

## **TRAFFIC AND TRANSPORTATION**

May 26, 2020

A meeting of the Committee on Traffic and Transportation was held this date beginning at 1:50 p.m. over Zoom Conference Call.

Notice of this meeting was sent to all local news media.

### **PRESENT**

Councilmember Seekings, Chair; Councilmember Brady, Councilwoman Jackson, Councilwoman Delcioppo, and Mayor Tecklenburg **Present:** Jennifer Cook, Tracy McKee, Jason Kronsberg, Councilmember Appel, Matthew Moldenhaeur, Robbie Somerville, Josh Johnson, Keith Benjamin, Rick Jerue, Bret Gillis, Bethany Whitaker

The meeting was opened with an invocation provided by Councilwoman Delcioppo.

### **APPROVAL OF MINUTES**

On the motion of Councilwoman Jackson, seconded by Councilwoman Delcioppo, the Committee voted unanimously to approve the minutes of the May 12, 2020 meeting.

### **Folly Road at Formosa Drive/Yeamans Road SCDOT Signal Rebuild Update (information only)**

Josh Johnson stated that he would give a little bit of an update on how the coordination projects were going. The DOT and his office received a certain amount of money each year for maintenance of traffic signals and they identified a few to be completed for what they called a rebuild, which was to completely rewire the signal, replace the signal heads and do any upgrades/pedestrian upgrades needed. Through that, they had a signal maintenance agreement with the City and they reached out to them from time to time to see if the money would be available to potentially share costs on an intersection because many municipalities would like upgrades to the mast arms. With the DOT position being that they maintained standard equipment, the mast arm fell in the category of not standard. So, when an intersection that was on a list and eligible for a rebuild and the City would like mast arms, and the DOT had the funding for the standard equipment, they did a cost share through a financial participation agreement. DOT paid for everything standard and the City paid for the upgrade. That was how this came about at Folly and Formosa. It was a complicated intersection and had taken the designers some time to work through that, but they were very close. Kimley-Horne had been hired to do the design and last he heard, they were finalizing the plan now. Once they had that in hand, they would take their quantities they had calculated and would generate a cost estimate and separate out the cost of the standard equipment from the non-standard mast arm equipment and would generate their financial participation agreement where they listed out the costs for each. Sometimes it was handled at the City Administrator level, and sometimes it would go before Council. The timeline would somewhat depend on the two agencies timeline for those agreements to be signed, because for DOT it needed to be signed by upper management in Columbia and for the municipalities, it sometimes needed to go before Council. Once that was initiated and folded into a project, it would generally move pretty quickly. If it took three months to sign, it could take 3-4 months to go through a bid process and then move forward. The most recent in Charleston that they had done was in the Avondale area. That was done in a

similar fashion where the City paid for the non-standards to upgrade the area with mast arms. He looked forward to continuing with these types of partnerships to improve. They would get some pedestrian improvements there and some flashing yellow arrow improvements. In the south-bound direction, turning onto Yeamans Road, Kimley-Horne had done an analysis and was recommending to allow the left turns to be protected permissive. Right now, they could only turn on a green arrow, so they were recommending a trial to allow a green arrow, but be able to turn permissively when traffic was clear. There would be a follow up analysis after 90 days and a year to see if there were any crash patterns occurring.

Councilwoman Jackson thank Mr. Johnson for being there. She would hope they would continue to do cautionary things. She wondered if there was a percentage above standard that they would end up paying for the upgrades. Mr. Johnson said it varied based on the number of mast arms and foundations needed. Since this was a complex intersection, the plan he was seeing had 6 foundations and a twin mast arm. This would be fairly expensive. The percentage, generally, was around 50/50. This one would probably be more than 50% though for the City. A few years ago, they had a project similar to this in North Charleston with six single arm masts, and he thinks the estimate was around \$120,000. The good news was that mast arms were long-lasting and protected the equipment really well. Councilwoman Jackson asked if the rebuilding would make sense if they weren't doing the mast arm upgrade at the same time. Mr. Johnson said that based on the feedback from the City the answer was yes. The reason those got to the top of the list for rebuilding was based on the increasing burden of maintenance. At some point, the time and money spent on the maintenance made it due for a rebuild. The goal, as a State, was to rebuild signals every 15 years. He was sure that this one had gone much longer than that, as most had. It was elevated to the top of the list because of that and so it became the City's decision to proceed with the mast arm upgrades. Mr. Benjamin said that this was proof of the coordination they had with SCDOT. That intersection had been in question for years, even before his time. From the community's standpoint, the ask had been for mast arms, and being able to have the flashing yellow option. So, they had been trying to check all those boxes. They got their signal maintenance agreement dollars from SCDOT to operate and maintain the signals. They had opportunities to use those dollars in specific ways. They didn't think this would come up until the end of the year, but they felt like they wanted to have an update that there were improvements coming to the area.

Mayor Tecklenburg thanked Mr. Johnson for his partnership. Chairman Seekings said that he had heard that there was a safety factor to the flashing yellows. He asked if the numbers showed that it was safer to have the flashing yellow as opposed to just a green and red left turn signal. Mr. Johnson said that the comparison to being safer was in reference to the old 5-section head. The flashing yellow arrow was safer in comparison to that because they could provide the left turn with its own signal head. If they did a study on protected permissive versus protected only, they would find that the protected only was safer, but it was a much bigger increase in delay. There was a balance. When they were going from protected to flashing yellow, they required an engineering study up front to recommend it and a follow-up to make sure that recommendation was right.

**Meeting Street and King Street Road Safety Audit (information only)**

Mr. Benjamin stated that SCDOT had identified ten corridors in the State regarding bike/pedestrian safety. Four of them were in the City of Charleston. They were stipulated to do road safety assessments that gave an understanding of both short and long-term benefits of improvements in the area. There was a collection of stakeholders that came together to assess what was happening and give recommendations. He wanted to give a salute to SCDOT and Stantec for listening to them about which stakeholders to bring together and what it would look like. He wanted them to get an update on what came out of those meetings and where they stood. The CHATS Policy Committee actually voted on some amendments to the TIF that included allocations specifically for all of the corridors. They hadn't gotten info from SCDOT on what the allocations would be directed for yet. He was excited about moving toward implementation and thought it was important to hear where the pieces stood and where things were headed.

Bret Gillis, Stantec, stated that SCDOT had a group called The Office of Traffic Safety. Shawn Salley was on the call that day and representing them. They handled the safety improvement projects throughout the state. One of the tools they sometimes used for programming the projects were road safety audits. They contracted with Stantec to conduct those audits for Meeting/King Streets. Projects were initiated and managed by the Office of Traffic Safety and funding came from Federal Highway. The Safety Office used a data driven approach to identify intersections and corridors that could most benefit from safety improvements. Project selection required engineering analysis to ensure maximum safety benefits from funds invested. For some corridors, that engineering analysis was the road safety audit. The audits were not projects themselves, but studies to determine what safety improvements might be warranted for independent corridors. The audits included some recommendations that were warranted and others that required further study before implementation. Road safety audits identified safety issues through data analysis, field observation and local knowledge. A multi-disciplinary team was formed to bring a variety of perspectives. SCDOT had conducted RSA's off and on and the current program began around 2016. In 2018, they started the non-motorized program. SCDOT ranked corridors in 2018 by bike/ped crashes per mile and the top ten corridors were assigned for RSA. Meeting and King Streets were two of those top ten. That was why they were talking about those corridors. It was a team effort. Both studies began on the north side at Line Street and extended down to Broad Street. They collected the data over 6 years and Meeting Street had 663 vehicular crashes, 19 bike and 17 pedestrian crashes. King Street had 490 vehicular crashes, 21 bike, and 15 pedestrian crashes. The bike/ped crashes account for a smaller portion of the overall crashes, but are still high compared to other corridors, so they were being carefully studied.

Mr. Gillis continued and stated that for the actual recommendations, he would go through them quickly, but wanted to give an overview. Pedestrians were a major component of the studies, so they wanted to look at two things. The first was how pedestrians traveled along the Meeting Street sidewalk and how they crossed the side streets to do so, and two, how they cross Meeting Street itself. They recognized that it was a bit of a balancing act. They didn't want to sacrifice traffic operations. The general recommendations for the Meeting Street corridor overall was crosswalks where they were missing, high visibility, ladder-style crosswalks. A lot already had that. They should upgrade crosswalks to ADA standards where feasible and add curb extensions to shorten the crosswalk length and they were also looking at potentially reducing the speed limit from 30 to 25. For location specific recommendations,

one example was a pedestrian crosswalk location at Spring Street with a refuge island to help pedestrians cross Meeting Street more safely. There was an existing crosswalk near Charlotte Street that had flashing beacons constantly. It was intended to get the drivers attention, but drivers got used to them. They were proposing a replacement with rectangular rapid flashing beacons. They worked better because they were pedestrian activated, and they also had an irregular flash sequence. They were proposing a new crosswalk at Society Street and it would include a flashing beacon, as well. They were also looking at signing and pavement marking upgrades to improve traffic flow. They could give drivers better guidance on their need to shift lanes to continue straight. Next, they looked at traffic signal recommendations. For Meeting Street, they were looking at countdown pedestrian signal heads where not present. Most signal heads had that already. They were considering an 'all ped' crossing at Calhoun and Market Streets. Further evaluation was needed for that. At other intersections, they were considering leading pedestrian intervals. That increased the all red phases to give pedestrians a head start to cross before the vehicles entered. Both LPI's and the all pedestrian signal required changes to the signal times. They were looking at replacing the 8" signal heads with the standard 12" where feasible and adding reflective backplates for more visibility.

Next, they would look at King Street recommendations, which were pretty similar. They evaluated both traveling along King Street and crossing it. They looked at what was there today and what improvements may be viable. They looked at crosswalks, ADA ramps, potentially reducing speed limit at the northern end. For bicycle recommendations, this was for the southern end of the project from Calhoun to Broad Street. Today, there were two narrow lanes. Cars couldn't stagger because it was so tight. They could get rid of one lane and make the other car lane wider, and add a bike lane. That would make King Street a more pronounced bike corridor. The second option was to get rid of parking and turn it into a two way cycle strip with bikes going in both directions. For the northern end of the project, from Line Street to Calhoun, they couldn't take away lanes, but they could better emphasize bike riding by adding shared use lane markings to remind the drivers. So, King Street was being designated as a bike corridor with infrastructure improvements. King Street – South Bound today was signed so that during rush hour traffic the southbound movement had a through left lane and through lane and there was no parking allowed. All other times of the day, there was a left turn only lane and a through lane. The through lane had to cross Line Street, merge to the left, and then merge back to the right. The recommendation was to evaluate moving out the parking spots there, make it a left turn only lane. On King Street, there was an existing crosswalk at Ann Street. It was like Meeting/Charlotte where they would replace beacons with the RRFB's for pedestrian safety. Another example of this was at Vanderhorst and Hutson where there was a crosswalk, but they would add the RRFB. For signal recommendations, they were generally the same as what they were for Meeting Street, but the intersection locations varied. Like the Meeting Street recommendations, the LPIs and all-ped phases would require new signal timing. For next steps, SCDOT had begun evaluating recommendations for funding and the City could pursue remaining recommendations. SCDOT was to program its implementations as projects and contract with consultant for the design, and then construction could start.

Chairman Seekings said he knew they were just looking at the Meeting and King Street Corridors and Calhoun. At some point, there was some interplay between the two. He asked if they would build in some of the Calhoun recommendations with this study. Mr. Gillis said they did both studies, and they

were comparing them. When SCDOT looked at programming the projects, that would be kept in mind. Chairman Seekings said he didn't know how they could do these projects without considering the Calhoun Street corridor. One thing on his mind was people getting off Calhoun Street and getting onto St. Philip and King Street with left turn signals. That became a big issue for pedestrian and bike safety, especially at King/Calhoun. He hoped it would all be coordinated for consideration.

Mayor Tecklenburg said that they were considering the all pedestrian phase. Meeting/Market was one of his personal favorites for that recommendation because Market split into two streets and was very awkward for someone crossing Meeting on the north side. He asked if DOT would make that decision and what the process for that was. Mr. Gillis said that the report was written with the logic of what they thought would work, but they would have to collect data and analyze it to verify. In the case of the all pedestrian phases, they were talking about retiming the system and that needed to be coordinated with signal timing improvements which was a bigger project. That was something that would have to be coordinated with the City. They couldn't just put up all new pedestrian phases, because it would compromise the timing. Chairman Seekings asked if he would go back to the slide shown by Dewberry/Marion Square. He referenced the meeting where the Mayor had talked about repaving and places where grates/drains were a big problem. He pointed out the drainage area in front of where the Dewberry was. Chairman Seekings asked what the timing was on this. Mr. Johnson said that he wouldn't be able to fully answer but several of the revisions that were assigned dollar values and years. They were spread out over the next few years. His estimate for that is that the funding, the \$5 million annually for the non-motorized safety improvements initially funded the studies and would fund the improvements moving forward. Things were subject to change, but it would be over the course of the next few years. Shawn Salley, SCDOT, stated that they would probably begin with the short-term fixes. That was an easy starting point. Some things could be done pretty quickly. The recommendations that might need additional study or design may take a little longer.

### **A report regarding open streets from the Bicycle and Pedestrian Advisory Committee**

Chairman Seekings stated that Councilmember Brady had the idea of sending the question of what to do about streets in the City of Charleston and any recommendations there might be to the Bike/Ped Committee. They had a meeting the previous week, but didn't come up with any recommendations. They would be meeting again and would bring recommendations, if any, to the T&T Committee before the next City Council meeting. There were a lot of good ideas.

Mr. Moldenhaeur stated he didn't have a lot to add. They had a lot of information to consider from the Committee and Charleston Moves. They all recognized this as an opportunity. Hopefully, they would identify some remedies for open streets that could be sustained even after Covid. They wanted to take advantage of people getting out of their houses and understand what the City could look like from another dimension.

Councilwoman Jackson thanked the Advisory Committee for meeting so quickly after the suggestion. She thought they were saying that they'd be happy to entertain a more comprehensive set of ideas as late as July. They could give themselves time to do something good. She felt like what they could put in motion, on the basis of learning more about the society's interests, and being a bike/ped friendly City, that what they did now should be able to stand the test of time in some fashion. They wanted to do it right and they didn't need to be hasty. Chairman Seekings said he agreed. They had a large group of enthusiastic people on that

committee and they sent them home with homework to come up with ideas. They would try to balance it. Councilmember Brady said everyone on the committee was very receptive, and thankful to be charged with it from City Council. It was another great example of using established committees that they had to farm out some of the work. He looked forward to serving on that committee. Chairman Seekings said Mr. Benjamin gave a great presentation about the process they must go through to make adjustments to the roads. There would be more to come.

### **Director's Update**

Mr. Benjamin stated that they were grateful for the SCDOT's continued partnership on some pieces that were approved at CHATS. That was the Maybank Pedestrian crossing. They got TTC money for that and worked with the BCDCOG to leverage that into Complete Streets dollars for sidewalk on Woodland Shores, and multi-use on Maybank. That, along with the change order in dollars for the St. Thomas Bridge on Daniel Island, were approved at the SCDOT Commissions meeting. That was the final checkbox. There was also completion of the initial work of Project 700 Crosswalks. There was around 20 intersections that had some level of improvements since they started the process. He was grateful for that. They would be getting updates on the awardings for the TST soon. They would send that out of what projects they had submitted that had been selected for funding. For Courtenay/Calhoun, the County's team was still waiting for updates from SCDOT on some variances and coordination. They were still looking to bid that out this year. His staff was meeting with their consultants on Maybank/River the next day to move that forward. They had a pedestrian counter out on Hampton Park since May 7<sup>th</sup>, and taking into the Federal Highways error account which was about 22%, they had some amazing numbers of usage out there. They had over 40,000 users since May 7<sup>th</sup>. They had spent the vast majority of the dollars for traffic calming, but people were still welcome to put those requests in.

Having no further business the Committee adjourned at 2:44 p.m.

Bethany Whitaker  
Council Secretary