPO)
- Regional goals and strategies were developed by the Baltimore Region Transportation Board (BRTB)
- Local jurisdictions, in consultation with MDOT, submitted projects for consideration in Maximize2045
- Projects could receive a maximum of 90 points based on a combined Technical Score and Policy Score (Figure 3)
 - BMC scored each project on technical merit, with a maximum score of 50 points
 - Each submitting jurisdiction and agency provided a policy score, based on the relative priority to the jurisdiction or agency and demonstrated financial support, with a maximum score of 40 points

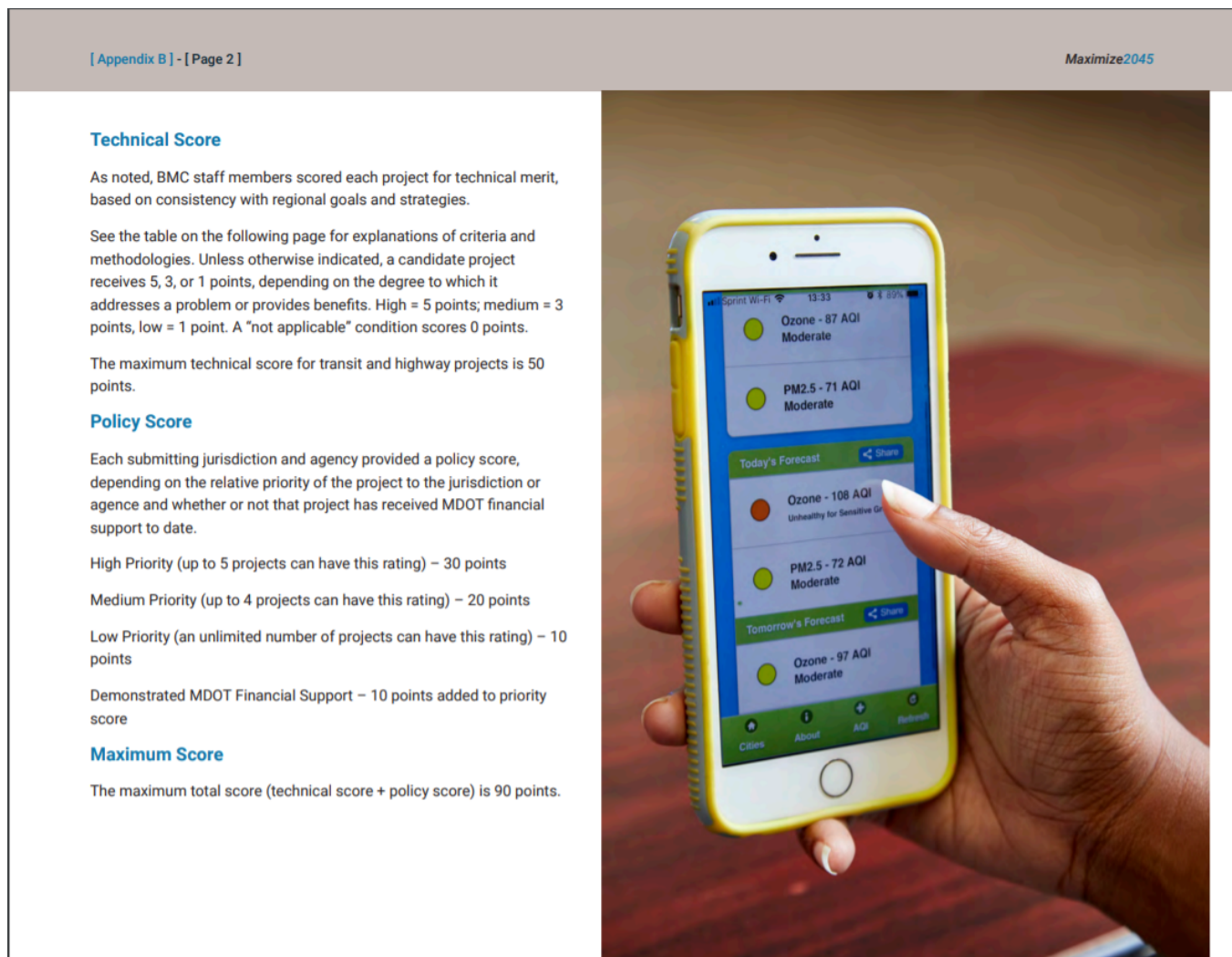


Figure 3: BMC Maximize2045 – Technical Score and Policy Score

4. VIA Metropolitan Transit – Vision 2040

- http://www.viainfo.net/wp-content/uploads/2018/05/2016_1208_Vol-2_The-Visioning-Process_FINAL.pdf
- Long-range plan for transit in the Greater San Antonio Region
- Identified network of potential high-capacity transit projects
- Corridor were scored based on measures of the following priorities:
 - Ridership
 - Congestion effect
 - Productivity
 - Site potential
 - Access
- Scores were categorized as High, Med/High, Med/Low, and Low (Figure 4)




NAME	RIDERSHIP	CONGESTION EFFECT	PRODUCTIVITY	SITE POTENTIAL	ACCESS	OVERALL
Fredericksburg	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
Zarzamora	HIGH	HIGH	HIGH	HIGH	MED/LOW	MED/HIGH
Commerce-Houston	MED/HIGH	MED/HIGH	HIGH	HIGH	MED/LOW	MED/HIGH
San Pedro	MED/HIGH	HIGH	MED/HIGH	MED/HIGH	HIGH	MED/HIGH
New Braunfels Ave	MED/HIGH	MED/HIGH	HIGH	HIGH	MED/LOW	MED/HIGH
Looper Premium (Incl. SW Mil.)	HIGH	HIGH	LOW	MED/HIGH	MED/HIGH	MED/HIGH
Austin Highway	MED/LOW	MED/LOW	HIGH	MED/HIGH	MED/LOW	MED/LOW
General McMullen-Babcock	MED/LOW	MED/LOW	MED/LOW	HIGH	LOW	MED/LOW
Rockport/Roosevelt	MED/LOW	MED/LOW	HIGH	MED/LOW	LOW	MED/LOW
Bandera	LOW	MED/LOW	MED/LOW	HIGH	LOW	MED/LOW
Huebner-Grissom	LOW	LOW	LOW	MED/HIGH	LOW	LOW
FM 78	LOW	LOW	LOW	MED/LOW	LOW	LOW

Figure 4: VIA Vision 2040 – Project Scoring

Transit Readiness Factors, Common Issues, and Strategies to Address Them

Transit Readiness Factor	Common Issues Associated with this Factor	Strategies for Addressing this Issue
 <p>Destinations Along the Path of Travel</p>	Major destination or the district to be served by transit is difficult to reach from proposed route	Use MDOT MTA's Transit Priority Toolbox to select methods to efficiently move service from corridor through destination or district streets
		Engage major employer(s), jurisdiction, transit operator, and/or mobility companies to plan shared-mobility or microtransit options at transit stops or stations and destinations
		Include transit-provider or transit-oriented design guidance in site layout/design review process to help create transit-servable destinations on redeveloping parcels
		Plan off-corridor transit destination areas to identify optimal location(s) for transfers (facility or mobility hub) and stop locations and to assess market and design options that increase the area's transit-supportiveness
	Route has destinations only at one or each end (beyond termini, corridor is rural or very low density to warrant more stops)	Conduct a corridor study to determine corridor locations conducive to new development or re-development, assess their market options, and establish regulatory support for transit-friendly patterns (dense/clustered/mixed use/walkable)
	Existing rail stations serve low density location(s) or park-and-ride(s)	Provide express service to build ridership for future envisioned corridor-based service
		Pursue Maryland's Transit Oriented Development (TOD) Designation
		Assess site opportunities and plan station area(s), regardless of designation, with support from MDOT MTA's TOD Guide, market, design, and strategic planning expertise
 <p>Dense, Mixed Land Uses</p>	Single-use (employment) areas have little or no activity after business hours	Change zoning and/or incentives to mix land uses (e.g.: ensure mixed use zoning in station areas; add retail/housing to industrial employment zone, etc.)
	Uniform low to medium density is spread along many miles of a corridor	Coordinate transit service with the start and end of the workday (e.g.: shift-focused service frequency and span)
		Vary allowed density via zoning code to create "transit nodes" along corridor as parcels redevelop
	Large surface parking lots impede density of land use	Promote infill development at strategic locations through active marketing and incentive program strategies
		Reduce minimum parking requirements near transit stations/stops jurisdiction-wide
	Properties are proximate to existing transit under- or un-developed and unable to produce requisite transit demand	Establish regulations, governance, and incentives to allow for and encourage shared parking arrangements near transit stations/stops
		Prepare community-based planning studies to identify "soft" and catalytic sites and investigate redevelopment options
 <p>Connected Network of Streets and Paths</p>	A barrier, such as major roadway, track bed, and grade separation, cut off access to transit stop or station on one or more sides	As part of planning studies, conduct area market analysis to determine area-based opportunities for redevelopment
		Prioritize program funds for projects that increase and ameliorate access to transit stops or stations
		Prioritize transit access in ADA improvement programming
		Adjust signal/crossing spacing guidance to allow for more frequent intersections and fewer driveways (off-arterial property access) for areas near major transit stops/stations
	Large-scale development creates barriers for pedestrians and does not plan for multimodal circulation through the site and/or along its periphery to connect neighboring parcels and transit stops	Ensure interchange/intersection design guidance reduces right-turn radii and turning speeds to increase pedestrian crossing safety and motorist compliance with low speeds at conflict points
		Require connectivity plans with all master plans that build internal and through-site connections for comfortable pedestrian access to daily destinations like schools, shopping, parks, transit stops, nearby employment, and neighborhoods
		Include pedestrian connectivity through or around parcels as a priority in design guidance and permit review
	Meandering street network makes destinations inconvenient to reach by pedestrians and transit vehicles	Develop easement program to partner with owners of important parcels to create connections for all modes
		Develop plan to connect streets identifying pedestrian and bicycle paths or new street opportunities
	Lack of sidewalk, sidewalk gaps, and dedicated road space for bicycles, scooter, etc. make it difficult to access destinations from transit stop or station	Explore opportunities for pedestrian/bike/scooter crossings at dead-ends and cul de sacs
		Require sidewalk construction along with parcel development (consider off-site improvements)
		Identify routes for separated facility or dedicated roadway space for bicycles and scooter access to stops/stations
		Include transit access needs and prioritization for complete streets design and funding programs in planning

Transit Readiness Factors, Common Issues, and Strategies to Address

 <p>Comfortable, Inviting Environment</p>	Large building setbacks, blank walls, and/or unused/uninviting public space (both public and privately owned) exists	Use design guidelines for pedestrian-friendly places (e.g. building orientation, fenestration, streetscape elements, etc) to influence private and public project designs and plan review
		Identify high-impact parcels/buildings that are suppressing pedestrian comfort and prioritize redevelopment or partner with parcel owners or tenants to redesign facade, landscaping, and site layout
		Temporarily activate underused spaces near important transit stops using low-cost interventions such as kiosks, murals, and pop-up style space programming
	Surface parking and excess supply increase the distances between destinations and reduce the appeal of transit	Reduce minimum parking requirements near transit stations/stops jurisdiction-wide
		Facilitate shared parking arrangements near transit stations/stops
		Establish parking districts to manage parking supply
		[Jurisdiction or institution] Supply shared structured parking in central locations to minimize separate surface lots
 <p>Transit Prioritized on the Route's Street/Guideway</p>	Major on-street transit route is slowed by congestion and causes bus bunching, which impacts service quality and on-time performance	Determine cause of delay, and consult MTA's Transit Priority Toolkit to develop appropriate solution
		Redesign streets to enable transit priority that is compatible with other street functions and priority users
	Transit operation is slowed by limited right-of-way, numerous drive-ways and frequent interaction with turning vehicles	Evaluate and adjust access management policies to promote side-street and cross-easement access
 <p>Programs and incentives for transit use and site location</p>	State tax incentive and grant based funding support have little correlation with existing areas of high transit service	Provide additional points or set asides for transit accessible places in ranking criteria for tax Incentive and grant based funding support
	Development/business location and design miss opportunities to leverage existing transit service investment	Establish a Fast Action Response Team to convene and engage with partners; respond to development opportunities; and expedite agency planning, design, and permitting decisions as well as any necessary cross-agency coordination
		Engage with major institutions to share marketing and support employee program set-up, such as Live Near Your Work
	Business's location decisions do not include transit accessibility; businesses request service once they have located, and employees find that they can not reach jobs they have been hired to do because service is unavailable or prohibitively inconvenient	Establish an employer or area based Transportation Management Association to encourage, monitor, and report on transit-based marketing
		Provide information to economic development staff and planning staff to support the business location and transit oriented design of new facilities

