

Bryan/College Station Metropolitan Planning Organization

MPO Policy Board Meeting Minutes

February 7, 2018

Certification of Quorum:

Voting members present were Commissioner Nancy Berry, Chair, Brazos County; Councilman Greg Owens, Vice Chair, City of Bryan; Mayor Karl Mooney, Member, City of College Station; Lance Simmons, Member, TxDOT Bryan District Engineer; and Dr. Bill Stockton, Member, Texas A&M Transportation Institute. A list of persons who attended is attached.

1. Welcome and Call to Order

Commissioner Berry called to order the regular meeting of the MPO Policy Board at 9:00 a.m. on February 7, 2018, at the Brazos County Commissioner's Courtroom, 200 South Texas Avenue, Bryan, TX. The meeting opened with the Pledge of Allegiance to the United States and Texas flags with an invocation given by Mr. Dan Rudge.

2. Public Comments regarding items not on the Agenda

No public comments were received.

3. Review and approval of January 10, 2018, Policy Board Minutes

Minutes from the January 10, 2018, Policy Committee Meeting were considered for adoption. A motion to approve the minutes was made by Councilman Owens. The motion was seconded by Mr. Simmons. The minutes were approved by a unanimous vote.

4. Staff Report

Board of Directors for Texas Innovation Alliance – The first conference call is this afternoon to prepare for the meeting next week in Austin where they'll begin to develop a blueprint for the autonomous vehicle proving grounds in Texas. They will also look at specific issues related to equity and access and develop problem statements for a variety of other innovations so that when the private sector is engaged in looking for innovative solutions, it is clear what the group is trying to accomplish and can recommend technologies, strategies, a variety of different things. The meeting is on the 12th and 13th and the alliance has drawn so much national attention there are participants coming in from Seattle, Boston, and a variety of other places that want to see what we're doing in Texas.

Results of January 19 Human Service Agency Transportation Coordination Workshop – Mr. Rudge thanked Commissioner Berry for coming to listen to the discussion. There were a couple of big takeaways from the workshop. It is apparent there is terrible communication

among the human service providers. These agencies don't know what services each one is providing. The 211 system does not have accurate and up-to-date information on potential agencies that can provide transportation. Lastly, the biggest issue is the way that the organizations are structured. The agencies are really focused only on specific types of clients so the idea of trying to coordinate trips is foreign to them. There is not a mutual understanding that coordination leads to more quantity of service and better quality of service. This information will be presented to the Equity and Access Panel for the Texas Innovation Alliance next week. They will be discussing a statewide transit fare media that is the same across every single transit agency in the state so when they get to a different city, they don't have to worry because they could use the fare medium they've already purchased through their home location. To make it easier for persons with disabilities to get approved and qualified, it has also been suggested that we work towards a one agency statewide eligibility system.

Regional Bicycle Plan – The MPO has been working with the Active Transportation Advisory Panel on a Regional Bicycle Plan. The last plan that they looked at was good except for two corrections. The ATAP wanted to put the city boundaries on the map and put the extra territorial zoning boundaries on the map. With these two changes, it will most likely go to the Technical Advisory Committee in March.

5. University Drive Study Final Report

Christian Lentz, a Senior Planner from Halff Associates and the Project Manager for the University Drive Study, presented the final report. Mr. Rudge expressed his satisfaction with the report in regard to quality and the ideas that came out of it.

Mr. Lentz led the team from Halff Associates made up of planners, landscape architects, and engineers. Alliance Transportation also assisted as they put the report together over the past year. Halff Associates worked in conjunction also with the Technical Advisory Committee and the Active Transportation Advisory Panel so they had input and participation in the planning project as well.

Halff Associates was tasked with looking at a six-mile section of both University Drive and Raymond Stotzer Parkway or FM 60. They were asked to look at ways that bicycle and pedestrian connectivity could be improved both along and across the corridor. They were asked to come up with conceptual solutions and the TAC and ATAP asked them to come up with some big ideas or outside the box thinking and not obvious solutions. Mr. Lentz said their primary outcomes were to look at ways to improve access along the corridor, comfort for the user, promoting innovative design on the corridor, and safety. The secondary outcomes, while not focused on level of service or traffic movement along the corridor, wanted to look at bicycle and pedestrian connectivity solutions that did no harm to the level of service for motorists on the corridor. The corridor was divided into three sections due to the different land use characteristics as well as future land use plans. West Corridor is from the airport to Wellborn Road, Central Corridor is from Wellborn Road to South Texas

Avenue, and East Corridor is from South Texas Avenue to the current terminus of FM 60 and Boonville Road.

The section between Wellborn Road and South College Avenue is referred to as University Boulevard and is a consolidated bicycle and pedestrian connectivity solution that separates the main Texas A&M Campus and Northgate. All of the other locations are singular locations along the corridor where if an improvement is made, it could stand alone by itself. The four locations along East corridor that we looked at, unlike west and central corridor, these four locations on east corridor were selected to provide examples of connectivity solutions that could be applied not just to one single location, but at different locations through the corridor. All of the background information that Halff Associates looked at (roadway characteristics, traffic conditions, the conditions of transportation facilities along the corridor and surrounding land use), one of the things they wanted to take a hard look at was the safety issue and bicycle and pedestrian crashes. The graphics in the report confirm that where there is more bicycle and pedestrian activity, you certainly do have an elevated number of accidents that are involving bicyclists and pedestrians along the corridor. Halff also looked at growth potential along some areas of the corridor. In the University Boulevard area there are a lot of new high rises and housing that is being constructed. The density of Northgate is increasing and it's projected to increase. The report illustrates how much additional population upon build out you might expect in these key segments of the central corridor above and beyond what is already being experienced now.

Mr. Lentz went through a few of the concepts in the report that are representative of the types of solutions that are proposed throughout the report and then talked about implementation. The solutions presented in the report are concepts and there is a lot more work to be done. Anyone reading the report should understand that other studies need to be conducted. There are a number of high level cost estimates for the concepts in the report with a collective total of just under \$600 million to over \$700 million dollars. These are 2017 dollars that don't account for inflation and doesn't account for future operations and maintenance costs. Those things need to be determined through future engineering studies. There are creative funding mechanisms out there to create partnerships that may make these very high dollar projects, at least some of these very high dollar projects, feasible. The TAC encouraged Halff to add the concept of air space leases into the report. There are locations where there could be some vertical construction that's factored into the preliminary engineering and may also help with some of the financing for one or more of these projects.

Commissioner Berry thanked Mr. Lentz for the report, and felt it was exciting and certainly out-of-the-box thinking, and felt Halff Associates had achieved the goals of the study. Dr. Stockton commented that he felt it was really exciting and interesting and bold. He felt it met all the objectives of the primary and secondary goals.

Councilman Owens made the motion to accept the University Drive Study Final Report as work completed. Mayor Mooney seconded the motion. The motion passed by a unanimous vote.

6. Adoption of MPO Safety Targets

Annually, the MPO's are required to adopt state safety targets. The Texas Department of Transportation has asked that we respond by adopting the State of Texas safety targets or adopting our own safety targets which we would develop. The TAC recommended that we adopt the State of Texas safety targets. Mr. Rudge provided a copy of Appendix A of the proposed resolution which states the safety targets. Once the safety targets are adopted, all of the MPO planning processes would take into account safety when we select projects for funding. Mayor Mooney made the motion that the Bryan College Station MPO would support the state's safety targets. Councilmember Owens seconded the motion. The motion was approved by a unanimous vote.

7. Revisions to MPO's Top Five Unfunded/Underfunded Priority Projects

Since its approval a year and a half ago, there have been local decisions made about how SH 6 and University Drive should look, so it is important that the numbers and terminology be updated to reflect current information. No projects were deleted or added. The cost number is large when you look at it, but it is also important, because this is the kind of information that goes to our federal legislators and it will be part of the Federal Legislative Action Plan (FLAP) that the Chamber of Commerce takes to Washington, D.C. when they visit in the spring. Also, adopting the changes in what we want the projects to look like, for example the collector/distributor lanes on state highway 6 which we did not talk about before, and obviously the University Boulevard Concept which you just approved which is one of the projects on the list as well, is just as important. Once the Policy Board approves the new Unfunded/ Underfunded list, the MPO will pass it along to the Chamber for inclusion into the FLAP and it can be posted on the MPO's website.

Mr. Simmons made the motion to adopt the revisions to the MPO's Top Five Unfunded/ Underfunded Priority Projects. Dr. Stockton seconded the motion. The motion passed by a unanimous vote.

8. Presentation on Autonomous Vehicles in Bryan/College Station

Mr. Robert Brydia, Senior Research Scientist at the Texas A&M Transportation Institute, presented information regarding development of autonomous vehicle technology at Texas A&M and the B/CS Community.

There are many opportunities for autonomous vehicles within the A&M system or university academics research. There are several projects that are going on as well such as the Campus Transportation Technology Initiative, the Campus Transformational Mobility Plan, and the Campus Master Plan update. There are lots of things going on which are looking at bringing transportation technology into campus to improve the campus.

There are many steps involved to actually deploy an autonomous vehicle anywhere, not just on campus. There are articles all the time that talk about how autonomous vehicles are coming and will be here in just a couple of years, but it's a little bit more complicated than that. You have to map out the routes, and have a robust physical environment taking into account everything that's there. You must really account for and think through your vehicle and pedestrian interactions, especially on campus where you have tens of thousands of millennials who never look up from their cell phone as they walk across streets. You have to consider everything related to scheduling and making requests and how do you do that when there is an entire new arena. There are other steps, but the point is we are really still in the early stages of learning how to do all this.

As an autonomous vehicle operates, the brain of the computer (the AI) is actually seeing and recognizing all the different components of the environment such as pedestrians, cars, bicycles, buses, etc. As a human being when you're driving along, you just intrinsically understand there is a pedestrian and you anticipate they pedestrian is going to step out because of your vast experience and your brain knows all of this. This information has to be put into software, compact it into a computer that is running all the operations of the autonomous vehicle, and get that same level of awareness and optimization of running through an environment that the human brain already does. This is a challenging concept and why Mr. Brydia believes we are still in the early stages.

Autonomous vehicles could fit into the community beyond just the A&M Campus such as downtown Bryan, educational complexes, apartment complexes for transit stops and internal circulation, medical complexes with large parking lots or for the mobility challenged, shopping complex routes, etc. The Texas AV Proving Grounds Partnership is a very critical opportunity that the area has. We are part of a federally designated center. There are multiple locations in Texas but within the Bryan/College Station community, we have access to RELLIS, A&M and the entire community. That means that people are looking to come here to do trials. They are looking to utilize Texas advantages for tri-lane AV vehicles and those types of things. It's a very significant capability that will enable this area to grow in the autonomous vehicle arena in the future.

An in-house development project started in the Department of Mechanical Engineering as an electric utility vehicle, aka golf cart. The focus for the in-house deployment is the mobility disadvantaged population which is a critical population on the A&M Campus that is currently underserved. The goal over time is to build a fleet of vehicles that can be operating autonomously on the A&M Campus with safety drivers in the beginning, which would serve the mobility disadvantaged community. In just a couple of years the mobility disadvantaged population at A&M is going to exceed 3,000 people registered on campus as needing these types of services. All of this relates to some core values of A&M University in terms of respect and integrity for people who don't have the same mobility options as others and service to provide that, and it also showcases Aggie innovation.

They have done some trials of this shuttle concept. There was a four-day study with 124 riders on campus. The shuttle went from West Campus Garage using the pedestrian underpass underneath Wellborn Road up to Kyle Field and took riders back and forth. They asked folks overall did you think it was positive, did you feel safe, did you feel comfortable, did you think you went too fast, too slow, would you recommend it to your friends, family, and neighbors who might have mobility challenges? Overall there were fairly positive results. There is a lot to do on this prototype chassis to make improvements and have it truly ready for deploying a fleet type of operation, but these are very encouraging. There are other autonomous vehicles on campus: a Lincoln, a Kia, and an F150. The university is part of the GM Autodrive Challenge and won one of the national designations for that which brings a vehicle, money, and support from automobile manufacturers to help further these concepts.

There is a very deliberate process to create autonomous vehicles and put them on the road. Step number one is simulation. We can't do these things first without understanding how they interact with the environment. Step two is like a little RC car. You run them around in your office and look at the concepts. Step three you bring the slower speed more lightweight type vehicles out on the roadway such as the autonomous golf cart. Step four you go to some other larger vehicles and test them out in larger systems. Step five you actually take it to full scale testing. RELLIS is an ideal location to do that on a test track before you take it out onto a roadway.

Through the AV Proving Grounds Partnership and some of the projects at A&M, multiple companies have expressed interest in coming to A&M and the area for demonstration. Texas A&M Transportation Institute is currently discussing with them what they're focusing on and what are the unique situations that exist on A&M and in the community that gives them a value proposition for coming here. Again, we are still in the early stages of deploying these vehicles in a totally autonomous fleet type of situation. They've identified several potential routes that would be unique and there are multiple opportunities.

On the academic side, over the last three semesters across multiple departments, there have been sixteen different projects supporting different aspects of the autonomous shuttle development. They've gotten support from IBM to bring Watson and integrate it into the shuttle. Overall, they've worked with more than 100 different students, some of which have presented papers on their work in national conferences. A&M is out there and making a name for itself in terms of all these things that are going on. We are working hard to incorporate the academic mission of Texas A&M associated with this proposed autonomous vehicle research.

Deploying shuttles or autonomous vehicles is a complex mix of technology, environment, and testing. There are certainly multiple opportunities, both near term and long term, both on campus itself and the surrounding communities. Through private sector trials, we can show TAMU and Bryan/College Station innovation and thought leadership.

Mr. Brydia's presentation was followed by a short question and answer period.

9. Adjourn

The Policy Board Meeting was adjourned at 9:54 a.m.

Meeting: Policy Board Meeting

Date: ~~2/06/2018~~ 2/07/2018

Name	Agency
Robert E. Brydia	TTE
Bill Stockton	TTE / TAMULIS
GARY SCHATZ	CITY OF BRYAN
Dennis Christianson	College Station P&Z
LANCE SIMMONS	TXDOT
CHAD BOHNE	TXDOT
John Nichols	Coll. Stat. Council / BCS Chapter
Paul Kasper	COB
Troy Rother	COES
Thomas Lindheimer	COCS
Doug Bremner	JAMES / CARM
Zach Kennard	LOB
Nancy Berry	Brazos County
JASON SCHUBERT	COCS
Michael Parks	BVCOG
JUSTIN REGISTER	BVCOG
Allison Kurwitz	TXDOT
Prasthna Banaji	Brazos County

Nancy Berry

MPO Policy Board Chair or Vice-Chair
Bryan-College Station
Metropolitan Planning Organization

ATTEST:

Dan Rudge

Dan Rudge - BCSMPO

3-7-18

Date