



CORE MPO Board

Minutes
November 1, 2023 at 10am

November 1, 2023 CORE MPO BOARD MEETING

Voting Members	Representing	Present	On-Line
Pamela Oglesby	Advisory Committee on Accessible Transportation		
Les Fussell	City of Richmond Hill	X	
Tim Callanan	Effingham County Commission	X	
Nick Palumbo	City of Savannah	X	
Karen Jarrett	Metropolitan Planning Commission	X	
Scott Robider	City of Garden City		
Jim Aiello	Savannah Airport Commission		
Deidrick Cody	Chatham Area Transit Board of Directors		
Representative	City of Tybee Island		
Beth E. Goette	Town of Thunderbolt		
James Hungerpillar	Town of Vernonberg		
Faye DiMassimo	Chatham Area Transit Authority	X	
Tom Hutcherson	City of Pooler		
Mayor Van Johnson	City of Savannah	X	
Vivian Canizares	Georgia Department of Transportation		
Jamie McCurry	Georgia Ports Authority		
Armand Turner	Citizens Advisory Committee		
Gary Norton	City of Port Wentworth		
Charles Ackridge	City of Bloomingdale		
Chester Ellis	Chatham County Commission (Chairman)	X	
Dr. Estella Shabazz	City of Savannah		
Michael Kaigler	Chatham County	X	
Pamela Bernard	Economic Development & Freight Advisory Committee	X	
Tanya Milton	Chatham County	X	
Voting Alternates	Representing		
Robert Milie	Town of Thunderbolt	X	
Ted Hicks	Georgia Department of Transportation	X	
Others	Representing		
Katie Proctor	GDOT District 5		X
Joseph Shearouse	City of Savannah	X	
Audra Miller	Bryan County	X	
Anna McQuarrie	CORE MPO/MPC	X	
Joseph Longo	FHWA	X	
Deanna Brooks	Chatham County	X	
Wykoda Wang	CORE MPO	X	
Asia Hernton	CORE MPO	X	
Sally Helm	CORE MPO/MPC	X	

Ed DiTomassio	GMC	X	
Annette Wynn	Savannah Chatham County Public School System	X	
Jeff Ricketson	LCPC		X
Kaniz Sathi	Georgia Department of Transportation		X
Mary Moskowitz	Chatham Area Transit		X
Matt Bilskie	UGA		X
Shannon Johnson	GDOT		X
Pamela Everett	MPC	X	
Hind Patel	MPC/IT	X	

I. Approval of Agenda

Ms. Tanya Milton motioned to approve the agenda; seconded by Ms. Faye DiMassimo. The motion passed with none opposed.

II. Committee Reports (verbal)

ACAT

Ms. Asia Hernton gave the presentation on ACAT stating they met and endorsed all action items.

CAC

Ms. Asia Hernton gave the presentation on CAC stating they met and endorsed all action items.

TCC

Mr. Les Fussell gave the presentation on TCC stating they met and endorsed all action items.

EDFAC

Ms. Pamela Bernard gave the presentation on EDFAC stating there were no action items. They went over the final draft for the Regional Freight Plan update.

Executive Director

Ms. Pamela Everett stated there were no updates at this time.

III. Action Items

[1. Approval of the August 23, 2023 CORE MPO Board Meeting minutes](#)

Mr. Les Fussell motioned to approve the August 23, 2023 CORE MPO Meeting minutes; seconded by Mr. Nick Palumbo. The motion passed with none opposed.

[2. FY 2024-2027 TIP Adoption](#)

Ms. Wykoda Wang stated the TIP is the MPO's short range programming document and is a subset of the long-range plan. All projects must be consistent with the current 2045 Plan. The TIP includes highway, transit and multi-modal projects. The TIP contributes to the performance measures. The PM1 (safety), PM2 (bridge conditions and pavement) PM3 (freight movement and congestion/CMAQ), TAM (Transit Asset Management) and Transit safety performance targets were adopted in February 2023.

The following projects are included in the TIP and are contributing to multiple performance measures.

GDOT PI Number	Project Name	From	To	Federal Performance Measures					
				Safety	Pavement and Bridge	Congestion	Freight	Air Quality	Transit Safety
0008358	I-516 @ CS/1503/DeRenne Avenue (DeRenne Blvd. Option)	I-516	White Bluff Road	✓		✓	✓		
0010236	SR 21/West DeRenne Avenue	Mildred Street	SR 204	✓		✓	✓		
0011744	I-16 Exit Ramp Removal Interchange Modification Report (IMR)	MLL Blvd	Montgomery Street	X				X	
0015704	SR 404 SPUR/US 17	Back River		✓	✓		✓		
0015705	SR 404 SPUR/US 17 FM NE OF SAVANNAH HARBOR PKWY TO BACK RIVER	NE of Savannah Harbor Pkwy	Back River	✓	✓		✓		
0017411	I-95 -ITS EXP	Florida State Line	S Carolina State Line	✓		✓	✓	✓	
0017414	SR 26/US 80 @ Bull River	Bull River		✓	✓	✓			
0017415	SR 26/US 80 @ Lazaretto Creek	Lazaretto Creek		✓	✓	✓			
0017515	I-16 Interchange at Little Neck Road	Little Neck Road		✓	✓	✓	✓		
0017975	Chevis Road Improvement Project	Wild Heron Road	SR25/Ogeechee Road	✓				✓	
0017976	Garrard Avenue Improvement Project	Chatham Parkway	Gamble Road	✓				✓	
0019013	Chatham Area Transit-State of Good Repair Fleet Replacement							✓	✓
0019015	Green Island Road Multipurpose Trail off Diamond Causeway			✓				✓	
0019219	SR 404 SPUR @ TALMADGE MEMORIAL BRIDGE				✓				
0019716	OCEAN TERMINAL @ CS 2356/LOUISVILLE RD & @ SR 25/US 17 RAMP	Interchange					X		
TBA	Lump Sum Project			✓	✓	✓	✓	✓	
NA	Transit Priorities to be programmed in Sections 5307, 5337, 5339, 5310, 5311 and other programs			✓		✓		✓	✓

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The total investment for the next four years is more than \$495,000,000. Each project contributes to multiple performance measures. Approximately 64% of the projects are contributing to highway safety, 69% will contribute to pavement and bridges, 29% will contribute to freight, 59% will contribute to congestion relief, 34% will contribute to air quality improvements, 16% will contribute to transit asset management, and 16% will contribute to transit safety.

In summary, the new TIP includes high percentages of projects that will address safety, bridge and pavement, and congestion. The TIP as a whole will contribute to economic development of the Savannah region.

There are some updates to the Draft TIP which was made available for public review and comment in September.

- [Added two projects](#)
 - [I-16 Exit Ramp Removal IMR \(earmark funds\)](#)
 - [Green Island Road Trail \(later phases\)](#)
- [Moved one project to illustrative section](#)

- [OCEAN TERMINAL @ CS 2356/LOUISVILLE RD & @ SR 25/US 17 RAMP \(100% locally funded project\)](#)
- [Deleted one project](#)
 - [Ivey and Linwood Sidewalks \(requested cancellation by project sponsor\)](#)
- [Allocated Y230, Y301 and Carbon Reduction Funds based on Call for Projects Rankings](#)
 - [Project DeRenne](#)
 - [I-16 @ SR 17](#)
 - [Chevis Road Improvement Project](#)
 - [Garrard Avenue Improvement Project](#)
 - [Green Island Trail](#)
- [Transit Updates](#)
 - [Added funding obligation for FY 2021 - 2023](#)
 - [Updated T-HUD funds, Section 5310, and Flexed Z230/Y230 funds](#)

The Carbon Reduction Program funds were not allocated during the draft TIP development. There was a special called TCC meeting. GDOT and the Federal Highway Administration stated some of the projects such as Garrard Avenue and Chevis Rd projects would be eligible to receive the Carbon Reduction Program funds since they are improving sidewalks and bike lanes. .

Mr. Nick Palumbo asked if there was a way to help to apply and alleviate congestion for transit? Ms. Wang said the MPO controls HIP (Highway Infrastructure Improvement Program) funds, Y230 funds, Y301 funds, and the Carbon Reduction Program funds allocated to our area. The HIP funds will lapse soon. The focus should be on Y230, Y301, and Carbon Reduction Program funds. In allocating the funds, the Carbon Reduction funds will be used first, then the transportation alternatives funds, and finally the Y230 funds. The Y230 funds are the most flexible and can be used for transit improvements.

Ms. DiMassimo said in the Master Transit Plan there were some calculations for the performance impacts of implementation of overall improvements over time. There is some information that can be used here.

The chairman opened the public hearing. There were no public comments, so the Chairman closed the public hearing.

A motion was made and seconded for FY 2024-2027 TIP adoption. The motion passed with none opposed.

IV. Other Business

V. Status Reports

[3. CORE MPO MOU, Fee Structure, and Bylaws Adoption](#)

Ms. Wykoda Wang said she has presented the MOU at the past two meetings and sent a follow-up email to get input. Before this meeting she has not received any input and neither has Ms. Wilson. We are interested in input on Appendix B which is the fee structure. Based on the conversations that she had yesterday and today, she has summarized the following information.

- Mr. Tim Callanan from Effingham County stated that the County will pay for all their share. Staff will update the language in Appendix B of MOU regarding Effingham County from "to be determined" to 'will pay for 100% of the county's share'. Effingham County will work with Rincon, Springfield and Guyton to decide who will serve the other seat, and that decision will be associated with the bylaws update.
- As for Bryan County, Richmond Hill will pay their share and they will coordinate with Bryan County. So, we are still waiting on Bryan County for how they will split their share.
- For Chatham County, the Chairman indicated that the County will pay 25% of the municipality's share. The assumption is the County Commission Chairman will still be the CORE MPO Chairman, so we will not have elections on the MPO Board.

This is what staff has decided to do regarding MOU.

We have sent the MPO members (current and new) calculations of membership dues based on fiscal year 2024 UPWP. Those are the estimated amounts you will pay. Since the message includes everybody, it might be difficult to find the information associated with your agency. We will prepare a letter to all the jurisdictions - you will receive an individual letter specifying your expected amount. We will need official response letters in return, for example, Chatham County needs to indicate that 'we will pay the 25% of the share, but the County

Commission Chairman will still be the MPO chairman'. Hopefully we will get all that done in November so that we can finalize the MOU and present it in December. After the MPO Chairman signs the MOU, we will forward it to all the jurisdiction so that you may sign your individual signature page. Other input we had at the last meeting is that maybe Chatham Area Transit needs to pay less than Georgia Ports Authority. We will need to meet with CAT to decide what approach we will take. Currently all modal representatives are paying 70th percentile, so we are thinking CAT could pay 60th percentile. We will re-do the calculations and send out the numbers in individual letters to everyone. This would be the follow-up for the MOU.

For the Bylaws, staff has updated the Bylaws based on the assumption that every committee will have the standard format and same election time and the same quorum requirements. Right now, everyone is different, and we will try to standardize this. The preliminary draft still has staff comments attached after being sent for internal review. Please go over this information after this meeting. We don't have to adopt the Bylaws in December as it does not require the signatures. However, since the MOU requires signatures, we need to forward the MOU to GDOT and the Governor's office in December. We can still work on the Bylaws in the meantime. After this meeting, please review the language. All changes are highlighted in red. We already had the question from the Chairman yesterday about deleting Garrison Commander from Hunter Army Airfield. We will revisit that section. Mr. Tim Callanan is fine with the language about the other voting seat for Effingham to be agreed upon by Effingham County and its municipalities. If Bryan County wants to do the same thing, we will revise the language. This is the first time you review the Bylaws, so please let us know if you have questions. Please send us your comments and we will keep working on the language. You will most likely see several iterations. We do plan to have a meeting with ACAT and CAC to work on their portion of the bylaws. They have some questions and concerns and one of the members is not even satisfied with the new name. We will go line by line to finalize the Bylaws and that will take more time. The Bylaws will not be ready in December.

Chairman Ellis stated there are some procedural and legal issues that the City of Savannah must address. Timing, particularly with the changing of Administration and a couple of other issues, we will need time to work those out. The timeline would be helpful to us.

Ms. Wang said we are talking about the MPO Board meeting which is December 13th. After everybody on this board approves the MOU, we will send you a copy. You will have time to work on this. Bryan County has already contacted us about working this into their next agenda in December. So most likely your meeting will be in December or January. After we have all of the signatures, we will send the MOU to GDOT and the Governor's Office, probably in January or February. Again, the MPO Board decision is December 13th.

Chairman Ellis stated that even if the municipalities are going through elections, those members of the Board will not change before December 31st. However, the MOU has to be in Atlanta by then, so it's the members of this board and the elected officials who will serve now to December. They are the ones who need to sign off on the MOU. We need to get the MOU done by December. No matter what happens in the election, they don't come in until January. As we work on the Bylaws, they can come back and put comments in January, but MOU will already be gone. So we need to separate those two.

Mayor Johnson stated that the question was more on procedural and legal issues more so than administration, so we will need time to clarify that.

Ms. Wykoda said you will have after December 13th to do that.

[4. 2050 MTP Update](#)

Ms. Wykoda Wang stated 2050 MTP update is ongoing.

- We started our second round of public involvement for the 2050 MPT update, because at this stage of developing the project list, we want public input. We attended two community events on two consecutive Saturdays, one at the Skidaway Island State Park, and the other at a City of Savannah event. For the second round, we will only advertise for one public meeting, because we found out we get more input from going to the neighborhoods. SAGIS is doing GIS day today, so they will bring our public outreach information to the students, as we want to collect information about bicycle and pedestrian patterns. We will do several of these types of events to collect information and then develop the project list.
- We have sent the 2050 social economic data to GDOT, and they have sent comments back. We are addressing the comments now.

- Several of the contributing plans and studies have wrapped up, like the Urban Flooding Model Study, the Regional Freight Plan, and US Corridor 80 Study. We are compiling the matrix of project recommendations from the studies. You will probably see the project list at the February meeting.
- We will do the third round of public outreach in April or May. That's when you will see what specific projects will be included in 2050 MTP.
- Genesis will talk about how we prioritize the projects and how we do the cost estimating for new projects.

For the 2nd round of public outreach, we will host a virtual public meeting for 2050 MTP on November 15th, and you will receive a link when we send out the advertisement. Chairman Ellis asked how soon it will be advertised. Ms. Wang replied that we will send out the notice today and advertise on Sunday. After that we will send out the link. Chairman Ellis wanted to make sure people know when the advisement goes out, as people always say 'y'all didn't tell us'. Ms. Wang replied that we are just trying to decide on the time. Since it's a virtual meeting, we are thinking 6 pm or 6:30 pm, so that people can join in from home. Chairman Ellis stated as soon as the time has been decided, please let us know. That's something we can put on everyone's website and link to the MPO website. For example, if I live in Bryan County, I would go to Bryan County website to find the virtual meeting. A lot of people don't even understand what the MPO is all about. We need to relay the information. Ms. Wang agreed that we did find out at our events that not a lot of people understand what the MPO is. Chairman Ellis stated that if we put it on Bryan County, Effingham County, Chatham County, City of Savannah, Thunderbolt, Tybee, and all affected area's websites, people may read their own jurisdiction's website, so please get it to us as soon as possible so that we may get it out on our own webpages.

Since Genesis is having technical difficulties, Ms. Wang went over the inflation rates and cost estimating tool for the 2050 MTP.

- For financial plan development, we are talking about two things – revenue projection and project costs. Both the revenues and project costs have to be inflated because we are required to do the Year of Expenditure (YOE) for financial plan development. We will divide the next 25 years into 3 cost bands. Cost Band 1 will have the latest cost estimates, but Cost Bands 2 and 3 will need to be inflated for both revenue and the cost estimates. Genesis has done some research on what inflation factor we will use. Based on the samples, we decided for the revenue projections, we suggest using 2%. Previously for the 2045 Plan when GDOT sent the revenue projections, they assumed 1% annual inflation rate. We think 2% makes more sense for 2050 MTP. For the cost estimating in the current 2045 plan, we used 4% annual inflation rate, because when GDOT does the project letting, the project costs more. So we use a higher percentage rate for the cost estimates. Those are the things we presented to the TCC to get some ideas. TCC agreed on the 2% for now. We are soliciting volunteers from the TCC to form a subcommittee to develop this financial plan. They will meet more often and deal with the inflation factors. When we have the revenue projection from GDOT, we will see how much will be available in Cost Band 1, Cost Band 2, and Cost Band 3. Then we will agree on the prioritization methodology and start to prioritize the project list and then decide which projects will go into Cost Band 1, 2, and 3. We are working with TCC and asking for volunteers.
- For cost estimates, this might be the first time we can include some new projects in the long-range transportation plan. For previous plans, we did have a big project list and not enough revenue, so what we did was cutting out a lot of the projects. This is the first time we might have the revenue to cover new projects. I-16 widening project is done and other big item projects like Ogeechee Rd Widening already have their funds, so there is room for new projects. The new projects will come from the Congestion Management Process, Freight Plan, the corridor studies, and some projects carried over from the current 2045 MTP. New projects that come from the studies, for example this SPUI project at SR 26/US 80 at SR 307 comes from both the SR 307 Corridor Study and the US 80 Corridor Study. When we had the RFP out, we didn't ask the consultant to come up with the cost estimates. If we are to include this project into the 2050 MPT, we need a cost estimate. Genesis acquired a cost estimating tool from the ARC (Atlanta Regional Commission) which is the MPO for Atlanta. She did some testing, plugging in numbers like mileage and land use and came up with a design theory. We wanted to test whether this cost estimating tool is usable and she did a comparison with other areas, for example California and North Carolina, to see how much their SPUI projects cost. Basically, we found out the results of our cost estimating tool are pretty reasonable. This will be the cost estimating tool we will use for new projects. All of this will go through the TCC and the TCC Subcommittee. The MPO Board probably will not see that much detail, but we wanted to inform you of our approach.

Ms. Pam Bernard asked where did the tool come from, was it GDOT? Ms. Wang replied that Genesis has worked in the Atlanta Area before and she got the cost estimating tool from the Atlanta Regional Commission. The ARC is the largest MPO in Georgia, so they have more resources and staff members. They develop a lot of tools that other small MPO can use. We are also referencing the ARC's project prioritization methodology to refine our 2050 MTP project prioritization method.

Mr. Les Fussel stated that the presentation Genesis provided to the TCC was phenomenal. She included a lot of details and got down into the weeds a little bit. This is a good way of prioritizing and looking at real cost estimates for projects. Kudos to Genesis and the presentation she did for the TCC.

[5. Congestion Management Process 2024 Outline](#)

Ms. Wykoda stated that Genesis is also working on the Congestion Management Process (CMP) update. Some of our projects will come from the CMP. Genesis did an outline on this update. She is acquiring additional data and adding additional sections. She is going to add information that is not included in our current CMP, like the percentage of non-single occupant vehicle travel. She will add information on the vehicle delay hours, cost of congestion, the percentage of non-single occupant vehicle travel, total estimation reduction, type of crash, pedestrian propensity analysis, and bicycle propensity analysis. All the highlighted portions are not in the current CMP, and she will add this new information. We are hoping to have the Congestion Management Process update done in January, before February when we compile the 2050 project list.

[6. CORE MPO Regional Freight Plan Update](#)

Ms. Wykoda Wang stated that the consultant gave a presentation at the EDFAC meeting and the presentation file is attached to the CORE MPO Board meeting agenda. It outlines what is included in the final report. The contract ended yesterday, October 31st. Ms. Wang received an email from the consultants indicating that all of the final deliverables are ready to be downloaded. We currently posted the drafted deliverables on our website. For the final deliverables, the consultants addressed all of the comments, including the graphics not being in high resolution. The consultants updated all of it. After today's meeting staff will download the final deliverables and replace on our website with the final files. The Freight Plan is done. The consultants also provided the matrix for us and that will help us develop the 2050 plan project list.

Ms. Pam Bernard stated that the consultants did a great job, the freight report that came in was very good, and it has good recommendations for projects as well.

[7. Urban Flooding Model Study Update](#)

Ms. Anna McQuarrie introduced Mr. Matt Bilskie, the consultant lead from UGA who is attending the meeting virtually to give the final prestaton, and the GMC representative Ed DiTommaso who is attending the meeting in person to do a demo of the tool that they developed in GIS.

Mr. Matt Bilskie acknowledged the various folks who have been involved in this project, both from UGA and GMC and gave a special shout out to the graduate and undergraduate students who have contributed to this project. He then presented the financial stewardship and resiliency planning, sea level rise scenarios, the stormwater modeling, and the Coastal Inundation Modeling & Roadway Vulnerability Assessment tool.

Financial Stewardship & Resiliency Planning

Social vulnerability is often quantified in terms of poverty, education, access to transportation resources, and other public resources that make it harder for particular communities more than others to bounce back after these disasters. The Social Vulnerability Index (SVI) is based on US Census Bureau data, compiled by the Centers for Disease Control (CDC ATSDR). The index assesses 16 variables associated with enhanced vulnerability to environmental threats. The four different indices are socioeconomic status, household characteristics, racial and ethnic minority status, and housing type & transportation. The scores are compiled, and the information is shown within the vulnerability assessment tool and in a map. In the SVI map for the MPO study area, low SVI is shown as green. As the colors become warm into the red, those are the areas with the highest average SVI.

We've identified approximately 40 different grant opportunities to support improving resilience with the focus on roadway and transportation infrastructure. This will be what we present as part of the technical memo for this area of the project.

Sea Level Rise Scenarios

The sea level rise scenarios include low and high values for 2050, 2075 and 2100. These are the same scenarios that were presented in one of the last MPO reports. We're continuing to use those to keep everything the same.

Stormwater Modeling

We're using the Stormwater Management Model or SWMM, that was developed by the EPA. Essentially, this model uses stormwater infrastructure data. It simplifies it into a very simple stormwater basin, junction, and pipe network that all lead to the outfall. We can simulate rainfall driven runoff that then goes into the stormwater collection system, and then ultimately, ends up at the outfall, as well as apply downstream conditions at the outfall, which is important for this particular area because we can have tidal flow that goes backwards in the stormwater network, and that can be exacerbated under the sea level rise scenarios when the tide is increased under sea level rise.

What we've done is, we've taken tide conditions, and then an example of adding sea level rise for future scenarios of stormwater flooding, as well as increase in developed areas using USGS land cover projections for the future. The image of land cover shows an increase in red, and that's a suggested increase in urbanized areas, which would increase the amount of impervious area that would then lead to stormwater runoff.

There was a very high level of effort that went into data collection with all the stormwater pipes, diameters of pipes where they're connected, elevation, and outfall elevation. A lot of information went into this model.

In the study domain, we looked at the areas where we had data. This is not the entire MPO area. One, because this was a very difficult effort to undertake, and two, this is where we had good data readily available to work on the project and what the project timeline allowed. We use these different sub-basins within the city.

Then this is just showing the stormwater network, and then the simplification that's necessary for our SWMM modeling. The next slide shows an example of the Fell Street Basin Watershed. Here's just some examples of looking at the inputs for the downstream battery condition in terms of the tide curve, and then a synthetic design hydrograph for rainfall, which is the image on the top.

You can see different combinations of a 10-year and a 25-year rainfall event, as well as with the tide condition at the outlet are there in the river with different tide scenarios and sea level rise scenarios.

Costal Flood Modeling and Roadway Vulnerability Assessment.

This is using the new 2019 Lidar DEM that was derived for coastal Georgia. It's clipped to our MPO boundary, and then overlaid on top of that are the road segments for the area. What we can do is take each of those road segments and assign an elevation to those road segments. What's shown in this graphic here, is we have all of the individual road segments, and those road segments have an attribute of elevation above datum, in this case the datum of NAVD 88.

This is our elevation dataset. Now we can overlay different flooding combinations, or different flooding scenarios, and compare that to the elevations of the road. This is an example here. This is the 1% annual exceedance probability floor, or in other words, the 100-year flood level, as derived by the US Army Corps South Atlantic Comprehensive Study that was just recently completed. We can take this dataset, and then we can overlay the roadway network onto it.

Then based on that flooding extent, we can essentially come up with a vulnerability of the roads. The N/A means there're are not likely to be flooded. Then we've just categorized for graphical purposes here, low probability of flooding, and then the high probability of flooding under this given scenario for each of the individual road segments.

This is all of the data that's going into our Esri dashboard that Ed will go over. First, here's just an example, going back to the SVI. This shows the social vulnerability index, the average value there with high being the dark blue, overlaid with the road vulnerability for the tidal flooding under the 2050 high sea level rise case. Again, this is just showing through some static images, some of the examples that are all going into this Esri dashboard.

Mr. Ed DiTommaso stated our job was to try to take that information and put it out there in a way to make it useful for people where they could easily navigate through it.

We started with this dashboard and added a lot of data here. He ran through how the dashboard is set up and how it works. It's a good way to interact with the data in a way that traditional methods didn't allow. We developed this dashboard as a user-friendly tool, where you can play around with the data. You will not mess anything up. If you get in trouble, you can go right back to the beginning and it will reset.

The left column gives general information and guidance about the project and how to get started. It talks about the different scenarios, the high and low tides impact scenarios, and how vulnerability was defined. As it is important to link back to MPO site for further information, we added a link at the bottom to the MPO site.

As a meaningful way to interact with the data, we want to give the user a chance to select their particular area of interest. There are a lot of ways you can define the areas within the city and the county. The unincorporated area is so vast that instead of doing it at that level we use the census place name, for example Isle of Hope. You can go directly to Isle Hope and it will filter the data that way. Let's start our examples with Thunderbolt, it will zoom into that area and it will filter all of our data so that it's just the streets that fall in Thunderbolt and their different vulnerabilities. If I were to click on Lakewood Dr, it will zoom into that area and bring up information about the street segment and how it's vulnerable under each of the scenarios we analyzed. You also have the ability to search a street.

As you go through, there are different tabs across the bottom of the screen. The map is interactive - it contains a lot of different data, it has a legend that shows you what you are displaying, a lot of different areas and layers including the critical facilities that are shown here. You can turn the different data sets on and off, so you can turn on the different road level scenarios, you can turn on the 2050, 2075 or the 2100 under the DNR Low or High scenarios, or the annual exceedance which is the 100-year, the 500-year storm events.

The social vulnerability characteristics are also available, so you are able to look at overall social vulnerability, but you can also break it down categories, for example, housing type which might look a little different than the housing characteristics category.

Here is another example - we will look at Wilmington Island. The tabs across the bottom will show how different mileage is impacted within each of those communities under the different scenarios we talked about earlier. The first scenario is present day, the numbers on the side will update automatically based on your place selection. Right now, looking at Wilmington Island, it says one mile of road is currently impacted by the high tide flooding. When you select the 2100 DNR Low scenario, it shows that 11 miles are impacted by flooding. Now looking at the same area using the High scenario, it shows that 49 miles of road segments would be impacted. Next, we will show the 1% annual exceedance or 100-year storm flooding, 61 miles or 81% of Wilmington Island would be impacted. Using the 500-year flood, almost every road on the island would be impacted.

To put this into perspective, you can look at other areas, Richmond Hill for example. When I select Richmond Hill, it will automatically update the number on the side of the screen. In Richmond Hill, only 48% of the road is impacted.

Those are just a few ways you can go through and look at the different areas of interest. Another way is to compare it directly via an interactive mapping piece. These are all linked together, so whatever I do here is going to show all those the scenarios with the master data set. Under present day on Wilmington Island, you can see how the color change under the different scenarios, if you toggle over one it will show the 2100 area High level scenarios. That way you can quickly see which roads will be impacted under these different scenarios. The idea is by looking at the High level, it allows you to get into the weeds and pull-out useful information for considering future transportation projects within your jurisdiction. This gives you the ability to look at road segments and how they line up with the High, Low and different scenarios.

For the interactive map, we are in the process of building in nodes that we have developed and each of those graphs that you saw when Matt gave his presentation, there will be points added to this dashboard that you can click on the graph, and it will bring up a quick picture as you get into the attributes.

Chairman Ellis stated that thinking about how we can take what you are doing and what the county is doing under our westside study and marry those two pieces of data together. Thomas Hutton is doing that for the county. He asked "could you look at that to see how we could better use those sets of data?" He then asked "will this be on the MPC website? Will all of us be able to link it to our county or jurisdiction?"

Ms. McQuarrie replied the final report will be on our website but this website to the dashboard is already on the studies page for the MPO for the flood model, so you can already access it there.

Ms. Wang stated that Ed showed you the map, but it only covers the current MPO boundary. The expanded boundary to Bryan and Effingham Counties will be done in Phase Two.

Mr. Les Fussell asked what is the single take away in all this data? Is this an analysis tool for today and a planning tool for tomorrow? How would the municipalities or counties alleviate flooding? We can look at our more vulnerable roads and say we need to elevate them? The data is wonderful, and I appreciate what you have done. How would we go forward to use this data?

Dr. Bilsky replied that is a great question and there are quite a few use for this tool. At a high level, this could be used as a screening tool, to show what roads would be impacted at what level of sea level rise. Then a further study could be done, possibly using the funding grants showed earlier. Maybe you would want to apply for a funding grant to do a furthermore detailed analysis of a particular roadway, road network or community. Then you will be able to identify what types of mitigation measures we could do for this particular road. Every road will be different. I don't think we necessarily need to raise roads, but getting grants to look at different alternatives is a big part of why that grant list was put together. This information will be very useful in applying for grants, to show that this data is available. We are using state-of-the-art modeling methods and very recent data. When applying for grants for municipalities, that is the data they are wanting to see, e.g. this study to identify potential problem areas has already been completed. That is one area this could be used.

Mr. Les Fussell agreed and asked could we also use this tool for emergency management for forecasting roadway evacuations and things along those lines?

Dr. Bilsky said absolutely. In fact, much of this work is going to be expanded across the entire coastline of Georgia. We have a newly funded program from GDOT that just started in September, where we will be doing a road vulnerability assessment with new techniques for the entire coast. With the aid of doing real-time forecasting, for example high tides and storm surges. These results could be updated in real-time for an event that would occur. Right now, this map could certainly be used for emergency planning services.

Mr. Ed DiTommaso added that as far as planning goes, if you already know you have the CIP list of road projects, this could be a tool to help understand a road that is problematic, and you might want to have a closer look at it. Say if you are planning to pave and do infrastructure work on a road that may be already highly vulnerable, whether it be social vulnerability or flooding, then this maybe a way to have a second look, to decide if that project would be sufficient to meet the time frame for a capital project. Definitely analysis now and planning for tomorrow.

Ms. Jarrett asked "have you looked at future development and how that will impact the maps for 2050, 2075 analysis?" Mr. DiTommaso replied that we did not look at planned or proposed future developments; it is just based on the existing roads and infrastructure. Ms. Jarrett asked "that would impact it?" Mr. DiTommaso replied yes. Dr. Bilsky clarified that we didn't include any potential new transportation. In the storm modeling we did look at changes in potential land use, particularly urbanization. We found those projections were nearly the same as today because the region around the main area of Savannah is already well urbanized. That would be something we can look at in an additional phase, in terms of the potential storm water development moving outside of the city.

Mr. Robert Milie asked is there a way moving forward to interface this with the individual municipalities? You all aren't aware of what the individual municipalities have possibly development wise. When we have something on the table, say 10.3 acres are developed, we can utilize this as a tool to see what impact it would have. Is there a way to insert sub-positions into this to use as a planning tool, prior to us even working with developers? Would that be a capability? For example, if in Thunderbolt there are 10.3 acres that have been developed, storm water runoffs are different. Would that be an aspect of this model? Could we insert a possible development, to use the connotations to see what the modification would be? Is that a possibility? Or is it an 'as-is model' we can use but we would have to figure it out on our own? Dr Bilsky replied that it will be a little bit of both. The SWMM model (EPA Storm Water Management Model) developed for the storm water inputs and an instruction manual have been provided as part of our deliverables. They are also on the website. Those data points can be downloaded, and you can adjust the model inputs for that lane use, using the instructions. It does take a little bit of expertise, but not much all the data, if not already, will be publicly available. Mr. Robert Milie stated that Thunderbolt has a quality engineer that works for them and probably we can run the SWMM model.

Chairman Ellis said GDOT did the Coastal Empire Study. They talked about the roads and things that will need to be updated. Now they have connected with you all to overlay what the flooding will be in the Coastal Empire Study. It included Bryan, Chatham, Effingham and Bulloch County. It's my understanding that you just signed a new contract with GDOT. They are taking this flooding study and adding it to the Coastal Empire

Study. So there will be a chance that the new roads that come up for widenings, for example the project for Quacco Rd. and Little Neck Rd, once they complete this study it will show how it's impacted. Like the GDOT Coastal Empire Study, you can hone in right on Thunderbolt. You can do the same thing right here. When GDOT gets with their study, you can pull it. It can be part of your planning now and part of your future plan, because this goes up to Year 2100.

Chairman Ellis:

Ms. McQuarrie added that you can download all the storm water models on the study website. Here on the screen, you can see that they are linked. If you would like more information on the SWMM, it's linked to the EPA website where you can download the software yourself. The EPA has manuals, so if you have a storm water engineer, they would be able to read through that and access it. We have some hydrographs, and the road vulnerability assessments are linked as well. Thinking about how this is going forward. During our public engagement last Saturday, I printed out some of these maps about present day flooding. I was able to ask people 'where did you experience flooding' and place a dot on the map. It was great to be able to compare where the model says there's flooding and where individuals are experiencing it as they don't always line up. I believe having both parts is really important to tell the story. Thinking about long range transportation - this data will be incorporated in a vulnerability assessment scoring tool from the Federal Highway Administration. Thinking about where our roads are most vulnerable and how they can be prioritized in your plans and in any transportation project that needs funding. So, this data is getting used beyond this.

Mr. Robert Milie asked where the model says no flooding and people are saying they do experience flooding, is that traditionally on the municipality? If the model shows that by the storm drainage there should not be a problem, ergo when it is flooding, would that be due to that the municipality maybe isn't doing drainage, etc.? Is that the reason why the modeling shows that the infrastructure is there and there shouldn't be a problem, however when a human on the ground sees flooding that would be due to something in the system not working properly. For example, the sewers are backed up, the road grading hasn't been done properly, is that where the disconnect is? Mr. DiTommaso replied that it could be a possibility that it comes down to infrastructure, the model would be assuming it's a 24-inch pipe that is free and clear but it's 75% full of sediment. So it could be related to the infrastructure. Mr. Robert Milie said that is something that the MPO or anybody who receives feedback that these roads flood and it doesn't show on the modeling would help every municipality to cross-coordinate and say we might have more a maintenance issue than a flooding issue because the infrastructure should be there. So, we could address this differently.

Ms. McQuarrie stated that all of our public outreach data is usually included in the appendix of the long-range transportation plan. We can get that to you individually and then it will hopefully be in the public outreach section as well from the comments and survey results.

Mr. DiTommaso said you do have your MPDS storm water program where you are inspecting over that 5-year period. That data typically will indicate where your maintenance needs are, so you can always look at that to reference how it aligns.

[8. Non-Motorized Transportation Plan Status Report](#)

Ms. Asia Hernton presented the Non-Motorized Transportation Plan Status Report update.

Staff is continuing the update of our Non-Motorized Transportation Plan, which is our bike and pedestrian plan for the CORE MPO area. We are asking everyone to send project lists for this plan so they can be added and then ranked by our steering committee. We would prefer if the projects could come in the format shown, which is the spreadsheet style where we see the use, project description, the length in miles, the location in terms of the street, county, city/municipality. Once all of those projects are submitted, they will be reviewed by the public and staff, then scored by the steering committee. In addition to listing the projects in this spreadsheet format, it would be great to send us a PDF or GIS file so it can be easier to add to our maps and files. It would be great if we could get some of those projects within the next couple of weeks so that we have enough time to get a good public review before the next steering committee meeting where we would rank those projects. The project list is projected to be completed by February 2024, so I can send a follow-up email asking are there any projects you would like to add to this plan.

It terms of current activities outside of the project list, we are still working in terms of the data we showed at the previous meeting. Also, some equity related topics such as creating maps that overlay showing community resources like schools and grocery stores, places experiencing poverty like public housing complexes. We want to add maps of those resources in combination with maps layers of our existing bike and pedestrian infrastructure, to see if those places are being served by our current infrastructure and if we should add more bike lanes, sidewalks, crosswalks, and those types of updates.

Additionally, we are still doing an analysis of our bike and pedestrian volume data, crash data, and origin and destination data. We did present some of the crash data at the public outreach events we did the past couple of Saturdays and people found the information really interesting. The work with these current activities will result in a list of specific roads and intersections that need the most safety improvements based off the crash data. A description of where we need more bike and pedestrian infrastructure based off the travel volumes, origin and destination data. Also, a map showing the difference between community features such as public housing, schools, etc. and our existing bike and pedestrian infrastructure. The Non-motorized Transportation Plan is projected to be adopted in June 2024.

[9. US 80 Corridor Study Status Update](#)

Ms. Wykoda Wand said the US 80 Corridor study is completed. The consultant gave a presentation at the last meeting. This is the latest status report. The consultant sent us a link where we can download the final report. As soon as the report is downloaded, we will make sure we post it to our MPO study website.

Ms. Wang mentioned something related to reimbursement for the US 80 Corridor Study. This project is federally funded at 100%, but so far Pooler hasn't sent a reimbursement request to GDOT. Pooler has already paid the consultant. Pooler needs to process the reimbursement with GDOT.

Chatham County is going to have State Route 204 Corridor Study, US 17 Corridor Study and the President St Rail Crossing Elimination study. City of Savannah also had the DeLesseps Ave project that encounters the same situation. How this works is that you sign two contracts, one for a Project Framework Agreement which is basically a contract with GDOT and then you sign one with the consultant or the contractor. Normally, the consultant will send an invoice request quarterly, and you will process this request and use the information to create a letter. In the letterhead you put the amount needed to request from GDOT and send the request to GDOT. Then GDOT reimburses you. After receiving the GDOT reimbursement, you have 30 days to pay the consultant. So, you would not pay the consultant before you are reimbursed from GDOT. For the DeLesseps Ave project, the City of Savannah has already paid the consultant, however, they didn't even request a reimbursement from GDOT. That is a problem. For the US 80 Corridor Study, Pooler has already paid the consultant, but they haven't sent the reimbursement request to GDOT. We wanted to make sure that project sponsors wait for the reimbursement before paying consultants. Ms. Pamela Everett said the reason Wykoda is bringing this up is because we also have to track the payment and we need that information.

VI. Information Reports (verbal)

[10. GDOT Project Status Update Report](#)

Ms. Katie Proctor gave the presentation.

Preconstruction Status

- PI# 0019219, State Route 404 at Talmage Memorial - the revised schedule has been accepted and the environmental begins and a construction manager or general contractor is expected to be awarded in the spring.
- PI# 0015151, Safety improvements of State Route 204 from State Route 21 to Rio Road - the PFPR is progressing to shift the schedule and the next major milestone will be PFPR which is anticipated in September and then LET will be shifting into FY26.
- PI# 0015675, Safety improvements on I-16 at Chatham parkway - we are awaiting LET. It was moved to April 2024 on the LET schedule.
- Numbers 4 and 5 are the twin projects of PI# 0015704 and PI# 0015705 which are replacement of Back River and the widening - preliminary design is ongoing, working towards PFPR.
- Numbers 6 and 7, PI# 0017404 and PI# 17405, Bull River and Lazaretto Bridge replacements - we are still waiting on the environmental tech studies and waiting on the draft environmental document.
- Number 8, PI# 0018023, the roundabout on Hodgeville Rd - working towards PFPR, the cost estimate is anticipated.

Construction Status

- All of our projects are progressing.

- PI# 0017955, cable barrier upgrade on I-95 is awaiting a supplement agreement for a time extension, so we will change the anticipated completion.
- PI# 521855, widening on US 80 - still waiting for a start date.
- Last meeting, we had a question about PI# 0016361 and PI# 16441, Highway 21 at State Route 30. There were some dividers missing in front of the CVS which was causing issues. GDOT has not replaced them yet, but we do have plans to do that.

[11. Chatham County Project Status Update Report](#)

Ms. Pam Bernard said we are looking forward to getting started on the 3 studies - State Route 204, State Route 25 and the President St at Truman Railroad and Elimination study. They will all be starting shortly, and we are excited about that. You will be hearing more about it in the next year.

[12. City of Savannah Project Status Update Report](#)

Mr. Joseph Shearouse presented on the City projects.

- DeLesseps Ave project continues to move forward. We are doing utility relocation both above ground and underground. Construction will be following those relocations, so we are moving forward down the street.
- Project DeRenne is continuing to move forward. We have had great meetings with our partners at GDOT and Federal Highway. We have a great plan for accomplishing the additional environmental justice outreach and look forward to updating the public on the project moving forward.
- We have rebid the Truman Linear Trail Phase Two project, that is currently out right now. We didn't receive any proposals in our initial bid, so we made some tweaks and additional outreach to hope to receive some competition in that project.
- Middle Ground Rd which is also a segment of the Tide to Town Project – we are revising the RFP and hopefully it will go out soon.
- The interchange modification report for the I-16 ramp removal project is a partnership with GDOT to update and review the interchange modification report to understand the impacts and feasibility of that ramps removal. That will be let within the next few months.

[13. City of Port Wentworth Project Status Update Report](#)

Ms. Wykoda Wang indicated that Port Wentworth is not on, but they did provide the Status Report which is attached to the Agenda.

[14. Savannah Hilton Head International Airport Project Status Update Report](#)

Ms. Wykoda Wang indicated that Jim is not on for the Airport, but again he did provide the Status Report which is attached to the Agenda.

[15. Chatham Area Transit Project Status Update Report](#)

Ms. Faye DiMassimo presented the CAT projects.

- There is a correction in the report on the ITS clever devices. The one vessel that is still outstanding installation is the Florence Martis and it is still on hold for other maintenance activities that were engaged in on that. The Clever device ITS system cameras and such will be installed but they are on the Susie King Taylor, so that is a correction on that.
- The other projects largely remain the same.
 - We still have the ferry maintenance facility and dock are underway. The dock is currently out to bid and the maintenance facility for the ferry, we are engaging in some work on the design in order for it to be bid ready. We are working with partners on the much-needed deepening of the slip, both for these facilities and the new ferries that are coming on board and for the existing ITC intermodal transfer center facility on Hutchinson Island.
 - On the Savannah Bells hybrid electric ferry replacement, this is the one we received a THUD earmark for. Those THUD earmarks have been interesting. One was automatically granted to GDOT instead of directly to CAT. We have been going through the process of transferring that over, flexing that and transferring it over. That we should have completed very soon, it's well underway. On the other THUD earmark, that one was granted directly to us. These are newer programs, and they just didn't have the process in place to make the THUD earmarks move smoothly.
 - Paratransit maintenance facility - we kicked off the design of that project this past week.

- Electric bus replacements - we are still working on identifying our matching funds for those. We are working with Georgia Power. There are installation stations at CAT's property that is on-going now with an expected completion date in January. We are also working with the Department of Energy and some partners from the smart grant regarding some additional DEO funding that would advance electric charging infrastructure with all of our partners throughout the county including the county, the city, Georgia Power, the Economic Development Authority and so forth.
- On the route restoration analysis, we expect completion of that by the end of FY24. That is a strong part of equity focus on making sure we are serving all in the community.
- We are moving forward, well underway with implementation of the Master Transit Plan.

[16. LATS-SCDOT Project Status Update Report](#)

Ms. Wykoda Wang said Stephanie Ross is not online, but she did provide the report for the South Carolina LATS project status, which is attached to the agenda.

[17. TIP Funding Tracking Report](#)

[We need to gather information from all the project managers so we can update the TIP funding tracking table, which is attached as well.](#)

VII. Other Public Comments (limit to 3 minutes)

VIII. Notices

[18. AMPO Conference 2023 Notes and Takeaways](#)

[Ms. Wykoda Wang indicated that she and Asia attended the AMPO conference. Asia took some notes and we also have the presentations ready and all the files are online on the AMPO website.](#)

[19. Information on Local Agency Program \(LAP\) Discretionary Grants](#)

[Ms. Wykoda Wang mentioned that the new funding legislation, IIJA, includes a lot of funding opportunities where the local government are eligible. The attached presentation file includes information on the requirements for local governments. If you are managing the projects yourself or you need to do a request for GDOT to manage the project for you, the information on how you approach that is included. There is also an ARC database that is specifically for the IIJA, so you can use the ARC tool to do a search or find out what grant is available, when, and who is eligible.](#)

[20. Next CORE MPO Board Meeting December 13, 2023 at 10:00am.](#)

IX. Adjournment

There being no further business, the November 1, 2023 CORE MPO Board meeting was adjourned.

The Chatham County- Savannah Metropolitan Planning Commission provides meeting summary minutes which are adopted by the respective board. Verbatim transcripts of minutes are the responsibility of the interested party.