



CORE MPO Technical Coordinating Committee

Minutes
October 19, 2023 at 2:00pm

October 19, 2023 Technical Coordinating Committee (TCC)

Voting Members	Representing	Present
Charles Ackridge	City of Bloomingdale	
Les Fussell	City of Richmond Hill	X
Deana Brooks	Chatham County Engineering	X
Caila Brown	Bike Walk Savannah	X
Robby Byrd	City of Pooler	
Kaniz Sathi	GDOT – Planning	X
Jim Aiello	Savannah Airport Commission	X
Troy Pittman	GDOT – District Five	
Scott Robider	City of Garden City	
Omar Senati-Martinez	City of Port Wentworth (Asst. City Manager)	X
Don Masisack	Coastal Regional Commission	
Peter Gulbranson	City of Tybee Island	
Ambria Berksteiner	Chatham Area Transit	X
Melanie Wilson	MPC Executive Director	
Jamie McCurry	Georgia Ports Authority	X
Wykoda Wang	CORE MPO	X
Michele Strickland	City of Savannah	X
Representative	Effingham County	
Robert Milie	Town of Thunderbolt	X
Vacant	Town of Vernonburg	
Voting Alternate	Representing	
Katie Proctor	GDOT District 5	X
Others	Representing	
Asia Hernton	CORE MPO	X
Ted Hicks	GDOT	X
Pamela Bernard	Chatham County	X
Anna McQuarrie	CORE MPO/MPC	X

Sally Helm	CORE MPO/MPC	X
Sean Brandon	City of Savannah	X
Brandon North	GDOT	X
Vivian Canizares	GDOT	X
Kassa Habte	GDOT	X
Jason Stewart	City of Port Wentworth	X
Joseph Longo	FHWA	X
Kirra Fields	City of Savannah	X
Steve Candler	Effingham	X
Amber Berg	Modern Mobility Partner	X
Julia Billings	GDOT / Carbon Reduction	X
Matt Bilskie	UGA	X
Ed DiTommaso	UGA	X
Ashley Goodrich	Consultant for Thunderbolt	X

I. Approval of Agenda

II. Action Items

[1. Approval of the August 17, 2023 TCC Meeting Minutes](#)

Ms. Deanna Brooks motioned to approve the August 17, 2023 TCC meeting minutes; seconded by Mr. Jim Aiello. The motion passed with none opposed.

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

Ms. Wykoda Wang stated that the MOU document is almost done except for Appendix B which is the MPO membership dues fee structure. We are still waiting on information from the municipalities. For example, Bryan County and Richmond Hill need to tell us how to split their county's share of the membership dues. For Chatham County, we need to get some input from the Chatham County Commission on whether they still are going to pay 25% of the municipalities' share. CAT and the Savannah Airport Commission pointed out that we probably want to have some kind of discussion about the modal authorities' shares. For MOU, Appendix B is the only portion that is not finalized at this point.

Another document is the bylaws. Ms. Wang mentioned that we are trying to be consistent. For example, currently the election cycle varies for different committees. We want to update the bylaws to make sure that all of the committees hold the elections at the end of the calendar year. So, some changes would be consistent election process, standardized quorum requirements, non-voting advisory committees, etc. Ms. Wang then listed some of the specific changes such as the new Bicycle and Pedestrian Advisory Committee, and the combined CAC and ACAT as the Transportation Equity and Public Involvement Committee. She also provided information about the TCC bylaws and how they are to be finalized in December.

It's expected that the MOU will be adopted in December.

3. FY 2024-2027 TIP Adoption

Ms. Wykoda Wang, Director of Transportation Administration, stated that the draft TIP is in the review period and can be found online. It is also available for review at the public review agencies. The comment period started on September 27th and will end on October 26th.

Some of the highway projects that are included in the draft TIP are listed below. They are sorted by funding sources in the draft TIP.

- PI# 0015704 and 0015705 - Back River Bridge and US 17 Widening
- PI# 0019219 - Talmadge Bridge Maintenance
- PI# 0017414 and 0017415 – US 80 Bridge Replacements at Bull River and Lazzaretto Creek
- PI# 0017411 - I-95 ITS project
- PI# 0019013 - CAT Fleet Replacement
- PI# 0008358 and 0010236 - Project DeRenne
- PI# 0017976 - Garrard Avenue Improvements
- PI# 0017975 - Chevis Avenue Improvements
- PI# 0017515 - I-16 at SR 17
- PI# 0019014 - Ivory and Linwood Sidewalk - Richmond Hill Project
- PI# 0019716 - OCEAN TERMINAL @ CS 2356 /LOUISVILLE RD & @ SR 25/US 17 RAMP

The transit projects are programmed with Sections 5307, 5337, 5339, 5311 and other funds. CAT provided the transit project information.

During the comment period, the MPO was informed that Richmond Hill had already sent a request letter to GDOT to cancel the Ivory and Linwood Sidewalk project and GDOT had deleted it from their system, so this project will be removed from the final TIP.

The Ocean Terminal at Louisville Road project is 100% funded locally by the Georgia Ports Authority. Because this project is not consistent with the 2045 Long-Range Transportation Plan, it will not be included in the final official TIP either. In order to include it officially in the TIP, the MPO would have to amend the 2045 Long-Range Transportation Plan first, but this is not needed since there will be no need for federal funding. This project will be included in the final TIP just as an illustrative project since it's a regionally significant project.

Ms. Vivian Canizares, GDOT Planning, stated that this project probably is not regionally significant because it does not require federal action. It was included because it's a high-value project, but it's mostly for GDOT's oversight since it's affecting their Right-of-Way. Ms. Wang stated she will still show it as an illustrative project in the final TIP.

Ms. Wang continued by saying that another project that is missing from the draft TIP is the I-16 Exit Ramp Removal IMR. Since it was amended to be included in Fiscal Year 2024, it will be included in the final TIP.

Other changes are related to the funding balance. For the Carbon Reduction Program funds, currently, there aren't any projects programmed with them. From our research, sidewalk and bike projects are probably eligible for these funds. We were just waiting on confirmation from Mr. Joe Longo from FHWA. GDOT will also be giving a presentation on the program today.

Last year CORE MPO conducted Calls for Projects for Y230 and Y301 funds. Projects allocated funds in FY 2023 and FY 2024 were amended into the FY 2021 – 2024 TIP. Projects applying for funds in later years (2025 to 2027) were included in the waiting list. The MPO used the Call for Projects results as the basis to allocate funds for the FY 2024 – 2027 TIP.

- The projects that have funds authorized in Fiscal Year 2023 will not be included in the new TIP.
 - State Route 204 Access Study
 - State Route 25/US 17 Corridor Study
 - President Street Railroad Crossing Elimination Study
 - Tides to Town/ Middleground Rd Phase (PE phase)
 - I-95 at Airways Ave Interchange Improvements (scoping phase)
- The two projects that were awarded Y230 funds in FY 2024 are carried forward into the new TIP.
 - CAT Fleet Replacement
 - US 80 at Bull River Bridge project

- For the projects in the waiting list (FY 2025 – FY 2027), the funding was allocated based on rankings. The process is to use the Y301 funds first, supplement them with the CRP funds, and then use Y230 funds as a last resort. Ms. Wang demonstrated the funding balances in the Excel spreadsheet. The projects that get funded in these years include Chevis Road Improvements, Garrard Avenue Improvements, and Green Island Road Trail project.

Ms. Wang indicated that staff encouraged applicants to think ahead during the Call for Projects process and lay out funding needs. If you apply for PE funds in FY 2023, you may want to apply for ROW funds in FY 2025 or FY 2026. Unfortunately, no one but Chatham County was thinking ahead. As a result, all three projects for FY 2025 – 2027 are Chatham County projects because they laid out the funding needs. For example, they need the funds for the right-of-way phase for Chevis Road, say in 2024, utility in 2026 and construction in 2027. They laid that all out.

By applying the funding allocation sequence based on project rankings, Chevis Road takes precedence and gets some Y301 funds in FY 2025, but that is not enough. The balance will be made up by the Carbon Reduction Program funds and then Y230 funds. If all of the funds aren't used, the balance will be applied to the second priority projects. This process continued until the MPO staff was able to balance Y301, Carbon Reduction Program and finally Y230 funds.

Currently, project sponsors still have to come up with additional local match funds for their projects. This is the only way that we can balance the program funds. We have some problem with the Y230 funding balance in FY 2025. GDOT indicated that the MPO can request additional funding obligation. If we can request additional funds, we can boost the revenue in the fiscal year 2025. That way, Chatham County doesn't have to spend additional local match funds.

The HIP funds will lapse in September 2024. Right now, we have two projects programmed with these funds. We do need detailed project schedule updates on the two projects to make sure we can authorize the funds by the deadline, otherwise we could lose the HIP funds.

When the City of Savannah applied for additional Y230 funds (about \$1 million) during last year's Call for Projects, they didn't mention for what phase and what year the funds were needed. Staff assumed they were for additional environmental justice analysis. We need clarification from the City. If the funds are indeed for the PE phase, we do have the balance in FY 2024 to accommodate the request.

Ms. Wang will send the funding balance file to the TCC members for review, confirmation and correction after the meeting. She also requested that CAT staff double check the transit TIP programming information and provide any needed updates as well as the transit funding obligation information for the past three years.

Her request is for the TCC to endorse the TIP based on the assumption that everything will be sorted out by November 1st, 2023.

Ms. Caila Brown stated there should be a response back by the first part of next week. Ms. Wang stated she will send the file tomorrow. Project sponsors need to let her know which phase is looking for additional funds.

Mr. Jim Aiello stated that in FY 2026 it shows that almost \$5 million is unobligated and asked are there no projects to use that money. Ms. Wang stated that 2025 needs a lot of funding but 2026 doesn't have enough projects. Mr. Aiello stated that he has vested interest in the potential I-95 interchange project. He asked if they'd have to do another Call for Projects or is that something that can be modified. Ms. Wang stated she is not going to do another Call for Projects this year. If project sponsors think there might be a need for additional PE funds, they should lay it all out.

Mr. Aiello stated it was his understanding that GDOT has taken this project over. Once the scoping study goes through, it's in their hands. Ms. Wang responded that if GDOT takes over, they might have some other funding sources, so we don't have to exhaust the funding sources that MPO controls. Ms. Vivian Canizares stated that GDOT took over the IMR portion because if anyone is going to send an IMR request to the Federal Highway Administration, it has to be GDOT. It's in the regulations. They don't want to take over a project, meaning that what GDOT is doing here is making sure that the documentation is proper and can be submitted to FWHHA. The last time an IMR was conducted locally, FWHHA did not want to review it. That's the only reason that GDOT took over the IMR. They don't want to take over a project.

Ms. Wang stated the MPO cannot allocate additional funds for the PE phase, but there might be another Call for Projects next year. After the scoping phase is completed and we can determine how much PE funding is needed, then the project sponsor can have something to base the application on.

Ms. Wang stated another thing that she wanted to press the importance on is project implementation schedule. For example, the City of Savannah's Project DeRenne just kept on getting delayed. The information she got from GDOT is that the Federal Highway Administration obligates certain funds based on history. If FHWA gave us \$10 million but we could only spend \$5 million, next year they'll not give us \$10 million. They will reduce that to probably \$5 million or \$6 million. If we don't spend the money, we are losing more.

Mr. Joe Longo of FWHA stated that the TA projects are eligible for CRP funding. Ms. Wang stated that's good because the MPO will probably only have to do one competitive project selection in future years.

MOTION TO APPROVE: Mr. ROBERT Milie; SECONDED: Ms. MICHELLE Strickland

III. Other Business

[4. GDOT's Carbon Reduction Program Strategies](#)

Mr. Habte Kassa from GDOT stated the CRP has been in development since last year. Efforts were made for expanded public engagement through Advisory Committee meetings, communications with all 12 regional commissions, coordination with the Georgia MPOs, and communications via the general public through the GDOT webpage. The website includes fact sheets, video materials, introductory content, and the draft document.

The document includes existing conditions across the state from the carbon reduction perspectives related to efficient travel times, improving travel alternatives, reducing transportation emissions and increasing sustainability. The NEVI Plan is also included. The City of Savannah's 100% Clean Energy Plan is also referenced in the document.

Georgia is on its way to become the electric mobility capital of the nation. When you look at the booming electric vehicles manufacturing in Kia, Hyundai (next door to Savannah), Rivian, and the battery manufacturing plants across the state, there is a lot to celebrate.

The final Carbon Reduction Strategy (CRS) report is due on November 15. The draft document is shared with all MPOs through the GAMPO distribution list, as well as with regional commissions.

Ms. Julia presented a summary of the CRS. She spoke about the two-pronged approach to outreach via the MPOs and the Advisory Committee. She addressed the roles of the advisory committee (Strategy Development & Technical Analysis). Consistent with FHWA guidance, GDOT has also emphasized MPO coordination to ensure strategies meet MPO needs and the diverse settings across the state. MPOs are a source of local information and also provide input on what works in their parts of the state. This is the second of two meetings GDOT is having with each MPO. GDOT also has two meetings with GAMPO, one is complete and the next one is in November. Regional commissions and the general public are informed through the public website, which houses information on the CRS and its documentation. The website is the main mechanism for reaching the public.

She summarized the information that could be found on the website such process, the content, and the actual CRS document. She further stated the main objective for the CRS is to highlight available funding and provide information on the types of strategies that can be included in GDOT's and MPO's projects that are consistent with both the CRP's and Georgia's goals.

The strategy ensures that the various goals of the Carbon Reduction Program are considered in the planning and project development process. This objective is achieved by compiling qualitative evaluation strategies. The cornerstone of the evaluation process is a set of metrics that were developed through stakeholder involvement and incorporating Georgia and federal priorities. GDOT is not actually prioritizing any individual strategy; instead, GDOT is providing stakeholders with information on a set of metrics that can be used to help identify individual strategies and projects.

The CRS is required by law. It has to be developed in consultation with MPOs within the state by November 15th, 2023. This is the first Carbon Reduction Strategy report. Then every four years, it'll be updated.

The document explains the purpose and scope and summarizes the outreach and coordination process. It provides an overview of the evaluation metrics, selected strategies, and Georgia's plan for implementation. There are also three appendices.

She explained the evaluation scale. The scoring approach was developed with the Advisory Committee. Strategies differ from actual projects with a qualitative and somewhat subjective approach. There are three broad categories or buckets of strategies, including sustainable infrastructure, operational efficiency improvements, and innovative technology modes.

- The first bucket is the innovative technologies and modes. Generally, this set of strategies addresses consumer and commercial choices, such as vehicle technology purchases and travel model choice. Examples are things like alternative fuel vehicles for public sector fleets or transit infrastructure improvements.
- The next bucket is operational efficiency improvements. This set of strategies addresses transportation operations to optimize system performance, reduce delays, and smooth traffic flow to reduce emissions.
- The last bucket is sustainable infrastructure. This is things like lifecycle site emissions associated with transportation infrastructure. That could be things like lower carbon construction material, fuels, or retrofitting to lower energy-used lighting and maintenance strategies. Most strategies also have a Learn More section that has a link to some reference material.

She further stated that this meeting is part of the second round of outreach. We have completed three Advisory Committee meetings and presented at one GAMPO meeting so far. The next one will be in November. We're asking that any comments you may have be submitted within the two-week public comment period, which ends on October 30th. The document will remain on the website. It needs to be submitted to FHWA by November 15th. You can visit the page on the GDOT website and email any feedback, questions or comments to that email address shown on the slide, which is gdotcrp@dot.ga.gov

Ms. Wang mentioned that the document that needs input is attached to the TCC agenda. Julia clarified that only two chapters are attached to the agenda; the complete document is on the GDOT website.

Mr. Les Fussell asked if they received any input from the general public and if they are available on the website. Julia replied that in the past few days there have been a lot of requests, questions, and responses about the strategy, what they are about to do, etc. These are not on the website yet; we are still compiling the information.

IV. Status Reports

[5. 2050 MTP Update](#)

Ms. Genesis Harrod presented the interest rates and the cost estimating tool for the 2050 MTP financial plan development.

Interest Rates

The 2050 MTP Financial Plan growth rate is initially deduced by averaging the previous three years' annual inflation rates (2020, 2021, 2022) compiled by the US Labor Department's Bureau of Statistics (BLS). This initial estimate yields an average inflation rate of 4.61%. It is the CORE MPO's opinion that this rate is too high, given the current policies of the Federal Reserve and ongoing economic conditions, to utilize as a growth rate to project future funds. We need to deduce an appropriate agreed upon growth rate to complete the financial section of the MTP. This can be accomplished by comparing interest rates used across other agency plans in the state of Georgia, as well as comparing these to the GDOT base revenue forecast growth rate. An average of those interest rates, or the average of the maximum and minimum rates, could suffice - ARC RTP: 2.2%; Augusta ARTS MPO MTP: 2%; Macon MPO MTP: 2%; GDOT SSTP: 1%; CORE MPO 2045 MTP: 1%.

That's typically what engineers do in traffic data - looking at the interest rate in the future, projecting as far as economics is concerned, looking at Yahoo Finance and all other things inside our business. They're projecting that next year we'll still have higher interest rates. That'll probably ease out in the next five years or so.

Ms. Wang stated we are talking about two interest rates – one for revenue projections and the other for cost estimates. For the long-range transportation plan, we have to do the Year of Expenditure or YOE, so we need both. The highway revenues are normally provided by GDOT, which already have an interest rate embedded. For cost estimates, we use data from CPI, etc. For the current 2045 MTP, the annual revenue interest rate that GDOT used was 1%. For the annual cost estimates interest rate, we used 4%. For example, if we have a project, the right-of-way phase is projected to be in 2030 and we are now in 2023, we

have to project the ROW cost estimate to 2030 by applying an annual inflation rate of 4%. The total inflation factor would be probably 20% or something because it has to be in Year of Expenditure dollars. 4.61% might be used for cost estimating, but for revenue, we are not going to have that much.

Mr. Rob Millie asked what's the staff recommendation for revenue interest rate. Ms. Harrod stated we should use something like 2.5%. Ms. Wang stated 2%. Ms. Harrod stated that's settled. As far as what pots of money, GDOT Office of Financial Management has their own project-based forecast that we can use to project into the future. Ms. Wang stated she has sent the revenue projection request to GDOT but has not received that information yet.

Cost Estimates Example for 2050 MTP

Ms. Harrod stated that CORE MPO has obtained a Cost Estimating Tool from the Atlanta Regional Commission (ARC). The ARC tool was established in 2016 and is utilized across the region by the private sector as well as ARC. This tool provides an input for any interest rate. The CORE MPO staff and TCC must determine if the tool provides an adequate estimate of the cost of the facility.

She then demonstrated how to use the tool for the SR 26 at SR 307 Single Point Urban Interchange (SPUI) project, a recommendation from the US 80 Corridor Study. The SPUI allows improved traffic capacity and operations while utilizing less right-of-way than a diamond interchange. The operational area of the intersection takes place in the overpass and underpass. The example utilized an interest rate of 2%, Preliminary Engineering year of 2028, Right of Way year of 2029, and Construction year of 2030.

The distance of each leg of the facility within each leg of the intersection was approximated to determine the amount of acreage necessary for the cost estimate. The area of the facility is estimated to require 8.55 acres of approximately 50% commercial and 50% agricultural lands. Usually, this type of facility also includes Intelligent Transportation Systems updates to get better signal timing. The resulting cost estimate including preliminary engineering, right-of-way, construction and contingency was over \$50 million. Staff did a quick comparison around the whole country as far as how much SPUIs cost. The lower bound is \$25 million (Kansas City, MO), mid bound is Savannah, GA - \$50,143,000, and the upper bound is \$73,600,000 (Sherwood, California). Our result is in line with an urban area or soon-to-be more urban area.

Ms. Wang provided some background information. This might be the first time that we are going to add projects to the Long-Range Transportation Plan. Previously we used 1% interest rate for the revenue projections and 4% for the cost estimates. We didn't have enough revenue to cover a lot of projects. We had to cut down a lot of projects. This may be the first time that we might be able to add a project, based on the revenue that will be available and the fact that some big item projects such as I-16 Widening and I-16/I-95 Interchange are out of the way. That makes room for other projects.

We have a matrix for project selection. The matrix is based on recommendations from various studies such as US 80 Corridor Study, SR 307 Corridor Study, Freight Plan, etc. We have a project list. If a project is recommended by multiple studies, it will have a higher priority.

The problem is that the study recommendations don't always include project cost estimates. If some plans such as the Effingham County Master Transportation Plan have both projects and associated cost estimates, we can use their numbers and then adjust them by the inflation factors. If we have a new project but don't have the cost estimate, we will use this cost estimating tool. For example, when Kimley-Horn (consultant) developed the US 80 Corridor Study recommendations, they have the SPUI project, but they don't have the cost estimate. We might have this SPUI project selected in our 2050 Long Range Transportation Plan, but we don't have a cost estimate. What Genesis is doing is just to use the nationwide examples to provide us with some tools so that we can do the cost estimate.

Ms. Harrod stated she has worked on project prioritization methodology as well. She has gone through the ARC project prioritization document which describes how they do their project prioritization and the criteria they use. They also have something called LCIs, which are Livable Centers Initiatives. Mobility and access, equity, safety, resiliency, congestion, quality of life, travel time, etc. are some of the scoring criteria. What we want to do is make a process of our own instead of going off of everything they do.

When we look at projects and score them, we're trying to figure out which projects should be ranked and which kind of prioritization. We want to look at cost-effectiveness, the sponsored priority, who can pay for what, if it's a public-private partnership, if it's going to be something that local communities have to pay into more, regional equity in terms of mobility and access, deliverability, congestion relief, etc.

As far as the Matrix Project selection, it has projects scored as far as how frequently they are found in other plans. If a project is found in two or more plans or three or more plans, it gets more priority than a project that's only found in one plan.

Ms. Wang stated this is a status report. In the next couple of months or the next three months, we are going to delve into the financial plan development. We probably will have special-called TCC meetings or TCC subcommittee meetings just to drill down with all of this information, but today it's just a status report.

Ms. Wang asked the Chairman "do we want to confirm a subcommittee or do you want to have special-called TCC meetings to deal with all of the details regarding the 2050 MTP development". Mr. Fussell said that he would be fine with the subcommittee approach. Ms. Wang asked "do we want to solicit volunteers for the subcommittee or do you want to designate". Mr. Fussell asked "do we have any volunteers? Are there any volunteers for the Congestion Management Process". Ms. Wang stated that the subcommittee might as well deal with two issues - Congestion Management Process, and the 2050 Long Range Transportation Plan (revenue projections, prioritization methodology, cost estimating, etc.). The subcommittee has to meet more often and it will be a worker bee group. Mr. Fussell said that we need to reach out to all of the members of the TCC and see if there is anyone because there are a lot of absent members. Ms. Wang indicated that we could follow up on this.

6. Congestion Management Process 2024 Outline

Ms. Genesis Harrod stated the CORE MPO is updating the Congestion Management Process. The previous CMP was analyzed to create the 2024 version. Sections of the 2017 CMP were reviewed to determine current relevancy and include additional data. The 2024 Congestion Management Process outline has been created and data is in the process of being gathered.

What is the Congestion Management Process? It's to tackle the actual congestion and increase the flow and capabilities of our traffic network to make it safer and more efficient. The CMP is typically updated every five years. The 2024 CMP will include updates and additions to the following metrics.

- Vehicle Delay Hours – how many hours are wasted being stuck in traffic by commuters each year.
- Cost of Congestion – roughly the number of delay-hours in traffic each year multiplied by the average hourly rate of pay for that year.
- Percent of Non-single Occupant Vehicle Travel - for the sake of this CMP update, it will be defined as all multiple-occupant vehicles, as well vanpools and carpools.
- Total Emissions Reductions - This is something that we would look into with resiliency and climate change.
- Access Management Policies – We would look at the GDOT's access management policies. There's not enough access management for Georgia overall. We have a lot of two-way left turn lanes, also called suicide lanes. We don't have a lot of medians. We don't have internal access to different developments. Typically, people just make a right turn from the major thoroughfare instead of going into off-intersection areas or going into roadways that have been designed by the actual developments and going in from there. We don't have a lot of joining and connectivity between different developments. Instead, they keep going to the main roadway and that backs up traffic because everyone's waiting for people to make right turns, which are slower than left turns sometimes.
- Type of Crash - vehicular versus environmental denotes how most crashes occur and whether changes can be made to facilities and/or change driver behavior.
- Pedestrian Propensity Analysis - denotes areas in need of facilities based on heat density; i.e., which areas need to have which type of facilities as far as pedestrians are concerned.
- Pedestrian Level of Service (levels of services for pedestrian facilities) and Bicycle Propensity Analysis (areas in need of facilities based on heat density) - Asia just worked on the different types of multimodal facilities we have and how to increase those. This ties in with that. We could alleviate congestion if we have more greenways and trails that frequent areas that are called activity centers, where people drive to, work at, and go to shop.
- Crash Density versus Bottleneck Locations – safety issues.
- Conflict Points versus Crash Density throughout the study area - denotes conflict points in facilities and safety issues.

Ms. Genesis showed some illustrative examples of conflict points. One example shows the conflict points at intersections. There are different areas where there could be a crash because you have head-on, somebody crossing, making a left turn over, somebody going straight through. These are all different types

of conflict points. Another example shows a four-legged intersection versus a roundabout. A roundabout has fewer conflict points. They alleviate the conflict points of a four-leg intersection. A four-leg intersection is where you have somebody going on two major thoroughfares crossing, as in a T, or four quadrants versus a roundabout, which is circular and people could go through and yield in, which continues and do not stop the flow of traffic. Other examples include conflict points on a freeway when you're merging.

The data sources for the 2024 CMP update include GDOT crash data, data from the Bureau of Transportation Statistics, NPMRDS, Georgia ITE, CAT, the CORE MPO Freight Plan, and US Census Bureau.

That's basically what we plan to do for the CMP update. We're adding on areas sections, adding more data and having more information. Data-driven decisions are usually not challenged as much.

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

Ms. Wykoda Wang stated for the Freight Plan, we had our last EDFAC Committee meeting this morning. The consultant presented the final report. It's a summary of the previous technical deliverables.

We're wrapping up the plan update on October 31st. All of the deliverables including the draft technical memos and the draft final report are online. We also web-posted the regional modal profiles. This is the information (four pages, one page for each mode) that we can use for public engagement.

The freight plan includes very solid analysis. If you want to talk to your committees or members about freight, you can use that information. Right now, all of the deliverables are in draft form. The consultants are addressing all the comments that we have received to finalize the technical memos and final report. We will post the final documents online after they are finalized.

Mr. Fussell asked when the comments will be addressed and when the final report will be published and released. Ms. Wang replied that it will be probably after October 31st. We're still addressing all the comments right now and tying the loose ends. For example, if the resource link is not correct, it will be corrected in the final report.

[8. 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 an overview of the final prestatation, 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 thanked all the collaborators on this project, particularly the UGA graduate students who have contributed substantially to the 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 that's been developed.

Financial Stewardship & Resiliency Planning

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, and 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

Now to stormwater model. I'm going to be brief on this because I believe we've presented on this before. 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 you see on the right 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. Here, 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 once he goes through these slides. 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 then 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. I'm just going to quickly run through how the dashboard is set up and how it works, and it'll be available for people to play around with. It's a good way to interact with the data in a way that traditional methods didn't allow.

On the left here, it just gives you a little bit of background on where those scenarios came from, and some of those assumptions. For the sake of the dashboard and how we show our colors here, we assume that things were either low-risk, moderate-risk, or high-risk, and that's going to be our color palette. Low risk was where the depth above the road didn't get within three feet based on those different sea level rise scenarios.

The moderate was between -3 and 0. It means it's creeping up there, but it still hasn't reached the road, and then we assumed anything high risk that would cross the road under these different scenarios.

Just a quick run through what the options are on the dashboard. At the top here, on the top right, you can select a place. We broke it down by place instead of just being able to select it by municipality because some people might want to see part of a municipality. For example, Wilmington Island is in unincorporated Chatham County. It's separate from the regular other parts of unincorporated Chatham County. You can filter the data based on all these different places.

The tools here are just basic tools that you can use to interact with the map. It shows the legend, it shows the different layers, and you can also toggle between different base map options. Everything is driven in the dashboard by the way that you select a place up here. All the different numbers are going to automatically update based on your selection here. The good thing about the dashboard is if you, for some reason, get lost, or you go too far and you forget, you can just always refresh your screen and you're going to go right back to the beginning. There's no way to mess anything up.

We have some tabs across the bottom, and I'm going to go through this. It shows the depth above the road using that low DNR scenario. It shows the depth above the road using that high DNR scenario, and then the annual exceedance numbers that Matt showed in his slides. Let's say that you wanted to look at Wilmington Island. You can select that here; it's going to zoom you into Wilmington Island. All the road information here is filtered based on your selection. If you were interested in looking at different road segments, you could just click them from over here and it's going to narrow it down so that you're not scrolling through 50,000 road segments that are in the county.

If you were looking for a particular road, you can search it once you narrow it down, and it zooms in, it gives you all the different scenarios for that segment. You can see this present-day scenario for Sweet Bailey Cove is negative 99, meaning that currently that doesn't have an issue with the water, but you can see that, it becomes moderate risk under the low DNR scenario, and then high risk under the higher, and then it gets high as you move up.

Ms. Anna McQuarrie stated red means it's a high-risk area, high risk for the roadway.

Mr. Ed DiTommaso stated yes red's going to be high risk. Just backing out a little bit, we're currently looking at the present day. I'm going to turn the places layer off so that I can see through it a little bit better. Then we have a version of the places layer, where it's just outlined. We have all the different options over here, and we did accrue critical facilities as a layer that you can turn on and off, but just looking at this scenario here for the high, for Wilmington Island, in this particular scenario, we have our current conditions. Then we have the high 2050, where you turn that on, you start to see the red, and you have the 2075, and the 2100. You start to see how that particular area becomes more vulnerable over time. It's neat to work on a project like this where you can see how it directly impacts you.

Now you can see we have it filtered by Wilmington Island. We have these statistics that show how many miles are impacted, and how many road miles are impacted by those different scenarios. Under the present-day low condition, there's only one mile that accounts for 1% of roads on Wilmington Island.

Then under the 2050 low scenario you're looking at, it bumps up to 3% and then 7% and 15% in 2100. The next tab shows that high scenario for Wilmington Island. You start to see what a big difference just that a couple of feet of sea level rise could have an impact on the roads that are right there. It goes from 15% under the low scenario to 65% of the roads being inundated in the high scenario.

Then we also have the 100-year storm and 500-year storm. You have a 1% chance, so 61% on 81% of the island would be impacted by that 100-year storm, whereas almost 100% of Wilmington Island would be impacted by the 500-year storm.

Now, let's head over to Richmond Hill, and you can start to see how the impacts look there. There are fewer red lines here under these different scenarios. When you get into a low probability, just 5% on the 2100, but then you see that bump up to 20% under the high scenarios. The annual exceedance has a larger impact in Richmond Hill because it is a low-lying elevation. You get to 23% and 50% of the roads in the city there.

This is the tool that allows you to filter and search for the different roads. At the very bottom, there's also the way that you can toggle through the different scenarios. You can look at the annual, the low, and the high under here. You're able to look at all this different information in a lot of different ways. It's a tool we believe people can use. If they were looking at different projects, they can come in here and see if one road is directly impacted more under current conditions, that might make the difference in how you start to prioritize some of the different projects that you're planning.

Ms. McQuarrie stated the information should be up on the website tomorrow.

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

Ms. Asia Hernton gave the presentation on the Non-Motorized Transportation Plan update. Staff is continuing to update this plan, and we are asking everyone to send their project lists for this plan so that they can be ranked. If you have a project in mind, please put it in the Excel spreadsheet attached with the status report and send it back to us. Once all of the projects are submitted to us, they will be reviewed by the public, and then scored and ranked by the steering committee.

In addition to listing the projects, PDFs and GIS shape files would also be very helpful with documenting what developments may take place and where. The bike/ped/trail project list is projected to be completed by February 2024. If anyone has any type of project in mind, it'd be great if we could have it by the end of October, or even maybe the beginning of November. This way we could have time to receive public input on the plan as public input is a factor in how the projects are scored and ranked by the steering committee.

In terms of current activities, we're still working on a lot of what we presented last time, which is the origin and destination data, the bike and pedestrian volumes, and the crash data. We are still finalizing that data and hopefully we can have something to present in December, or February at the latest.

We're also delving more deeply into equity-related topics and creating maps that overlay community resources such as schools, grocery stores, and public housing complexes with our existing bike and pedestrian infrastructure. We want to see where our sidewalks and our bike lanes in comparison to some of those community resources are located.

All of this work in the status report will result in a list of specific roads and intersections that need the most safety improvements based on the crash data maps that we showed at the previous TCC meeting. Additionally, it'll describe where more bike and pedestrian infrastructure is needed based on travel volumes, and origin and destination data. The source of that data we also showed at a previous meeting was the Strava Metro data. Then, a map just shows the placement of non-motorized infrastructure in comparison to community features, such as public housing complexes, student housing, schools, grocery stores, libraries, and things like that.

The overall plan is projected to be adopted in June 2024. Her email is attached to this agenda, so the project lists can be emailed to her.

Mr. Fussell asked "on your project list, do you need the full project developed, such as cost or are you just looking for a list of projects?" Ms. Hernton replied she is looking for a list of projects, but the more detail the better. It's not dependent on how much detail you have. It could be low detail or high detail, depending on what you have. Mr. Fussell said "I just didn't see any cost in your spreadsheet here, or anything like that." Ms. Hernton replied she kept it kind of bare-bones because it doesn't necessarily have to have a cost associated with it yet. If it does, more information is great and that can also be added to the plan." Mr. Fussell asked "like being able to use the cost estimating tool?" Ms. Hernton replied yes.

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

Report attached to agenda.

V. Information Reports (verbal)

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

Ms. Katie Proctor gave a status report.

Talmadge Bridge project – the ROW phase and the Construction phase are both in FY 2024. The next milestone is Pre-Schedule Development.

Hodge Road roundabout - the concept has been approved and we're looking at PFPR now.

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

Report attached to agenda.

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

Report attached to agenda.

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

Report attached to agenda.

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

Report attached to agenda.

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

Ms. Ambria Berksteiner gave a status report.

- ITS Clever Devices – the project is still on hold. One of our vessels, Susie King Taylor, remains without the ITS system.
- Ferry Boat Maintenance Facility and Ferry Dock – the project is still ongoing. The Board approved the issuing of IFBs for the construction of the ferry maintenance facility and a new ferry dock in July. The anticipated date to issue invitation for bid (IFB) is August 1, 2023. Hopefully, we'll have some more updates at the next meeting.
- Ferry Vessel Rehab – we are in need of a FHWA (Federal Highway Administration) flex letter. CAT is collecting the information to complete application in TRAMS. That is still on hold and we're waiting for correspondence on that.
- Electric Ferry Replacement – on 5/26 a draft application was developed and sent to GDOT. On 6/23/23 we received the latest correspondence that stated GDOT is still waiting on FTA to receive guidance for the application.
- Electric Bus Replacement - we have grants for four EV buses. We're currently determining the match funds for that and waiting for the Board approval.
- Installation of Charging Stations - that project is ongoing. Installation of charging stations at CAT Central expected completion is January 2024 for our electric vehicles. Hopefully, we're able to have charging stations not only at CAT Central but throughout the City of Savannah.
- ARP Route Restoration Analysis – funding is obligated. Funds were awarded back in 2022 with a federal match. Hopefully we will be able to complete the analysis at the end of the fiscal year of 2024.
- Master Transit Plan and Implementation Strategy - the Board moved to adopt that back in July, so it was completed. The update was presented in August to CORE MPO.

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

Report attached to agenda.

[18. TIP Funding Tracking Report](#)

Report attached to agenda.

VI. Other Public Comments (limit to 3 minutes)

VII. Notices

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

[20. Earth-Conscious Expo at Skidaway Island State Park](#)

[21. Building a Resilient Future](#)

There being no further business, the October 19, 2023, TCC 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.