

APPENDIX C: FINANCIAL PLAN



2045 MTP Financial Plan Development

Federal planning regulations require that the financial plans presented in Metropolitan Transportation Plans (MTPs) be financially constrained (i.e., a balanced budget) where the estimated costs for all transportation improvements presented in the MTP cannot exceed the amount of reasonably expected revenues from identified funding sources. The financial constraint requirement ensures realistic assumptions are made when committing funds for projects. The development of the financially constrained plan is accomplished in several steps, which include projecting both the expected revenues over the time frame of the plan and estimating the costs of the projects. These revenue projections and the project costs are required to be identified in year-of-expenditure (YOE) dollars, rather than in current-year dollars.

1. Revenue Sources

Funding for transportation improvements in the CORE MPO's 2045 MTP comes from a variety of federal, state and local sources. For detailed funding programs, please reference Appendix A.

Federal funds provide the largest share of funding for transportation improvements in the CORE MPO Metropolitan Planning Area (MPA). Federal funds come from the Highway Trust Fund (HFT) and funding allocations are based on authorization legislations, the latest of which is the Fixing America's Surface Transportation Act (FAST Act) which was signed into law in December 2015 and authorized funds for fiscal years 2016 through 2020. For the 2045 MTP financial plan development, it is assumed that as the FAST Act expires, new legislations or continuing resolutions will be authorized to continue federal transportation funding through 2045.

States are major contributors of funds for transportation improvement projects, often the second largest contributor after the Federal Government. The state funds are used to match the federal grant funds or to develop transportation improvement projects without the lengthy federal process. State funds mostly come from Georgia's motor fuel tax and House Bill 170 (HB 170) funds.

In addition, transportation funds generated by local sources, either for a match against federal and state awards, or to advance projects independently of those sources, are also an important part of the 2045 MTP revenues. The local revenues come from local governments' general funds, Special Purpose Local Option Sales Tax (SPLOST), transit sales tax, transit farebox receipts, and transit district tax.

2. Revenue Projections

To assist the revenue and cost estimating process, the MPO staff requested information from GDOT and local jurisdictions/agencies pertaining to recent funding levels for transportation, both revenues and expenditures. The MPO staff has received information from GDOT, CAT, Chatham County, and the City of Savannah. Since CORE MPO plans for the expenditure of federal funds only within the CORE MPO MPA, the received data pertains to

1) the information for the roadways that have a functional classification of Collector or above because the local streets are normally not eligible for federal funds; and

2) the information for the roadways located within the CORE MPO's MPA which includes all of Chatham County, the City of Richmond Hill in Bryan County, and the census-designated Savannah Urbanized Area in Effingham County.

The CORE MPO's Technical Coordinating Committee (TCC) and its subcommittee - the 2045 MTP Working Group - reviewed the received information and developed the revenue projection methodology in regard to assumptions to be made, revenue sources, inflation factors, and cost bands. It has also been decided that highway revenues and transit revenues should be tabulated separately as they will fund different types of projects.

2.1 Highway Revenue Projections

2.1.1 Revenue Sources and Assumptions

The GDOT Office of Financial Management (OFM) provided highway revenue forecasts for 2019

 2045 based on a three-year average of the state's obligation authority and distributions among MPOs. The forecasted revenues are divided into two parts – funds for projects and funds for maintenance. The project amounts are determined based on the MPO population from the 2010 census, and the maintenance amount was calculated using the MPO's percentage of state route lane miles. These estimates are based on a standard 1% annual inflation.

According to the GDOT forecasts, the Savannah region will receive an annual average of a little over \$30 million. These forecasts only include the federal portion of the expected highway revenues for the Savannah area and will be the basis for the final 2045 MTP highway revenue development. Since the 2045 MTP will cover 2020 to 2045, the GDOT 2019 revenue data will not be included in the final forecast.

To access these federal revenues, the State of Georgia and/or local project sponsors must provide matching funds. Although each federal funding program requires a different percentage of matching funds, the majority require a 20% match. Thus, the assumption is that 20% state/local matching funds would be added to the final highway revenue forecasts of the 2045 MTP.

2019-2045 Savannah Funding Projections *

		Federal	
	Projects Estimate	Maintenance Estimate	Total Estimate
2019	\$30,171,903	\$6,227,451	\$36,399,354
2020	\$30,473,622	\$6,289,725	\$36,763,348
2021	\$30,778,358	\$6,352,623	\$37,130,981
2022	\$31,086,142	\$6,416,149	\$37,502,291
2023	\$31,397,003	\$6,480,310	\$37,877,314
2024	\$31,710,974	\$6,545,113	\$38,256,087
2025	\$32,028,083	\$6,610,565	\$38,638,648
2026	\$32,348,364	\$6,676,670	\$39,025,034
2027	\$32,671,848	\$6,743,437	\$39,415,285
2028	\$32,998,566	\$6,810,871	\$39,809,437
2029	\$33,328,552	\$6,878,980	\$40,207,532
2030	\$33,661,837	\$6,947,770	\$40,609,607
2031	\$33,998,456	\$7,017,247	\$41,015,703
2032	\$34,338,440	\$7,087,420	\$41,425,860
2033	\$34,681,825	\$7,158,294	\$41,840,119
2034	\$35,028,643	\$7,229,877	\$42,258,520
2035	\$35,378,929	\$7,302,176	\$42,681,105
2036	\$35,732,719	\$7,375,198	\$43,107,916
2037	\$36,090,046	\$7,448,950	\$43,538,995
2038	\$36,450,946	\$7,523,439	\$43,974,385
2039	\$36,815,456	\$7,598,673	\$44,414,129
2040	\$37,183,610	\$7,674,660	\$44,858,271
2041	\$37,555,446	\$7,751,407	\$45,306,853
2042	\$37,931,001	\$7,828,921	\$45,759,922
2043	\$38,310,311	\$7,907,210	\$46,217,521
2044	\$38,693,414	\$7,986,282	\$46,679,696
2045	\$39,080,348	\$8,066,145	\$47,146,493
	\$929,924,845	\$191,935,563	\$1,121,860,408

^{*} Projection amounts are YOE \$ - (1% inflation per year)

- 2. For the 2045 MTP highway revenue projections, the funds for projects and funds for maintenance will be separated from each other.
- 3. The first two years (2020 and 2021) of the 2045 MTP overlap with the last two years of the current FY 2018 2021 Transportation Improvement Program (TIP). The funds included in the TIP are considered "committed". Thus, the revenues committed in the TIP for 2020 and 2021 will replace the state obligation authority based revenue forecasts for these two years for projects. These committed revenues include funds allocated to projects included in the Major Mobility Investment Program (MMIP) (MMIP* see Appendix A for details) and projects programmed with HB 170 funds.
- 4. Since it is uncertain how much HB 170 funds will be allocated to the Savanah area for the duration of the 2045 MTP, it is assumed that no HB 170 funds would be available after 2020 for the final revenue forecasts.
- 5. It is assumed that an additional \$2.5 million annual local funds would be included in the final 2045 MTP revenue forecasts. These funds will be used to finance projects' implementation, not to be spent on maintenance.
- 6. It is assumed that no other funding sources (bonds, discretionary grant funds, public private partnership funds, etc.) would be included in the final 2045 MTP revenue forecasts.

2.1.2 Inflation Factor

Federal transportation legislation requires that the 2045 MTP be financially constrained. The development of the financially constrained plan is accomplished in several steps, one of which is to project the expected revenues over the time frame of the plan. These revenue projections are required to be identified in Year-of-Expenditure (YOE) dollars. Thus, an appropriate inflation factor should be identified to project the revenues from current-year dollars to YOE dollars. The MPO staff did some research in this regard.

- 1. The GDOT obligation authority based revenue forecasts assumed a 1% annual inflation factor.
- 2. Other long-range transportation plans for reference assumed different annual revenue inflation factors as listed below.
 - CORE MPO 2040 Total Mobility Plan: 2.5%
 - ARC 2040 Regional Transportation Plan: 2.1%
 - Augusta MPO's 2040 Vision Long Range Transportation Plan: 1%
- 3. The Consumer Price Index (CPI) based Average Annual Inflation Rates compiled by the US Labor Department's Bureau of Labor Statistics (BLS) (see table below) indicate that 1% or 2% annual revenue inflation rate should be used in a healthy economy under normal conditions.

Annual Inflation Rates by Month and Year

Year	Jan	Feb	Mar	Apr	Mav	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave
2018	2.1	2.2	2.4	2.5	2.8	2.9							2.9
2017	2.5	2.7	2.4	2.2	1.9	1.6	1.7	1.9	2.2	2.0	2.2	2.1	2.1
2016	1.4	1.0	0.9	1.1	1.0	1.0	0.8	1.1	1.5	1.6	1.7	2.1	1.3
2015	-0.1	0.0	-0.1	-0.2	0.0	0.1	0.2	0.2	0.0	0.2	0.5	0.7	0.1
2014	1.6	1.1	1.5	2.0	2.1	2.1	2.0	1.7	1.7	1.7	1.3	0.8	1.6
2013	1.6	2.0	1.5	1.1	1.4	1.8	2.0	1.5	1.2	1.0	1.2	1.5	1.5
2012	2.9	2.9	2.7	2.3	1.7	1.7	1.4	1.7	2.0	2.2	1.8	1.7	2.1
2011	1.6	2.1	2.7	3.2	3.6	3.6	3.6	3.8	3.9	3.5	3.4	3.0	3.2
2010	2.6	2.1	2.3	2.2	2.0	1.1	1.2	1.1	1.1	1.2	1.1	1.5	1.6
2009	0	0.2	-0.4	-0.7	-1.3	-1.4	-2.1	-1.5	-1.3	-0.2	1.8	2.7	-0.4
2008	4.3	4.0	4.0	3.9	4.2	5.0	5.6	5.4	4.9	3.7	1.1	0.1	3.8
2007	2.1	2.4	2.8	2.6	2.7	2.7	2.4	2.0	2.8	3.5	4.3	4.1	2.8
2006	4.0	3.6	3.4	3.5	4.2	4.3	4.1	3.8	2.1	1.3	2.0	2.5	3.2
2005	3.0	3.0	3.1	3.5	2.8	2.5	3.2	3.6	4.7	4.3	3.5	3.4	3.4
2004	1.9	1.7	1.7	2.3	3.1	3.3	3.0	2.7	2.5	3.2	3.5	3.3	2.7
2003	2.6	3.0	3.0	2.2	2.1	2.1	2.1	2.2	2.3	2.0	1.8	1.9	2.3
2002	1.1	1.1	1.5	1.6	1.2	1.1	1.5	1.8	1.5	2.0	2.2	2.4	1.6
2001	3.7	3.5	2.9	3.3	3.6	3.2	2.7	2.7	2.6	2.1	1.9	1.6	2.8
2000	2.7	3.2	3.8	3.1	3.2	3.7	3.7	3.4	3.5	3.4	3.4	3.4	3.4

Conclusion: The Technical Coordinating Committee made a decision to be conservative by applying 1% annual inflation rate for the 2045 MTP revenue forecasts.

2.1.3 Cost Bands

The revenues of the 2045 MTP expressed in YOE dollars will be distributed into short-, mid- and long- term cost bands to cover projects included in each band. The TCC has determined to divide the revenues into the following three cost bands.

- 1. Cost Band One: 2020 2027 (8 years; overlaps with current and next TIPs; mid-years are 2023 and 2024)
- 2. Cost Band Two: 2028 2036 (9 years; mid-year is 2032)
- 3. Cost Band Three: 2037 2045 (9 years; mid-year is 2041)

2.1.4 Highway Revenue Forecasts

The table on the next page lists the expected revenues that can be used for highway improvements in the 2045 MTP. \$784,156,593 in Cost Band One, \$491,556,682 in Band Two, and \$537,608,304 in Band Three will be available for highway projects' development and implementation.

The project revenues in each cost band will be divided into revenues for specific projects and revenues for category expenditures. Three categories have been identified:

- Operational Improvements Set Aside: based on the approximate lump sum category percentage of the total revenues in the FY 2018 2021 TIP, it is assumed that 9.5% of available project revenues for 2022 2045 will be reserved for operational improvements. The 2020 and 2021 lump sum funding amounts in the TIP are used for Operational Improvements for these two years.
- Transit Set Aside: based on historic Z230 funding awards, it is assumed that \$700,000 from project revenues will be reserved each year for bus purchase or transit improvements. Implementation of these transit projects will require funding flexing from FHWA to FTA.
- Non-Motorized Set Aside: based on the annual Z301 funding availability for the Savannah area, it is assumed that \$500,000 each year from project revenues will be reserved for non-motorized projects (bike, ped, trails, etc.) for 2022 2045. The 2020 and 2021 funding amounts for programmed bike/ped projects in the TIP are used for these two years.

The table below depicts the anticipated highway revenues for the planning period of 2020 – 2045 for highway projects and category expenditures.

Year	Cost Band	Cost Band Total		Maintenance Revenues				
		Projects + Maintenance	Specific Projects	Operational Improvements Set Aside	Non-Motorized Set Aside	Transit Set Aside	Total	Total
2020 - 2027	One	\$801,290,466	\$658,937,561	\$58,271,837	\$13,337,828	\$5,600,000	\$736,147,226	\$65,143,240
2028 - 2036	Two	\$491,556,682	\$361,876,186	\$39,120,705	\$4,500,000	\$6,300,000	\$411,796,891	\$79,759,791
2037 - 2045	Three	\$537,608,304	\$396,790,456	\$42,785,738	\$4,500,000	\$6,300,000	\$450,376,195	\$87,232,109
Total		\$1,830,455,452	\$1,417,604,203	\$140,178,281	\$22,337,828	\$18,200,000	\$1,598,320,311	\$232,135,141

Table 1: 2020-2045 Highway Revenue Projections Updated August 2019

		Federal*		ſ	Matching Fund	s	Total	with Matching	Funds	HB 170	Local****	Other	Highway Total	Cost	Cost Band	Cost Band	Cost Band
	Projects Estimate	Maintenance Estimate	Total Estimate	Projects Estimate	Maintenance Estimate	Total Estimate	Projects Estimate	Maintenance Estimate	Total Estimate				Estimates	Band	Total	Project	Maintenance
2020**	\$30,473,622	\$6,289,725	\$36,763,348	\$7,618,406	\$1,572,431	\$9,190,837	\$285,949,746	\$7,862,157	\$293,811,903	\$0	\$2,500,000	\$0	\$296,311,903				
2021**	\$30,778,358	\$6,352,623	\$37,130,981	\$7,694,590	\$1,588,156	\$9,282,745	\$190,430,286	\$7,940,778	\$198,371,064	\$0	\$2,525,000	\$0	\$200,896,064				
2022	\$31,086,142	\$6,416,149		\$7,771,536	\$1,604,037	\$9,375,573	\$38,857,678	\$8,020,186	\$46,877,864	\$0	\$2,550,250	\$0	\$49,428,114				
2023	\$31,397,003	\$6,480,310	\$37,877,314	\$7,849,251	\$1,620,078	\$9,469,328	\$39,246,254	\$8,100,388	\$47,346,642	\$0	\$2,575,753	\$0	\$49,922,395	One	\$801,290,466	\$736,147,226	\$65,143,240
2024	\$31,710,974	\$6,545,113	\$38,256,087	\$7,927,743	\$1,636,278	\$9,564,022	\$39,638,717	\$8,181,392	\$47,820,109	\$0	\$2,601,510	\$0	\$50,421,619	One	7001,230,400	7730,147,220	703,143,240
2025	\$32,028,083	\$6,610,565		\$8,007,021	\$1,652,641	\$9,659,662	\$40,035,104	\$8,263,206	\$48,298,310	\$0	\$2,627,525	\$0	\$50,925,835				
2026	\$32,348,364	\$6,676,670	\$39,025,034	\$8,087,091	\$1,669,168	\$9,756,259	\$40,435,455	\$8,345,838	\$48,781,293	\$0	\$2,653,800	\$0	\$51,435,093				
2027	\$32,671,848	\$6,743,437	\$39,415,285	\$8,167,962	\$1,685,859	\$9,853,821	\$40,839,810	\$8,429,296	\$49,269,106	\$0	\$2,680,338	\$0	\$51,949,444				
2028	\$32,998,566	\$6,810,871	\$39,809,437	\$8,249,642	\$1,702,718	\$9,952,359	\$41,248,208	\$8,513,589	\$49,761,797	\$0	\$2,707,142	\$0	\$52,468,939				
2029	\$33,328,552	\$6,878,980	\$40,207,532	\$8,332,138	\$1,719,745	\$10,051,883	\$41,660,690	\$8,598,725	\$50,259,415	\$0	\$2,734,213	\$0	\$52,993,628				
2030	\$33,661,837	\$6,947,770	\$40,609,607	\$8,415,459	\$1,736,942	\$10,152,402	\$42,077,297	\$8,684,712	\$50,762,009	\$0	\$2,761,555	\$0	\$53,523,564				
2031	\$33,998,456	\$7,017,247	\$41,015,703	\$8,499,614	\$1,754,312	\$10,253,926	\$42,498,070	\$8,771,559	\$51,269,629	\$0	\$2,789,171	\$0	\$54,058,800				
2032	\$34,338,440	\$7,087,420	\$41,425,860	\$8,584,610	\$1,771,855	\$10,356,465	\$42,923,050	\$8,859,275	\$51,782,325	\$0	\$2,817,063	\$0	\$54,599,388	Two	\$491,556,682	\$411,796,891	\$79,759,791
2033	\$34,681,825	\$7,158,294		\$8,670,456	\$1,789,574	\$10,460,030	\$43,352,281	\$8,947,868	\$52,300,149	\$0	\$2,845,233	\$0	\$55,145,382				
2034	\$35,028,643	\$7,229,877	\$42,258,520	\$8,757,161	\$1,807,469	\$10,564,630	\$43,785,804	\$9,037,346	\$52,823,150	\$0	\$2,873,686	\$0	\$55,696,836				
2035	\$35,378,929	\$7,302,176	\$42,681,105	\$8,844,732	\$1,825,544	\$10,670,276	\$44,223,662	\$9,127,720	\$53,351,382	\$0	\$2,902,422	\$0	\$56,253,804				
2036	\$35,732,719	\$7,375,198	\$43,107,916	\$8,933,180	\$1,843,799	\$10,776,979	\$44,665,898	\$9,218,997	\$53,884,895	\$0	\$2,931,447	\$0	\$56,816,342				
2037	\$36,090,046	\$7,448,950	\$43,538,995	\$9,022,511	\$1,862,237	\$10,884,749	\$45,112,557	\$9,311,187	\$54,423,744	\$0	\$2,960,761	\$0	\$57,384,505				
2038	\$36,450,946	\$7,523,439	\$43,974,385	\$9,112,737	\$1,880,860	\$10,993,596	\$45,563,683	\$9,404,299	\$54,967,982	\$0	\$2,990,369	\$0	\$57,958,350				
2039	\$36,815,456	\$7,598,673	\$44,414,129	\$9,203,864	\$1,899,668	\$11,103,532	\$46,019,320	\$9,498,342	\$55,517,662	\$0	\$3,020,272	\$0	\$58,537,934				
2040	\$37,183,610	\$7,674,660	\$44,858,271	\$9,295,903	\$1,918,665	\$11,214,568	\$46,479,513	\$9,593,325	\$56,072,838	\$0	\$3,050,475	\$0	\$59,123,313				
2041	\$37,555,446	\$7,751,407	\$45,306,853	\$9,388,862	\$1,937,852	\$11,326,713	\$46,944,308	\$9,689,259	\$56,633,567	\$0	\$3,080,980	\$0	\$59,714,546	Three	\$537,608,304	\$450,376,195	\$87,232,109
2042	\$37,931,001	\$7,828,921	\$45,759,922	\$9,482,750	\$1,957,230	\$11,439,980	\$47,413,751	\$9,786,151	\$57,199,902	\$0	\$3,111,790	\$0	\$60,311,692				
2043	\$38,310,311	\$7,907,210	\$46,217,521	\$9,577,578	\$1,976,803	\$11,554,380	\$47,887,889	\$9,884,013	\$57,771,901	\$0	\$3,142,908	\$0	\$60,914,809				
2044	\$38,693,414	\$7,986,282	\$46,679,696	\$9,673,354	\$1,996,571	\$11,669,924	\$48,366,768	\$9,982,853	\$58,349,620	\$0	\$3,174,337	\$0	\$61,523,957				
2045	\$39,080,348	\$8,066,145	\$47,146,493	\$9,770,087	\$2,016,536	\$11,786,623	\$48,850,435	\$10,082,681	\$58,933,117	\$0	\$3,206,080	\$0	\$62,139,196				
2020 - 2045 Revenues	\$899,752,941	\$185,708,113	\$1,085,461,054	\$224,938,235	\$46,427,028	\$271,365,263	\$1,524,506,233	\$232,135,141	\$1,756,641,373	\$0	\$73,814,079	\$0	\$1,830,455,452		\$1,830,455,452	\$1,598,320,311	\$232,135,141

^{*} Data provided by GDOT based on a three-year average of the state's obligation authority and distributions among MPOs. Projection amounts are YOE \$ - (1% inflation per year). Projection only covers the federal portion.

^{**} The committed funds in 2020 and 2021 from FY 2018 - 2021 TIP are used to replace the state's obligation - authority based forecasts.

^{***}The 2045 MTP covers 2020 to 2045, so the 2019 data is not used for revenue projections.

^{****}Local revenues will be used to fund projects, not maitenance.

2.2 Transit Revenue Projections

The 2045 MTP will only include transit capital projects to be implemented, so the operating funds will not be a part of the transit revenue projections.

- 1. Based on the information provided by CAT, the uncertainty of federal grants to be available, and the limited impact the CRC's capital program has on the 2045 MTP, it is assumed that an annual average of \$7.5 million (federal grants + state matching funds + local revenue sources) will be available for transit revenue projections.
- 2. Using 2020 as the base year, a 1% annual inflation rate is applied to the 2045 MTP transit capital revenue forecasts.
- 3. Similar to highway revenue projections, the transit capital revenues expressed in YOE dollars will be distributed into short-, mid- and long-term cost bands. The table below lists the expected transit capital revenues for the 2045 MTP.

2020 - 2045 Transit Revenue Projections						
	Transit Capital	Cost Band	Cost Band Total			
2019		NA				
2020	\$7,500,000					
2021	\$7,575,000					
2022	\$7,650,750					
2023	\$7,727,258	0 -	662 442 520			
2024	\$7,804,530	One	\$62,142,529			
2025	\$7,882,575					
2026	\$7,961,401					
2027	\$8,041,015					
2028	\$8,121,425					
2029	\$8,202,640					
2030	\$8,284,666					
2031	\$8,367,513					
2032	\$8,451,188	Two	\$76,085,794			
2033	\$8,535,700					
2034	\$8,621,057					
2035	\$8,707,267					
2036	\$8,794,340					
2037	\$8,882,283					
2038	\$8,971,106					
2039	\$9,060,817					
2040	\$9,151,425					
2041	\$9,242,940	Three	\$83,213,913			
2042	\$9,335,369					
2043	\$9,428,723					
2044	\$9,523,010					
2045	\$9,618,240					
2020 - 2045 Revenues	\$221,442,236		\$221,442,236			

3. Project Cost Estimating Methodology

The forecasted available revenues will be allocated to projects included in the 2045 MTP based on their development timeframe, thus deriving the planning-level project cost estimates is of vital importance. The following summarizes the methodology utilized to calculate the project cost estimates in YOE dollars for the 2045 MTP.

3.1 Planning Level Cost Estimating for Highway Projects

- 1. The project phases of each potential 2045 MTP highway project, which include Preliminary Engineering (PE), Right-of-Way acquisition (ROW), Utilities (UTL) and Construction (CST), are reviewed by CORE MPO staff and the 2045 MTP Working Group to determine which of three cost band periods best match the priority and schedule of each phase.
- 2. Funding source by project phase is not tracked; only the cost totals by phase (PE, ROW, UTL and CST) are calculated.
- 3. If a project phase was authorized prior to the adoption of the 2045 MTP, the project phase cost is not included in the plan.
- 4. The annual planning level cost estimating inflation rate is defined as 3.5% based on the National Highway Construction Cost Index (NHCCI) data from 2003 to 2018.
- 5. Project costs are calculated in YOE dollars for each appropriate time period. The projects' cost estimates for cost band periods are described below.
- Cost Band One (2020 2027):
 - Overlaps with GDOT's short-range planning period and the current FY 2018 2020
 Transportation Improvement Program (TIP).
 - For 2020 and 2021 projects, use the projects' phase costs in the TIP that reflect the most current GDOT cost estimates.
 - For 2022 2027 projects, use the best available cost estimates from GDOT, local project sponsors or CORE MPO where applicable. The projects' costs should be estimated for the appropriate phase (PE, ROW, UTL and CST). No inflation factor is applied to these projects assuming the cost estimates are already inflation-adjusted.
- Cost Band Two (2028 2036)
 - Incorporate cost estimates developed for the 2040 MTP, or project sponsor-provided estimates, or estimates based on per mile costs of comparable local projects as expressed in approved concept reports as available.
 - Apply the appropriate escalation inflation factor calculated for YOE 2032 (the midpoint of this time band) for the final cost estimates for each phase.
- Cost Band Three (2037-2045)
 - Incorporate cost estimates developed for the 2040 MTP, or project sponsor-provided estimates, or estimates based on per mile costs of comparable local projects as

expressed in approved concept reports as available.

 Apply the appropriate escalation inflation factor calculated for YOE 2041 (the midpoint of this time band) for the final cost estimates for each phase.

3.2 Planning Level Cost Estimating for Transit Projects

For transit capital projects, CAT used cost information developed for the Transit Development Plan (TDP) or System Re-design, or RFP quotes as the basis; then apply the appropriate escalation inflation factors similar to highway projects for final cost estimates.

3.3 Planning Level Cost Estimating Inflation factors

The cost estimates for Cost Band Two and Three projects will be expressed in Year-of-Expenditure (YOE) dollars by applying appropriate inflation factors. These inflation factors are normally associated with actual construction costs and are different from the inflation factors for revenue projections. The federal guidance on getting the appropriate inflation factors for YOE cost estimates indicate that:

- It is best to use State and/or local cost data if available;
- In the absence of State and/or local data, FHWA and FTA would be comfortable if MPOs utilize an annual inflation rate of four (4) percent for project costs; and
- The MPO may assume a lower or higher rate based on circumstances.

Based on the National Highway Construction Cost Index (NHCCI) data from 2003 to 2018 (see table on the next page), the annual inflation rate for project cost estimates is 3.5%.

Conclusion: The Technical Coordinating Committee made a decision to apply the 3.5% annual inflation rate to the 2045 MTP cost estimates for longer-term projects.

As indicated by the cost estimating methodology above, no inflation factor will be applied to Cost Band One projects.

Assuming that the Cost Band Two and Three projects will be estimated to the mid-year of each band, the final inflation factors based on the 3.5% annual inflation rate will be as follows.

- o Cost Band Two: 2028 2036 (mid-year is 2032, inflation factor is 1.51)
- o Cost Band Three: 2037 2045 (mid-year is 2041, inflation factor is 2.06)

0, 2018		
YEAR	QUARTER	NHCC
2003	March	1.0000
	June	1.0096
	September	1.0240
	December	1.0216
2004	March	1.0459
	June	1.1009
	September	1.1431
	December	1.1492
2005	March	1.2409
	June	1.2814
	September	1.3718
	December	1.4125
2006	March	1.4486
	June	1.5213
	September	1.6184
	December	1.5527
2007	March	1.5636
	June	1.5612
	September	1.5375
	December	1.5143
2008	March	1.5686
	June	1.6441
	September	1.7848
	December	1.6267
2009	March	1.5000
	June	1.4398
	September	1.4292
	December	1.4026
2010	March	1.4419
	June	1.4384
	September	1.4465
	December	1.4300
2011	March	1.4568
	June	1.5006
	September	1.5412
	December	1.5411
2012	March	1.5769
	June	1.6270

September

December

September

December

September

December

September

December

September

December

September¹

December¹

March

March

March

March

March

March²

June

June

June

June

June

2013

2014

2015

2016

2017

2018

Notes: 1/ Revised.

1.5955

1.6071

1.5908

1.6235

1.6448

1.5931

1.6278

1.6699

1.7351

1.6938

1.7198

1.7048

1.7063

1.6627

1.6311

1.6779

1.6798

1.6534

1.6172

1.6846

1.7343

1.6621

1.6647

2/ Preliminary.

Source: Federal Highway Administration (FHWA), National Highway Construction Cost Index (NHCCI).

4. Development of the Financially Constrained Plan

With the development of the anticipated revenues and projects' cost estimates over the planning period, the next step is to decide what projects are to be included in the financially constrained 2045 MTP. This step takes into consideration projects' development status and implementation schedule, MTP continuity, projects' prioritization rankings, fiscal constraints, and geographic equity analysis.

4.1 Highway Project Development Methodology

For highway financially-constrained plan development, the projects are evaluated and selected based on the methodology listed below.

- The projects included in the current 2040 MTP that are completed, under construction or no longer needed are not included in the 2045 plan.
- The remaining projects in the 2040 MTP that are in the pipeline for implementation will be carried forward to the financially constrained 2045 MTP.
- The long-range projects in the 2040 MTP are evaluated for their project prioritization rankings, fiscal constraints of each cost band, and geographic equity analysis.
- New highway projects identified through the travel demand modelling process and/or by local sponsors are evaluated for their project prioritization rankings, fiscal constraints of each cost band, and sponsors' commitment.
- Policy statements are developed for category projects to correspond to project revenue category expenditure set-asides and maintenance expenditures. These Policy Statements include the following:
 - Maintenance Policy: The Georgia Department of Transportation (GDOT) maintains the state highways in Georgia. Maintenance projects in the Savannah area which have been duly selected for funding by the State Transportation Board are considered to be consistent with the CORE MPO's 2045 Metropolitan Transportation Plan.
 - Operational Improvements Set Aside Policy: Any operational improvement project (traffic signals, turn lanes, intersection improvement, etc.) in the Savannah area seeking CORE MPO highway funding is considered to be consistent with the MPO's 2045 Metropolitan Transportation Plan provided that 1) the project is consistent with the MPO's plans (2045 Vision Plan, Freight Plan, Congestion Management Process, etc.) or local Capital Improvement Programs; 2) the project makes improvements to functionally-classified roadways (collectors and above); 3) the project is located within the CORE MPO's Metropolitan Planning Area (MPA); and 4) the project has a dedicated project sponsor with local match funding commitment.
 - Transit Improvements Set Aside Policy: Any transit improvement project seeking CORE MPO highway funding in the Savannah area is considered to be consistent with the MPO's 2045

Metropolitan Transportation Plan provided that 1) the project has an eligible local sponsor with match funding commitment; 2) the project is consistent with the needs identified in the cost feasible transit plan of the 2045 MTP, or the project is approved by the CORE MPO Board for inclusion in the Transportation Improvement Program.

O Non-Motorized Improvements Set Aside Policy: Any bicycle, sidewalk or trail project seeking CORE MPO highway funding is considered consistent with the MPO's 2045 Metropolitan Transportation Plan provided that 1) the project is consistent with the adopted CORE MPO Non-Motorized Transportation Plan; and 2) the project has a dedicated local sponsor with local match funding commitment.

In summary, the financial balancing of the 2045 MTP highway projects is accomplished through identifying those projects that are progressing towards implementation in a timely manner and those that are of a high local priority. These projects are candidates for remaining in the Cost Feasible Plan. The selected priority projects' costs are adjusted for inflation and then the costs balanced against the anticipated revenues in each cost band. In order to balance the anticipated revenues with the project costs for the financially feasible plan, some projects or project phases have to be removed and pushed back into the Vision Plan.

4.2 2045 MTP Vs 2040 MTP

As outlined in the methodology above, due to continuity of project development and implementation, there will be project overlaps between the 2045 MTP and 2040 MTP. It is necessary, therefore, to check the development status of the 2040 MTP projects to decide which ones will be carried forward and which ones will not.

The 2045 MTP **WILL NOT** include projects in the 2040 MTP that are completed, removed, under construction, or expected to be let for construction by the end of 2019. These projects are listed below.

2040 MTP Projects Not to Be Carried Forward to 2045 MTP					
Project	Status				
PI# 533205, Montgomery Cross Road Bridge	Deleted due to lack of progress and				
Replacement @ Casey Canal	local commitment				
PI# 0013281, SR 21 Culvert Replacement at Pipemaker	Deleted (now A local project under				
Canal	development by Chatham County)				
PI# 0013273, CAT Bikeshare Expansion in Downtown	Deleted (Funds re-allocated to CAT				
Savannah	ITS)				
CAT Dike Share Expansion in Downtown Sayannah Dhase	Deleted (City of Savannah will				
CAT Bike Share Expansion in Downtown Savannah Phase	regulate private provider – based				
l II	bikeshare program)				
PI# 0007402, Gwinnett Street Widening	Deleted (Under development with				
from Stiles Avenue to I-16	local funds)				
Sayannah MDO Stratogic Planning Studies / Sector Floven	Deleted (new studies will be pursued				
Savannah MPO Strategic Planning Studies (Sector Eleven	using discretionary PL funds instead				
to Sector Fourteen)	of Z230 funds)				

PI# 0012722, SR 21 from SR 30 to I-95; Including			
Interchange (Diverging Diamond Interchange)	Completed		
PI# 0010738, I-95 at Airways Avenue Interim			
•	Completed		
Improvements			
PI# 0010553, CS651/Crossgate Rd from SR 21 to NS#734150L in Port Wentworth	Completed		
	Commission		
PI# 0013549, SR 21 @ CS 705/Parkside Blvd in Port	Completed		
Wentworth			
PI# 0007259, JIMMY DELOACH PARKWAY @ SR 17 –	Under Construction		
INTERCHANGE			
PI# 522790, JIMMY DELOACH PARKWAY EXTENSION FM	Under Construction		
I-16 TO SR 26/US 80			
PI# 0007129, Islands Expressway at Wilmington River	Under Construction		
Bascule Bridge Replacement			
PI# 0007885, CS 602/CS 650/Grange Rd from SR 21 to E	Under Construction		
of SR 25			
PI# 0002923, SR 25 Conn / Bay Street From I-516 to the	Under Construction		
Bay Street Viaduct (West Bay Street Widening)			
PI# 532370, SR 144 EB FROM S OF CR 100 TO S OF CR	Under Construction		
154			
PI# 0007631, Truman Linear Park Trail Phase II-A from	Under Construction		
Lake Mayer to DeRenne Ave	0.000.000.0000.000		
PI# 0013277, PI# 0013278, PI# 0013279 and PI# 0013280	Under Construction		
- CAT Vehicle Purchase for 2015 – 2018	onder construction		
PI# 0015977, CAT- Bus Reliability Initiative	Under Construction		
PI# 0015978, CAT - Maintenance Equipment Upgrades	Under Construction		
PI# 0015979, CAT - Electric Bus Conversion Initiative	Under Construction		
PI# 0013282, SR 25 @ PIPEMAKER CANAL - CULVERT	Under Construction		
REPLACEMENT	Under Construction		
Benton Boulevard from Highlands Blvd to Meinhard Rd	Under Construction		
Canebrake Road Improvement Project from Gateway			
Boulevard	Under development with local funds		
to Basin Road			
Marsh Hen Trail, Phase II from East of Old Highway 80 to	Tybee Island project under		
Battery Drive	development		
·	One-time GDOT request that was		
TAP Project Oversight	included in the MTP and TIP.		
	Contract awarded by Chatham		
McQueens Island Trail	County with alternative funds		

The Cost Feasible 2045 MTP **WILL** include projects in the 2040 Total Mobility Plan that are in the pipeline for implementation. A lot of these projects are programmed in the FY 2018 – 2021 TIP as shown below.

2040 MTP Projects In the Pipeline for Implementation to Be Carried Forward to 2045					
MTP					
PI# 0012757, I-16 FROM I-95 TO I-516					
PI# 0012758, 1-95/I-16 Interchange Reconstruction					
PI# 0013741, SR 25/US 17 @ SAVANNAH RIVER IN PORT WENTWORTH					
PI# 0013742, SR 25/US 17 @ MIDDLE RIVER IN PORT WENTWORTH					
PI# 0015704, SR 404 SPUR/US 17 @ BACK RIVER					
PI# 0015705, SR 404 SPUR/US 17 FM NE OF SAVANNAH HARBOR PKWY TO BACK RIVER					
PI# 0015306, TRUMAN LINEAR PARK TRAIL – PHASE II-B					
PI# 0008358, I-516 @ CS / 1503 / DeRenne Avenue (DeRenne Blvd Option)					
PI# 0008359, EAST DERENNE FROM SR 204 TO HARRY S TRUMAN PKWY					
PI# 0010236, SR 21 FROM CS 346/MILDRED STREET TO SR 204					
PI# 0010028, CS 1097/DELESSEPS/LA ROCHE AVE FM WATERS AVE TO SKIDAWAY RD					
PI# 0013727, I-16 @ SR 307					
PI# 0006700, EFFINGHAM PKWY FM CR 156/BLUE JAY/EFFINGHAM TO SR 30/CHATHAM					
PI# 0010560, SR 26 FM JOHNNY MERCER TO OLD US 80; INC BULL RVR&LAZARETTO					
PI# 0006328, BRAMPTON ROAD CONNECTOR FM FOUNDATION DR TO SR 21/SR25/US80					
PI# 521855, SR 26 FROM I-516 TO CS 188/VICTORY DRIVE					

The Cost Feasible 2045 MTP **WILL** also include some longer-range projects in the 2040 Total Mobility Plan based on project prioritization results. These are listed in the table below. The prioritization process is based on the 2045 MTP goals and objectives, as well as achieving the performance measures targets.

Long Range 2040 MTP Projects To Be Carried Forward to 2045 MTP
I-95 at SR 21 / Augusta Rd Interchange Reconstruction
President Street / Truman Parkway Interchange Bridge and Ramp Reconstruction
I-516 / Lynes Parkway Widening from Veterans Parkway to Mildred St
I-516 / Lynes Parkway at I-16 Interchange Reconstruction
I-516 / Lynes Parkway Widening from CR 975/Veterans Pkwy to I-16
PI# 0015528, I-16 Widening from CS 565/Pooler Pkwy to I-95
Harris Trail Road Widening from Timber Trail to Port Royal Road
Port Royal Road Widening from SR 144 to Harris Trail Road

4.3 Additional Projects

New highway projects identified through the travel demand modelling process and/or by local sponsors included in the financial constrained 2045 MTP are listed below.

Additional Projects Added to 2045 MTP						
Projects	Source					
Gulfstream Widening from SR 21 to Airways	Travel demand model					
Avenue						
I-16 Interchange at Little Neck Road	Local sponsor (Chatham County)					
I-95 at Airways Avenue	Local Sponsor (Savannah Airport Commission)					
Old River Road Widening from SR 204 to	Local Sponsor (Chatham County)					
Effingham / Chatham County line						
I-95 at Quacco Road	Local Sponsor (Pooler)					

4.4 2045 Financially Constrained Highway Plan

The MPO worked closely with the 2045 MTP Working Group and developed a draft fiscally constrained 2045 MTP for highway projects as shown on the next page.

4.5 2045 Financially Constrained Transit Plan

Priority transit capital improvement projects were identified through the CAT's planning process and included in the financially constrained 2045 MTP as the forecasted transit revenues allow. This project list is listed below.

Draft 2045 MTP Cost Feasible Transit Capital Improvements								
Project Description	Cost Band One (2020 - 2027)	Cost Band Two (2028 - 2036)	Cost Band Three (2037 - 2045)					
Vehicle Replacement/Expansion - Fixed Route	\$33,720,752	\$41,286,865	\$45,154,837					
Vehicle Replacement - Paratransit	\$5,255,182	\$6,434,317	\$7,037,117					
Intelligent Transit System (ITS)	\$2,715,177	\$3,324,397	\$3,635,844					
Upgraded Farebox and Payment System	\$3,722,421	\$4,557,641	\$4,984,625					
Electric Vehicle Infrasructure	\$3,503,455	\$4,289,544	\$4,691,412					
Passenger Amenities	\$1,751,727	\$2,144,772	\$2,345,706					
Facility Improvement Project - ITC	\$1,532,761	\$1,876,676	\$2,052,493					
Facility Improvement Project - Gwinnett	\$1,532,761	\$1,876,676	\$2,052,493					
Vanpool Capital	\$788,277	\$965,147	\$1,055,568					
Park & Ride Capital	\$4,379,318	\$5,361,931	\$5,864,264					
Facility Construction - Ferry Maintenance	\$569,311	\$697,051	\$762,354					
Facility Construction - Ferry Dock	\$1,270,002	\$1,554,960	\$1,700,637					
Ferry Boat Construction	\$1,401,382	\$1,715,818	\$1,876,565					
Total	\$62,142,529	\$76,085,794	\$83,213,913					

Tabel 13: 2045 Metropolitan Transportation Plan - Cost Feasible Project List

1440. 20.	2045 Metropolitan Transportation Plan - Cost Feasible F						2020-2027			2028-2036	(mid-year 2032)			2037-2045 (mid-year 2041)	
GDOT PI#	Map	TERN	/INI	Thoroughfare Plan			2020-2027	Total Project		2028-2030	(IIIIu-year 2032)			2037-2043 (illu-year 2041)	Total Project
	ID NAME	FROM	то	Cross Section	PE	ROW	CST	Cost	PE	ROW	CST	Total Project Cost	PE	ROW	CST	Cost
0008358	1 I-516 @ CS/1503/DeRenne Avenue (DeRenne Blvd. Option)	I-516	White Bluff Road	Major Arterial - Suburban		\$ 18,400,000	\$ 33,000,000	\$ 51,400,000								
0008359	2 East DeRenne from SR 204 to Harry S Truman Parkway (East DeRenne Avenue Improvements)	Abercorn St	Truman Pkwy	Major Arterial - Suburban		\$ 4,700,000	\$ 5,600,000	\$ 10,300,000								
0010236	3 SR 21 from CS 346/Mildred Street to SR 204 (West DeRenne Avenue Improvements)	Mildred Street	Abercorn St	Major Arterial - Suburban		\$ 6,800,000	\$ 4,100,000	\$ 10,900,000								
0013741	4 SR 25/US 17 @ SAVANNAH RIVER IN PORT WENTWORTH	Savannah River		Minor Arterial - Suburban		\$80,580	\$30,564,67	\$30,645,255								
0013742	5 SR 25/US 17 @ MIDDLE RIVER IN PORT WENTWORTH	Middle River		Minor Arterial - Suburban		\$72,420	\$30,238,27	\$30,310,695								
0015704	6 SR 404 SPUR/US 17 @ BACK RIVER	Back River		N/A*			\$1,620,00	0 \$1,620,000								
0015705	7 SR 404 SPUR/US 17 FM NE OF SAVANNAH HARBOR PKWY TO BACK RIVER	NE of Savannah Harbar Pkwy	Back River	N/A*		\$500,000	\$2,000,00	0 \$2,500,000								
0006700	8 Effingham Parkway from SR 119/Effingham to SR 30/Chatham	Effingham County	Meinhard Road	Minor Arterial - Suburban			\$ 41,879,13	4 \$ 41,879,134								
0012757	9 I-16 FROM I-95 TO I-516	I-95	I-516	N/A*		\$ 6,100,000	\$ 205.800.00	0 \$ 211,900,000								
0012758	10 I-16 at I-95 Interchange Reconstruction			N/A*		ψ 0,200,000	— — — — — — — — — — — — — — — — — — —									
0013727	11 I-16 @ SR 307			N/A*			\$ 28,155,49	7 \$ 28,155,497								
521855	Ogeecnee Rd Widening)	4 Ln E Lynes Pkwy	Victory Dr	Major Arterial - Urban		\$ -	\$ 16,497,48	1 \$ 16,497,481								
0006328	Brampton Road Connector from Foundation Drive to SR 21/SR 25/US 80	SR 25	Georgia Ports Authority	Collector - Suburban	\$ 1,665,671	\$ -	\$ 60,350,42	3 \$ 62,016,094								
0010560	14 SR 26/US 80 @ Bull River and @ Lazaretto Creek	West of Bull River	East of Lazeretto Creek	Major Arterial - Suburban	\$ 1,000,000	\$ 280,500	\$ 93,719,18	8 \$ 94,999,688								
None	15 I-16 Interchange at Little Neck Road	Little Neck Road		N/A*	\$ 2,000,000	\$ 813,717	\$ 30,000,00	0 \$ 32,813,717								
None	16 I-95 at Airways Avenue	Airways Avenue		N/A*	\$ 3,000,000		\$ 30,000,00	0 \$ 33,000,000								
None	17 I-516 / Lynes Parkway at I-16 Interchange Reconstruction	At I-16		N/A*									\$ 19,788,105.00			\$ 19,788,105
0013160	18 I-516 / Lynes Parkway Widening	I-16	Veterans Parkway	N/A*					\$ 14,270,550			\$ 14,270,550			\$ 153,863,204	\$ 153,863,204
None	19 I-516 / Lynes Parkway Widening	Veterans Parkway	Mildred St	N/A*					\$ 12,610,598	\$ 7,991,650	\$ 113,495,380	\$ 134,097,628				
None	20 I-95 at SR 21 / Augusta Rd Interchange Reconstruction			Major Arterial - Suburban					\$ 5,137,479	\$ 83,912,321		\$ 89,049,800			\$ 104,250,067	\$ 104,250,067
None	21 President Street / Truman Parkway Interchange Bridge and Ramp Reconstruction	HST Parkway		N/A*					\$ 9,820,608	\$ 3,928,243	\$ 84,457,236	\$ 98,206,087				
0015528	22 I-16 Widening	Pooler Pkwy	I-95	N/A*					\$ 4,508,364			\$ 4,508,364			\$ 62,862,317	\$ 62,862,317
None	23 Old River Road Widening	SR 204	Effingham County / Chatham County line	Collector - Suburban					\$ 1,016,571	\$ 3,909,890	\$ 11,870,426	\$ 16,796,887				
None	24 Gulfstream Widening	SR 21	Airways Avenue	Collector - Suburban									\$ 6,394,535			\$ 6,394,535
None	25 I-95 at Quacco Road Interchange Study	I-95	Quacco Road	NA	\$ 450,000			\$ 450,000								
None	26 Harris Trail Road Widening	Timber Trail	Port Rayal Road	Collector - Suburban									\$ 1,722,918	\$ 5,709,638	\$ 21,537,789	\$ 28,970,345
None	27 Port Royal Road Widening	SR 144	Harris Trail	Collector - Suburban									\$ 1,721,515	\$ 5,164,546	\$ 10,329,091	\$ 17,215,152
							Total Cost	\$ 659,387,561			Total Cost	\$ 356,929,316			Total Cost	\$ 393,343,725
							Total Highway Project Revenue	\$ 658,937,561			Total Highway Project Revenue	\$ 361,876,186			Total Highway Project Revenue	\$ 396,790,456
							Balance	\$ (450,000)			Balance	\$ 4,946,870			Balance	\$ 3,446,731

		Identified Projects					2020-2027			2028-2026	(mid-year 2022)		2027 204	5 (mid-year 2041)	
GDOT PI #	Мар		ΛINI	Theyeught Di			2020-2027	Total Product		2028-2036 (mid-year 2032)		2037-2045 (mid-year 2041)			
GDOTTI	ID	NAME FROM	то	Thoroughfare Plan Cross Section	PE	ROW	CST	Total Project Cost	PE	ROW	сѕт	Total Project Cost	PE ROW	CST	Total Project Cost
ТВА		Operational Improvements with project sponsors		Operational Improvements			\$ 58,271,83	58,271,837			\$ 39,120,705	\$ 39,120,705		\$ 42,785,738	\$ 42,785,738
							Total Cost	\$ 58,271,837			Total Cost	\$ 39,120,705		Total Cost	\$ 42,785,738
							Total Operational Set Aside	\$ 58,271,837			Total Operational Set Aside	\$ 39,120,705		Total Operational Set Aside	\$ 42,785,738
							Balance	\$0			Balance	\$0		Balance	\$0
ТВА		Transit Improvements/Bus Replacements		Transit			\$ 5,600,0	5,600,000			\$ 6,300,000	\$ 6,300,000		\$ 6,300,000	\$ 6,300,000
			ı	1			Total Cost	\$ 5,600,000		I	Total Cost	\$ 6,300,000	<u> </u>	Total Cost	\$ 6,300,000
							Total Transit Set Aside	\$ 5,600,000			Total Transit Set Aside	\$ 6,300,000		Total Transit Set Aside	\$ 6,300,000
							Balance	\$0			Balance	\$0		Balance	\$0
									_						
0015306	28	TRUMAN LINEAR PARK TRAIL – PHASE II-B DeRenne Avenue	52nd Street/Bee Road				\$ 4,405,62	3 \$ 4,405,623							
0010028	29	CS1097/DeLesseps/LaRoche Avenue From Waters Avenue to Skidaway Road (Bike/Ped Facilities)	Skidaway Road	Collector - Urban	\$ 25,000		\$ 5,907,20	5 \$ 5,932,205							
ТВА		Priotiy bike/ped projects in the Non-Motorized Transportation Plan with local sponsors		Bike/Ped			\$ 3,000,00	0 \$ 3,000,000			\$ 4,500,000	\$ 4,500,000		\$ 4,500,000	\$ 4,500,000
	•			•			Total Cost	\$ 13,337,828	•		Total Cost	\$ 4,500,000		Total Cost	\$ 4,500,000
							Total Non-Motorize Set Aside	d \$ 13,337,828			Total Non- Motorized Set Aside	\$ 4,500,000		Total Non- Motorized Set Aside	\$ 4,500,000
							Balance	\$0			Balance	\$0		Balance	\$0
_					•										
ТВА		Maintenance Projects		Maintenance			\$ 65,143,2				\$ 79,759,791	\$ 79,759,791		\$ 87,232,109	\$ 87,232,109
							Total Cost	\$ 65,143,240			Total Cost	\$ 79,759,791		Total Cost	\$ 87,232,109
							Total Maintenance	\$ 65,143,240			Total Maintenance	\$ 79,759,791		Total Maintenance	\$ \$ 87,232,109
							Balance	\$0			Balance	\$0		Balance	\$0
						Band 1 Highwa	ay Project Costs	\$ 659,387,561		Band 2 Highway	Project Costs	\$ 356,929,316	Band 3 Highw	ay Project Costs	\$ 393,343,725
						Operational Se	et Aside	\$ 58,271,837		Operational Set	Aside	\$ 39,120,705	Operational S	et Aside	\$ 42,785,738
						Transit Set Asi	de	\$ 5,600,000		Transit Set Aside		\$ 6,300,000	Transit Set As	ide	\$ 6,300,000
						Non Motorize	d Set Aside	\$ 13,337,828		Non Motorized S	et Aside	\$ 4,500,000	Non Motorize	ed Set Aside	\$ 4,500,000
						Maitenance		\$ 65,143,240		Maitenance		\$ 79,759,791	Maitenance		\$ 87,232,109
						Total Band On	ne Costs	\$ 801,740,466		Total Band Two	Costs	\$ 486,609,812	Total Band Ti	nree Costs	\$ 534,161,572
						Total Availab	le Revenues	\$ 801,290,466		Total Available	Revenues	\$ 491,556,682	Total Availab	le Revenues	\$ 537,608,304
						Balance		\$ (450,000)		Balance		\$ 4,946,870	Balance		\$ 3,446,732
						Total Project (Costs of all Cost Band	;	\$	1,822,511,850					
						Total Availab	le Revenues of all Cos	t Bands	\$	1,830,455,452					
						Balance			\$	7,943,602					

Notes:

Blue Text: Projects with construction phase included in the current FY 2018 - 2021 TIP.

Green Text: some project phases are included in the current FY 2018 - 2021 TIP, but construction is not in the TIP.

Red Text: projects are carried over from 2040 MTP.

Purple Text: newly added projects.

Orange Text: projects to be funded with set-aside revenues.

Appendix: Funding Programs

1. Federal Revenue Sources and Funding Programs

Federal funds provide the largest share of funding for transportation improvements in the CORE MPO Metropolitan Planning Area (MPA). Federal funds authorized by Congress are used to build, improve and maintain multimodal transportation networks and services within the CORE MPO MPA. Federal funds typically come from federal taxes on fuel, heavy-duty trucks, and to a growing extent, general funds. Taxes are charged for each gallon of fuel purchase (18.4 cents per gallon for gasoline and 24.4 cents per gallon for diesel). Tax revenues are paid into the Highway Trust Fund (HTF), which is separated into two accounts — a highway account administered by the Federal Highway Administration (FHWA) and a mass transit account administered by the Federal Transit Administration (FTA). The highway account receives about 84% of the proceeds from gasoline fuel taxes and the transit account receives the rest 16%.

The HTF funding allocations are based on authorization legislations. The latest legislation is the Fixing America's Surface Transportation Act (FAST Act) which was signed into law in December 2015 and authorized funds for fiscal years 2016 through 2020. For the 2045 MTP financial plan development, it is assumed that as the FAST Act expires, new legislations or continuing resolutions will be authorized to continue federal transportation funding through 2045.

The FAST Act includes various funding programs for transportation improvements, the major ones relevant to the CORE MPO area are listed below. It should be noted that these funding programs are listed here only to provide information on what kinds of projects are eligible for which programs, as the revenue projections for the 2045 MTP do not differentiate specific funding programs.

1.1 Federal Highway Administration Grants

The FAST Act consolidated and restructured federal grant programs for transportation and introduced some new financing mechanisms for core program funding.

Highway Safety Improvement Program (HSIP)

HSIP grants fund transportation improvement projects that reduce traffic fatalities and serious injuries on all public roads, including non-state-owned public roads and roads on tribal lands. Eligible projects include highway safety improvements, roadway hazard correction, etc. Eligible projects must be consistent with the State Highway Safety Program (SHSP) while achieving state safety targets.

National Highway Performance Program (NHPP)

NHPP grants provide funding for the construction and maintenance of the National Highway System (NHS). The interstate system and all principal arterials are eligible for NHPP funds.

Surface Transportation Block Grant Program (STBG)

The FAST Act converts the long-standing Surface Transportation Program (STP) into the Surface Transportation Block Grant Program (STBG), acknowledging that this program has the most flexible

eligibilities among all Federal-aid highway programs and aligning the program's name with how FHWA has historically administered it. STBG grants provide flexible funding to states and localities for transportation improvement projects. Eligible projects for STBG grants will preserve or improve the conditions and performance on any Federal-aid highway, bridge and tunnel, on any public road, and on pedestrian and bicycle infrastructure. Funding for transit capital projects, such as intercity bus terminals, are also included in the STBG grants. STBG grants can cover up to 80 percent of the total cost of a project, with the balance covered by states or localities.

<u>Transportation Alternatives Program (TAP)</u>

TAP grants provide funds for alternative transportation projects, such as transportation improvement projects relating to pedestrian and bicycle paths and sidewalks. TAP funds may contribute up to 80% of the total eligible project cost. Local governments, regional transportation authorities, transit agencies, and school districts are some of the agencies eligible to receive TAP funds. Eligible TAP projects can include: sidewalk improvements, traffic calming and speed reduction improvements, pedestrian and bicycle crossing improvements, on- and off- street pedestrian and bicycle facilities, etc.

Railway-Highway Crossings Program

The Railway-Highway Crossings Program provides funds for safety improvements to reduce the number of fatalities, injuries, and crashes at public railway-highway grade crossings. This funding is a set-aside from HSIP.

National Highway Freight Program

The National Highway Freight Program focuses on improving the efficient movement of freight on the National Highway Freight Network.

1.2 Federal Transit Administration Grants

The Federal Transit Administration (FTA) issues various competitive grants and cooperative agreements funding public transit operations, maintenance programs and capital purchases. Depending on the grant, the FTA may fund up to 100% of the project cost. FTA grants relevant to public transit providers in the CORE MPO planning area are presented below.

Section 5307 - Large Urban Public Transportation

The Urbanized Area Formula Funding program makes Federal resources available to urbanized areas (population of 50,000+) for transit capital and operating assistance and transportation related planning. Public transit providers may use Section 5307 grants to provide mobility management services to members of the public. Contracted mobility services may also be funded by Section 5307 grants. The Chatham Area Transit Authority (CAT) is the designated recipient of Section 5307 funds in the Savannah area.

Section 5310 – Enhanced Mobility of Seniors and Individuals with Disabilities

Section 5310 grants are available to transit agencies that provide public transit services improving the mobility for seniors and disabled persons. Section 5310 grants enable public transit providers to go beyond meeting the mobility requirements of the Americans with Disabilities Act (ADA). Eligible projects include: 1) capital projects that improve access to transit for seniors and persons

with disabilities, e.g., specialized vehicle purchase; and, 2) communication equipment, such as two-way radios. The Georgia Department of Human Services (DHS) is the designated recipient of Section 5310 funds in the Savannah area.

Section 5311 – Other than Urbanized Areas

Section 5311 grants are available to transit agencies that provide service in rural areas with population of less than 50,000. Section 5311 grants seek to: 1) Enhance the access of people in rural areas to health care, shopping, education, employment, public services, and recreation; 2) Assist in the maintenance, development, improvement, and use of public transit in rural areas; 3) Assist in the development and support of intercity bus transportation; and 4) Provide for the participation of private transportation providers in rural transportation. Eligible activities using these grant funds include: acquisition of public transportation services and capital, operating, and administrative expenses on providing public transit services in rural areas. GDOT is the designated recipient and the Coastal Regional Commission (CRC) is the sub-recipient of Section 5311 funds in the Savannah area.

<u>Section 5337 – State of Good Repair</u>

Section 5337 grants provide financial assistance to public transit agencies that operate rail fixed-guideway and high-intensity motorbus systems for the maintenance, replacement, and rehabilitation of capital assets, along with the development and implementation of transit asset management plans. These funds reflect a commitment to ensuring that public transit operates safely, efficiently, reliably, and sustainably so that communities can offer balanced transportation choices that help to improve mobility, reduce congestion, and encourage economic development.

Section 5339 – Bus and Bus Facilities Program

Section 5339 discretionary funds provide funding to replace, rehabilitate, and purchase buses and related equipment, and to construct bus-related facilities. Grant funds can be used to purchase shelters and bus stop signs, bicycle infrastructure tied to transit, and electronic communications.

2. State Revenue Sources for Transportation Improvements

States are major contributors of funds for transportation improvement projects, often the second largest contributor after the Federal Government. With reductions in the availability of federal funds for transportation projects, states have had to develop innovative funding programs at the state level to make up for any shortfalls. The state funds are used to match the federal grant funds or to develop transportation improvement projects without the lengthy federal process. Of particular interest in Georgia are the funds from State Motor Fuel Tax and from House Bill 170.

2.1 Georgia State Motor Fuel Tax

The State Excise Tax funds are collected through the licensed distributors (suppliers, wholesalers) on all sales of motor fuel to any purchaser not properly licensed as a Georgia distributor of that fuel type. Sales of aviation gasoline are generally subject to a 1 cent per gallon excise tax so long as the sale is made to a duly licensed aviation gasoline distributor ("AL" license type); if not, a 26.8 cent rate per gallon will apply.

The following rates are in effect from January 1, 2018 until December 31, 2018.

Motor Fuel Type	State Excise Tax Rate			
1. Gasoline	\$ 0.268 Per Gallon			
2. Diesel	\$ 0.300 Per Gallon			
3. Aviation Gasoline	\$ 0.010 Per Gallon			
4. Liquefied Petroleum Gas	\$ 0.268 Per Gallon			
5. Special Fuel and Compressed Petroleum Gas	\$ 0.268 Per Gallon			
Source: Georgia Department of Revenue				

2.2 Georgia House Bill 170

The Transportation Funding Bill, House Bill 170 (HB 170), was passed on March 31, 2015 and made effective on July 1, 2015. The new legislation:

- Established a 26 cent per gallon state excise tax on gasoline and 29 cents per gallon state excise tax on diesel;
- Changed the current indexing formula to include both the Corporate Average Fuel Economy (CAFÉ) standards and Consumer Price Index (CPI) through July 1, 2018;
- Included additional oversight by the Georgia General Assembly, requiring GDOT to annually submit a ten (10) year strategic plan outlining the use of department resources for upcoming fiscal years;
- Created a Special Joint Committee on the Georgia Revenue Structure (i.e., Tax Reform);
- Authorized a cap on the average retail price for fuel that local sales taxes can collect, at a rate of \$3.00 per gallon for motor fuel, including diesel; and
- Allowed counties either alone or in groups to ask voters to approve up to a 1 percent sales tax to fund transportation projects close to home.

The new state transportation revenue will ultimately increase funds available statewide by \$750 million to \$1 billion each year. These funds will be used on maintenance and state of good repair and acceleration of some major capacity projects.

3. Local Revenue Sources for Transportation Improvements

Most of the roadways and bridges in the CORE MPO MPA are owned and maintained by a city or county government. Transportation funds generated by local sources, either for a match against federal and state awards, or to advance projects independently of those sources, are an important part of the 2045 MTP revenues.

Local government funding for transportation comes primarily from several sources: Special Purpose Local Option Sales Taxes (SPLOST), local government general fund expenditures, transit sales tax, transit farebox receipts, and transit district tax.

3.1 Special Purpose Local Option Sales Taxes (SPLOST)

A SPLOST is a financing method for funding capital outlay projects in the State of Georgia. It is an optional 1% sales tax levied by a county for the purpose of building parks, schools, roads and other public facilities. The revenue generated cannot be used towards operating expenses or most other maintenance projects, with the exception of roads and bridges.

In the Savannah area, the Counties of Bryan, Chatham and Effingham all have their respective SPLOST program. The local governments receiving SPLOST funds typically dedicate a portion of the revenues to fund transportation, though the percentages vary. All three counties have a long history of approving and renewing SPLOST programs and are planning to increase the portion of funds for transportation improvements. It should be noted that SPLOST programs are subject to voter approval and run for a limited period, usual five to six years. For purposes of the 2045 MTP financial plan development, though, all three counties are assumed to have this revenue stream available through 2045.

3.2 General Funds

Another local funding source for transportation improvements is general funds. However, expenditures for transportation must go through an annual budgeting process and compete against other uses.

3.3 Transit System Revenues and Transit District Revenues

In Georgia, as required by the Georgia Constitution, state motor fuel tax revenues cannot support transit or any transportation purpose other than roadways and bridges. Since there is not a dedicated state funding source for transit, the locally derived transit funds are crucial to the future of the transit systems in the Savannah area. The U.S. Department of Transportation requires a commitment for operating support from state, regional, or local governments before allowing federal funds to be spent on the construction and implementation of transit projects. The majority of transit operating funds must come from state and local funding resources as federal transit operating funds are very limited.

There are two public transit agencies operating within the CORE MPO's MPA – the Chatham Area Transit Authority (CAT) and the Coastal Regional Commission (CRC). CAT is a direct recipient of FTA funds and CRC is a sub-recipient of GDOT.

CAT is the major public transportation provider in the Savannah area. It's capital programs and operations are supported by federal grants, the Special Transit Tax District funds (a levy of 1.0 mill property tax within this district), the county-wide paratransit tax from Chatham County's M&O funds, special purpose local option sales tax allocations, and CAT's system revenues (farebox receipts, advertising sales, etc.).

CRC provides coordinated human service and rural public transit across 10 counties and 35 municipalities within the coastal region that includes the rural areas of the CORE MPO's MPA. The operations of the Coastal Regional Coaches are supported by federal grants, state matching funds, and the CRC's system revenues.

4. Other Revenue Sources for Transportation Improvements

Other revenue sources that can be used to improve the transportation system are listed below.

<u>Bonds</u>: Some transportation improvement projects might be financed through the issuance of bonds, which is a debt security, in which the authorized issuer owes the holders a debt and, depending on the terms of the bond, is obliged to pay interest to use and/or to repay the principal at a later date, termed maturity.

<u>Public-Private Partnerships</u>: Some transportation improvement projects might be financed through public-private partnerships (P3), which involve a contract between a public-sector authority and a private party, in which the private party provides a public service or project and assumes substantial financial, technical and operational risk in the project. There are different types of P3. FHWA encourages the consideration of P3 in the development of transportation improvements.

5. Major Mobility Investment Program (MMIP)

Georgia DOT is advancing the Major Mobility Investment Program across the state in an effort to yield a significant reduction in congestion along key freight and passenger corridors. Once the projects are completed, they will lead to reductions in delay and travel time savings in the year 2030, as compared to doing nothing and allowing traffic congestion to increase. The funding for the MMIP projects is based on statewide priorities and might be in addition to the revenues an MPO receives based on their regular share of the state obligation authority.

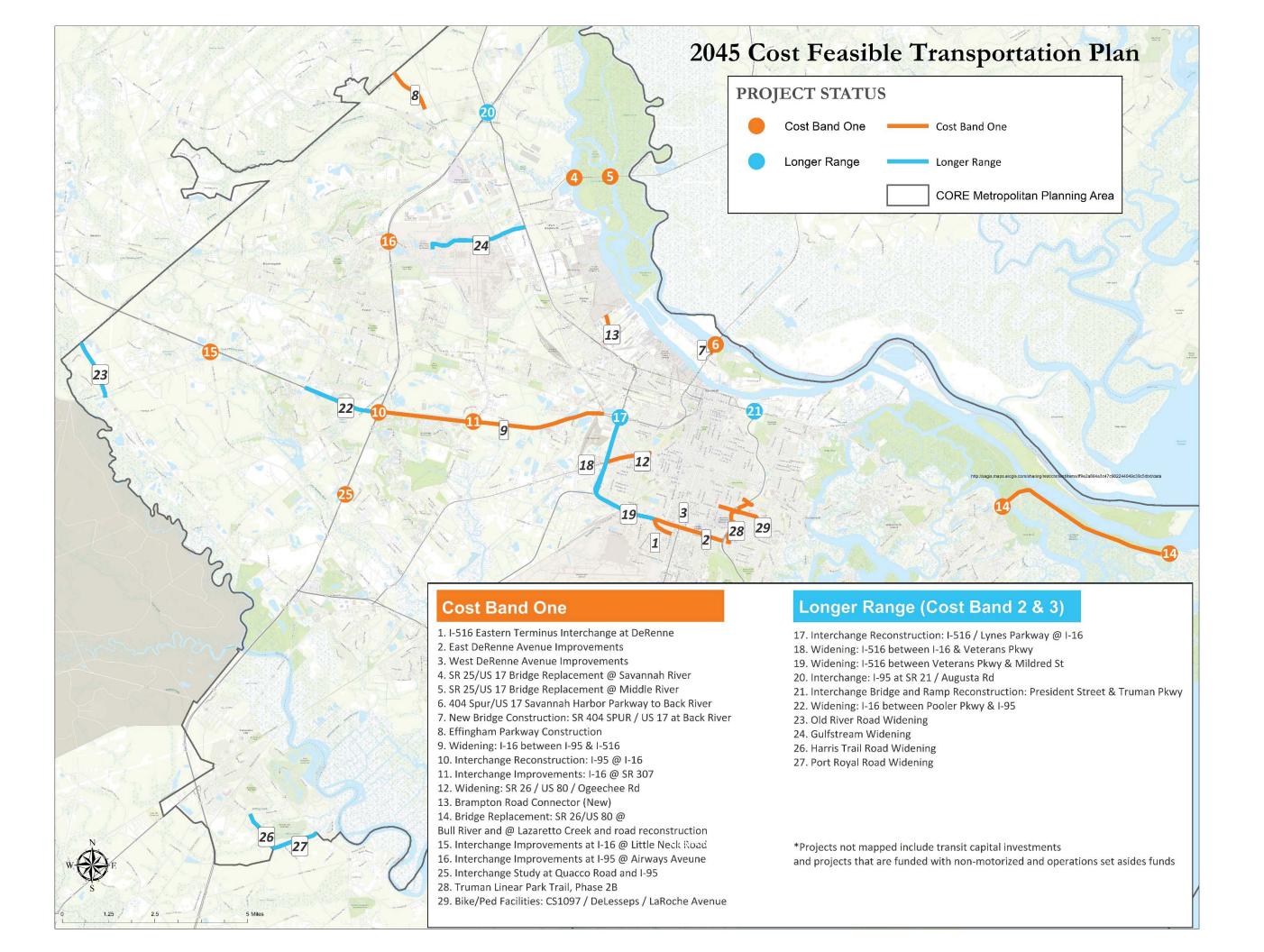
Two related projects in the Savannah area are included in the MMIP program - I-16 @ I-95 Interchange Reconstruction and I-16 Widening. These projects will improve traffic flow and enhance safety along I-16 and I-95, one of Georgia's busiest freight corridors as well as the gateway to Georgia's growing port in Savannah. The projects include:

- Widening I-16 from two lanes to three lanes in each direction between I-95 and I-516;
- Rebuilding two congested on/off ramps on the west side of the I-16/I-95 interchange to provide smoother, more direct connections;
- Adding collector-distributor (CD) lanes on I-95 northbound to help eliminate weaving to and from I-16;
- Adding lighting at the I-16@I-95 interchange; and
- Installing Intelligent Transportation System (ITS) technology to link to Georgia NaviGAtor.



PROJECT PAGES





PROJECT NAME: I-516 @ CS/1503/DeRenne Avenue (DeRenne GDOT PI #: 0008358

Boulevard Option)

PROJECT TERMINI: I-516 to White Bluff Road

PROJECT DESCRIPTION: Reduce traffic congestion on DeRenne Avenue by providing a new four-lane divided connector from I-516 to a realigned White Bluff Road.

Thoroughfare Type: Major
Arterial Suburban

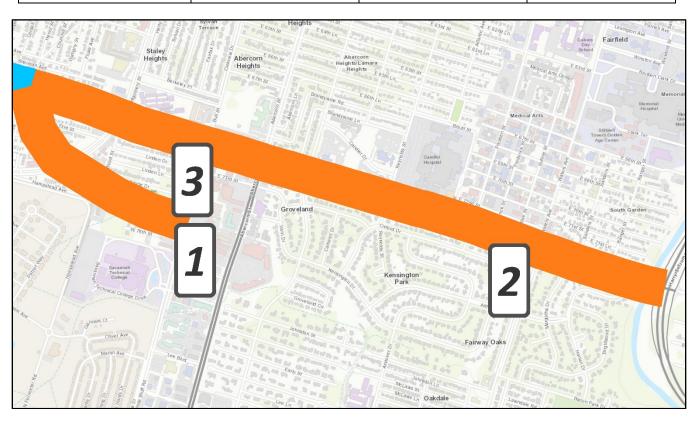
Map Project ID: 1

Total Project Cost: \$51,400,000

Comments: This project, a priority for the City of Savannah, addresses congestion, safety, and includes coordination with adjacent land uses to enhance the visual appearance of the corridor and promote a sense of place while incorporating accommodations for all travel modes. Mobility 2045 Plan Goals addressed by the project:

- Safety & Security
- Accessibility, Mobility, and Connectivity
- Environment and Quality of Life
- System performance

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way	\$18,400,000		
Construction	\$33,000,000		



PROJECT NAME: East DeRenne from SR 204 to Harry S Truman Parkway	GDOT PI # : <u>0008359</u>
(East DeRenne Avenue Improvements)	

PROJECT TERMINI: Abercorn Street to Truman Parkway

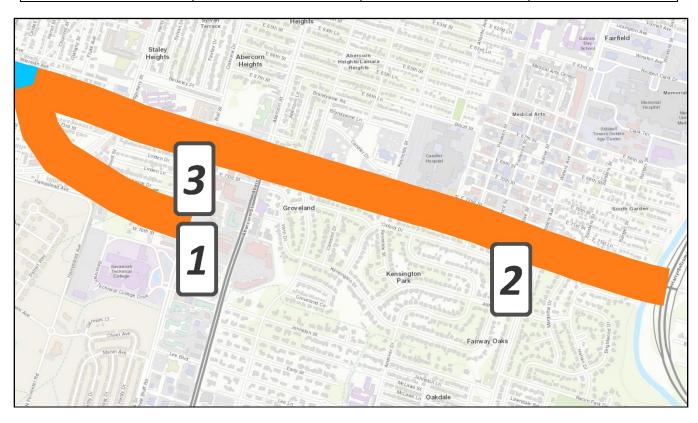
PROJECT DESCRIPTION: Construct a landscaped median and sidewalks, establish a parallel bicycle route along DeRenne Drive and improve signalized intersections

Thoroughfare Type: Major Arterial Suburban	Map Project ID: 2	Total Project Cost: \$10,300,000
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Comments: The project complements the interchange modifications at DeRenne Avenue and I-516 and improvements on West DeRenne. This project addresses multimodal accommodation, safety, and the operational efficiency of the facility. Mobility 2045 Plan Goals addressed by the project:

- Safety & Security
- Accessibility, Mobility, and Connectivity
- Environment and Quality of Life
- System performance

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way	\$4,700,000		
Construction	\$5,600,000		



PROJECT NAME: SR 21 from CS 346/Mildred Street to SR 204 (West GDOT PI #: 0010236

DeRenne Avenue Improvements)

PROJECT TERMINI: Mildred Street to Abercorn Street

PROJECT DESCRIPTION: Improve the raised median, signalized intersections and sidewalks

Thoroughfare Type: Major
Arterial Suburban

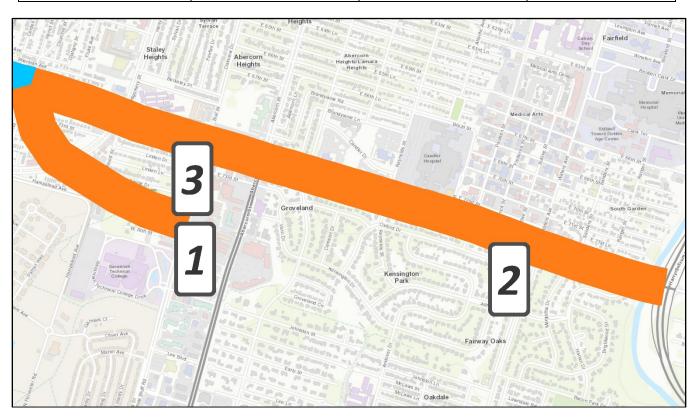
Map Project ID: 3

Total Project Cost: \$10,900,000

Comments: The project complements the interchange modifications at DeRenne Avenue and I-516 and improvements on East DeRenne. This project addresses multimodal accommodation, safety, and the operational efficiency of the facility. Mobility 2045 Plan Goals addressed by the project:

- Safety & Security
- Accessibility, Mobility, and Connectivity
- Environment and Quality of Life
- System performance

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way	\$6,800,000		
Construction	\$4,100,000		



PROJECT NAME: SR 25/US 17 @ Savannah River in Port Wentworth

PROJECT TERMINI: Savannah River

PROJECT TERMINI: Savannah River

PROJECT DESCRIPTION: Bridge replacement

Thoroughfare Type: Minor
Arterial Suburban

Map Project ID: 4

Total Project Cost: \$30,645,255

Comments: Bridge replacement. Mobility 2045 Plan Goals addressed by the project:

- Safety & Security
- Accessibility, Mobility, and Connectivity
- Intergovernmental Coordination
- State of good repair
- System performance

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way	\$80,580		
Construction	\$30,564,675		



PROJECT NAME:SR/US 17 @ Middle River in Port WentworthGDOT PI #: 0013742

PROJECT TERMINI: Middle River

PROJECT DESCRIPTION: Bridge replacement

Thoroughfare Type: Minor Arterial Suburban

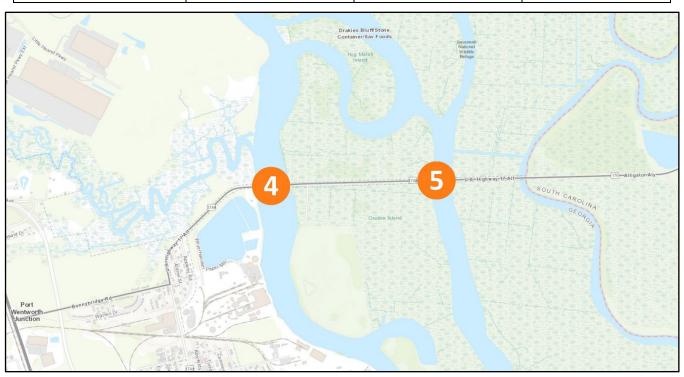
Map Project ID: 5

Total Project Cost: \$30,310,695

Comments: Bridge replacement. Mobility 2045 Plan Goals addressed by the project:

- Safety & Security
- Accessibility, Mobility, and Connectivity
- Intergovernmental Coordination
- State of good repair
- System performance

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way	\$72,420		
Construction	\$30,238,275		



PROJECT NAME: SR 404 Spur/	GDOT PI #: 0015704					
PROJECT TERMINI: Back River	PROJECT TERMINI: Back River					
PROJECT DESCRIPTION: Bridge	replacement					
Thoroughfare Type: N/A	Map Project ID: 6	Total Project Cost: \$1,620,000				

Comments: Bridge replacement. The South Carolina Department of Transportation (SCDOT) is developing this new bridge project in coordination with the Georgia Department of Transportation (GDOT) as a part of the US 17 Widening project. The bridge is located within Chatham County. A new two lane bridge structure would be constructed over the Back River to accommodate the additional travel lanes. The proposed bridge will consist of a 58.5-foot bridge cross section that features two 12-foot lanes, two 10-foot shoulders, a 10-foot multi-use path, and three 1.5-foot parapets. Upon completion of the proposed project, the existing two-lane bridge would accommodate southbound traffic and the new two-lane bridge would accommodate northbound traffic. Mobility 2045 Plan Goals addressed by the project:

- Safety & Security
- Accessibility, Mobility, and Connectivity
- Intergovernmental Coordination
- State of good repair
- System performance

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way			
Construction	\$1,620,000		



PROJECT NAME: SR 404 Spur/US17@ Back River		GDOT PI #: 0015705		
PROJECT TERMINI: NE of Savannah Harbor Parkway				
PROJECT DESCRIPTION: Bridge replacement				
Thoroughfare Type: N/A	Map Project ID: 7	Total Project Cost: \$2,500,000		

Comments: Bridge replacement. SCDOT in cooperation with FHWA and GDOT, proposes widening and improvements of U.S. 17 from Hutchinson Island in Savannah, Chatham County, Georgia to South Carolina (S.C.) 315 located southwest of Bluffton, South Carolina. Approximately 3,000 feet of the project corridor is located in Chatham County, Georgia. The proposed improvements include the widening of U.S. 17 from two to four travel lanes, divided by a grassed median. Mobility 2045 Plan Goals addressed by the project:

- Safety & Security
- Accessibility, Mobility, and Connectivity
- Intergovernmental Coordination
- State of good repair
- System performance

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way	\$500,000		
Construction	\$2,000,000		

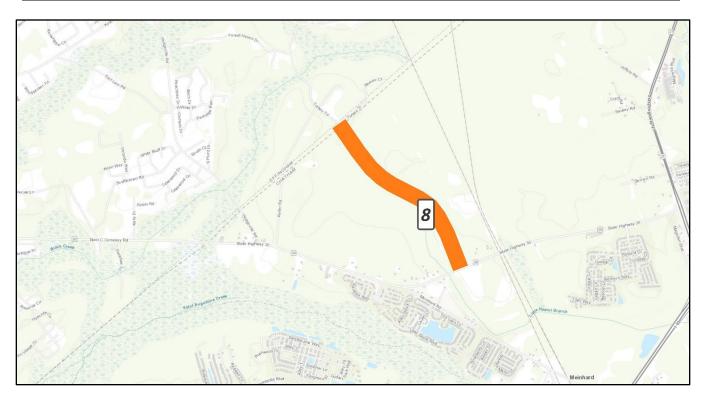


PROJECT NAME: Effingham Parkway from SR 119/Effingham to SR		GDOT PI #: 0006700	
30/Chatham			
PROJECT TERMINI: Effingham County to Meinhard Road			
PROJECT DESCRIPTION: New facility extending from Effingham County into Chatham County at Meinhard Road			
Thoroughfare Type: Minor Arterial Suburban	Map Project ID: 8	Total Project Cost: \$26,184,427	

Comments: This project provides additional capacity and access into Chatham County from Effingham County, primarily serving commuter traffic. The facility will be built as a two lane facility in Cost Band 1 subsequently expanded to a four lane facility. Mobility 2045 Plan goals addressed by this project:

- System performance
- Safety & Security
- Accessibility, Mobility, and Connectivity
- Intergovernmental Coordination

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way			
Construction	\$41,879,134		

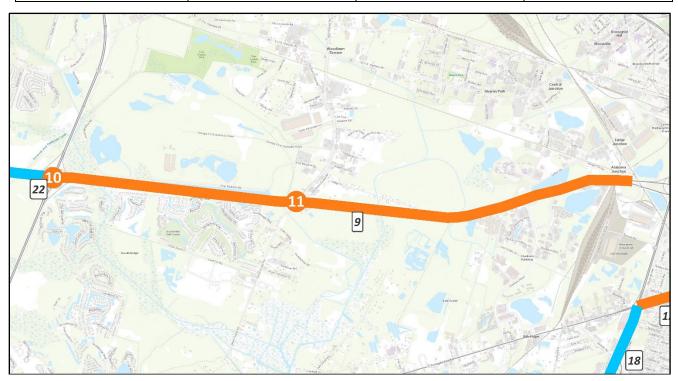


PROJECT NAME: I-16 from I-95 to I-516		GDOT PI #: 0012757	
PROJECT TERMINI: I-95 to I-516			
PROJECT DESCRIPTION: Widening			
Thoroughfare Type: N/A	Map Project ID: 9	Total Project Cost: \$211,900,000	

Comments: This is a much-needed widening project identified in both the CORE MPO plan and GDOT's Chatham County Interstate Needs Analysis and Prioritization Plan and the Statewide Freight and Logistics Plan. Mobility 2045 Plan goals addressed by this project:

- Safety & Security
- State of good repair
- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way	\$6,100,000		
Construction	\$205,800,000		

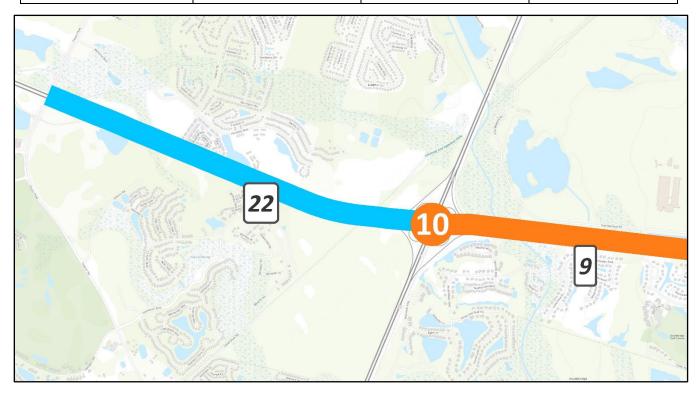


PROJECT NAME: I-16 at I-95 Interchange Reconstruction		GDOT PI #: 0012758	
PROJECT TERMINI: At I-16 and I-95			
PROJECT DESCRIPTION: Interchange Reconstruction			
Thoroughfare Type: N/A	Map Project ID: 10	Total Project Cost: See I-16 Widening I-95 to I-516	

Comments: This project is to reconstruct the interchange at I-95 and I-16. The project will address safety and weaving issues associated with the current configuration and is consistent with the Chatham County Interstate Needs Analysis and Prioritization Plan and the Statewide Freight and Logistics Plan. Mobility 2045 Plan goals addressed by this project:

- Safety & Security
- State of good repair
- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way			
Construction			

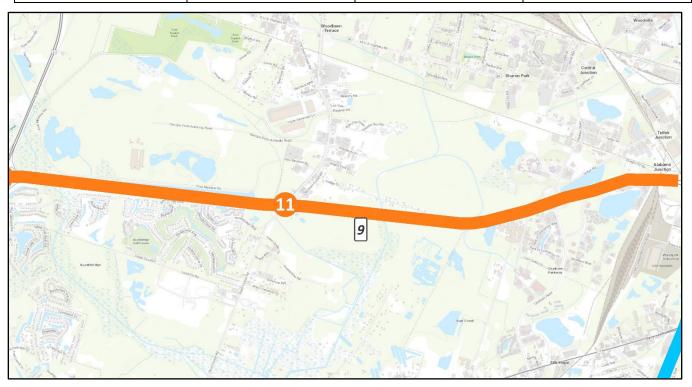


PROJECT NAME: I-16 at SR 307		GDOT PI #: 0013727	
PROJECT TERMINI: at SR 307			
PROJECT DESCRIPTION: Interchange			
Thoroughfare Type: N/A	Map Project ID: 11	Total Project Cost: \$28,155,497	

Comments: The proposed project will provide operational improvements to the 1-16 at State Route 307/Dean Forest Road Interchange. The project includes widening and relocation of the existing ramps and reconstruction to a diverging diamond interchange (DDI). The SR 307/Dean Forest Road bridge over 1-16 will also be replaced. Mobility 2045 Plan goals addressed by the project:

- Safety & Security
- State of good repair
- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way			
Construction	\$28,155,497		



PROJECT NAME: SR 26 From I-516 to CS 188/Victory Drive (US 80 /	GDOT PI #: <u>521855</u>
Ogeochee Pd Widening)	

PROJECT TERMINI: I-516/Lynes Parkway to Victory Drive

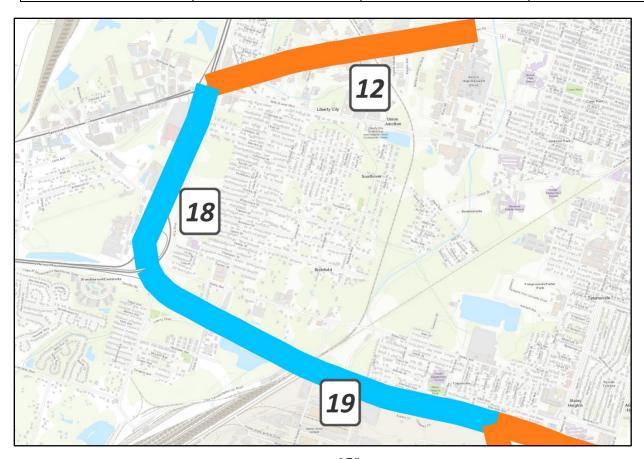
PROJECT DESCRIPTION: Widen SR 26/US 80/Ogeechee Road to four lanes with bicycle lanes and a raised

median

Comments: This project, a priority for the City of Savannah, will provide additional capacity on an evacuation route, increase bicycle and pedestrian safety, as well as vehicular safety, and mitigate flooding issues. Mobility 2045 Plan goals addressed by this project:

- Safety & Security
- System performance
- Accessibility, Mobility and Connectivity
- Environment and Quality of Life

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way			
Construction	\$16,497,481		



PROJECT NAME: Brampton Road Connector from Foundation Drive to	GDOT PI # : 0006328
SR 21/SR 25/US 80	

PROJECT TERMINI: SR 25 to Georgia Ports Authority

PROJECT DESCRIPTION: New four lane facility connecting Brampton Road, Georgia Ports Authority to SR 25, SR 21 and US 80.

Thoroughfare Type:	Map Project ID: 13	
Collector Suburban	Wap Flojectib. 13	Total Project Cost: \$62,016,094

Comments: This project, a priority of the Georgia Ports Authority, provides direct access to the Interstate system for the heavy trucks associated with the Port of Savannah and improves efficiency of the movements of good and freights between the port, intermodal terminal and highway system. This project is consistent with the Statewide Freight and Logistics Plan. Mobility 2045 Plan goals addressed by this project:

- Safety & Security
- System performance
- Accessibility, Mobility and Connectivity
- Environment and Quality of Life

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering	\$1,665,671		
Right-of-Way			
Construction	\$60,350,423		



PROJECT NAME: SR 26/US 80 at Bull River and at Lazaretto Creek	GDOT PI # : <u>0010560</u>
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PROJECT TERMINI: West of Bull River to East of Lazaretto Creek

PROJECT DESCRIPTION: US 80 bridge replacements at Bull River and Lazaretto Creek and roadway safety

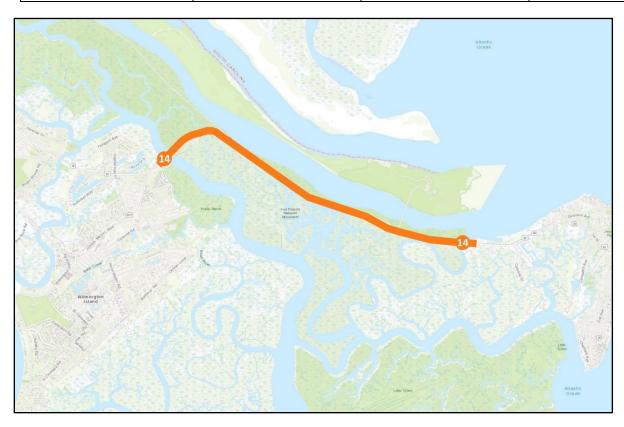
 $improvements\ between\ the\ bridges$

Thoroughfare Type: Major	Map Project ID: 14	Total Project Cost: \$94,999,688
Arterial Suburban	Wap Project ID. 14	• . , ,

Comments: The project improves emergency access and additional capacity for congestion or incident relief; provides access for bicyclists and pedestrian to Tybee Island and McQueens Trail; improves capacity for hurricane or event evacuation and improves conditions of flood prone areas. Mobility 2045 Plan goals addressed by the project:

- Safety & Security
- System performance
- Accessibility, Mobility and Connectivity
- Environment and Quality of Life

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering	\$1,000,000		
Right-of-Way	\$280,500		
Construction	\$93,719,188		



PROJECT NAME: I-16 interchai	nange at Little Neck Road GDOT PI #: N/A		
PROJECT TERMINI: Little Neck Road			
PROJECT DESCRIPTION: Interchange reconstruction			
Thoroughfare Type: N/A	Map Project ID: 15	Total Project Cost: \$32,813,717	

Comments: Interchange reconstruction. Mobility 2045 Plan goals addressed by the project:

- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering	\$2,000,000		
Right-of-Way	\$813,717		
Construction	\$30,000,000		



PROJECT NAME: I-95 at Airways Avenue

PROJECT TERMINI: Airways Avenue

PROJECT DESCRIPTION: Interchange reconstruction

Thoroughfare Type: N/A

Map Project ID: 16

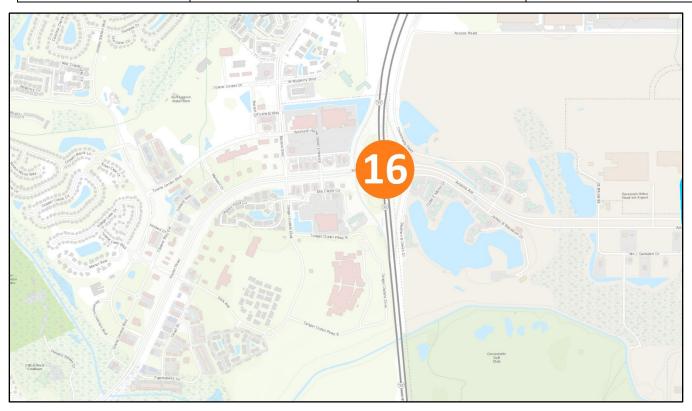
GDOT PI #: N/A

Total Project Cost: \$33,000,000

Comments: Interchange reconstruction. Mobility 2045 Plan goals addressed by the project:

- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering	\$3,000,000		
Right-of-Way			
Construction	\$30,000,000		

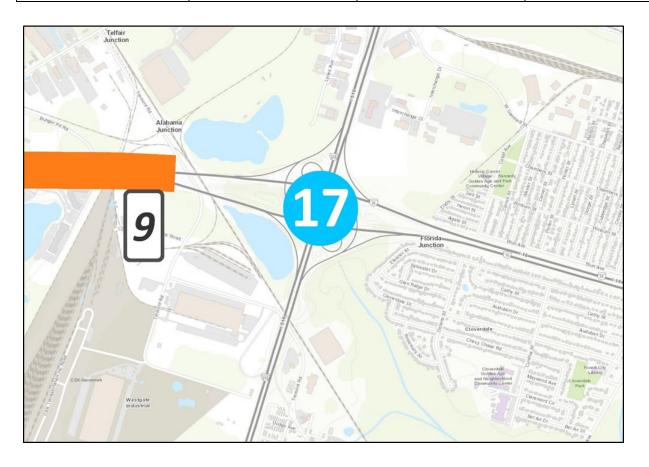


PROJECT NAME: I-516/Lynes Parkway at I-16 Interchange		GDOT PI #: N/A
PROJECT TERMINI: At I-16 and	I-516	
PROJECT DESCRIPTION: Interchange Reconstruction		
Thoroughfare Type: N/A	Map Project ID: 17	Total Project Cost: \$19,788,105

Comments: This project is to reconstruct the interchange at I-516 and I-16. The project will address safety and weaving issues associated with the current configuration and will increase the operational capacity of the interchange, which is utilized by a large number of heavy trucks and is also a designated evacuation facility. Mobility 2045 Plan goals addressed by this project:

- Safety & Security
- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			\$19,788,105
Right-of-Way			
Construction			

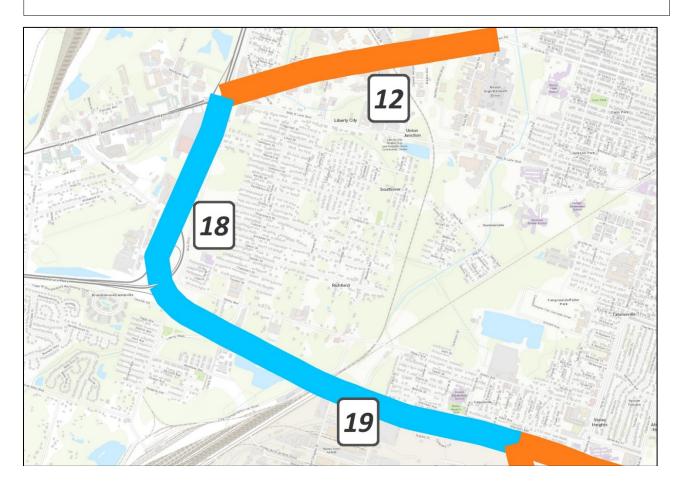


PROJECT NAME: I-516/Lynes P	arkway Widening	GDOT PI #: N/A	
PROJECT TERMINI: Veterans Parkway to Mildred Street			
PROJECT DESCRIPTION: Wider	ı I-516/Lynes Parkway		
Thoroughfare Type: N/A	Map Project ID: 18	Total Project Cost: \$134,097,628	

Comments: This project adds additional capacity in each direction on I-516. I-516 provides access to I-1 for evacuation, as well as access to Hunter Army Air Base. Mobility 2045 Plan goals addressed by this project:

- Safety & Security
- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1	Cost Band 2	Cost Band 3
	2020 - 2027	2028 - 2036	2037 - 2045
Preliminary Engineering		\$12,610,598	
Right-of-Way		\$7,991,650	
Construction		\$113,495,380	



PROJECT NAME: I-516/Lynes Parkway Widening GDOT PI #: 0013160

PROJECT TERMINI: I-16 to Veterans Parkway

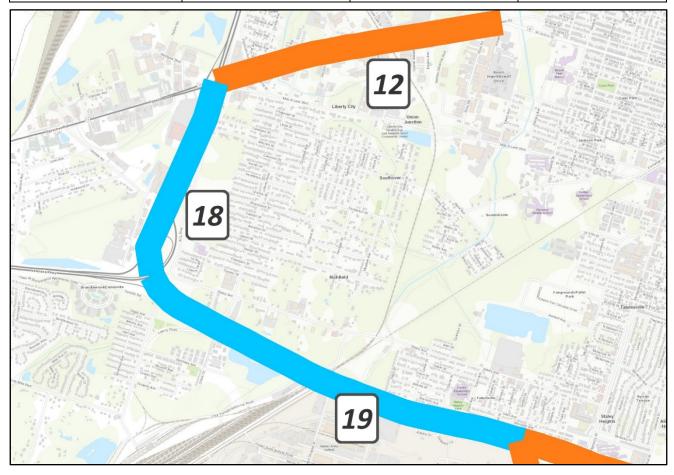
PROJECT DESCRIPTION: Widen I-516/Lynes Parkway

Thoroughfare Type: N/A Map Project ID: 19 Total Project Cost: \$168,133,754

Comments: This project adds additional capacity in each direction on I-516. I-516 provides access to I-16 for evacuation, as well as access to the Port of Savannah area. Mobility 2045 Plan goals addressed by this project:

- Safety & Security
- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering		\$14,270,550	
Right-of-Way			
Construction			\$153,863,204



PROJECT NAME: I-95 at SR 21	GDOT PI #: N/A			
PROJECT TERMINI: I-95 @ SR 21				
PROJECT DESCRIPTION: Full re	construction of the interchange			
Thoroughfare Type: SR 21: Major Arterial Suburban	Map Project ID: 20	Total Project Cost: \$ 193,299,867		

Comments: The project addresses the long term interchange congestion and operational efficiency and increases the ability to move freight more effectively. Preliminary engineering and Right of Way are included in the Cost Feasible Plan; Construction is in the Vision Plan. This project is consistent with the SR 21 study, the Chatham County Interstate Needs Analysis and Prioritization Plan and the Statewide Freight Plan. Mobility 2045 Plan goals addressed by the project:

- Safety & Security
- State of good repair
- System performance

Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering		\$5,137,479	
Right-of-Way		\$83,912,321	
Construction			\$104,250,067



PROJECT NAME: President Stroand Ramp Reconstruction	GDOT PI #: N/A		
PROJECT TERMINI: At President Street / Truman Parkway Interchange			
PROJECT DESCRIPTION: Raise the elevation of President Street and interchange reconstruction			
Thoroughfare Type: Collector Suburban Map Project ID: 21 Total Project Cost: \$98,206,087			

Comments: This project, a priority for the City of Savannah, and in keeping with the civic master plan for the area, addresses capacity issues, congestion, flooding and operational issues along President Street and at the interchange with Truman Parkway. Mobility 2045 Plan goals addressed by this project:

- Safety & Security
- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering	\$9,820,608		
Right-of-Way	\$3,928,243		
Construction	\$84,457,236		



PROJECT NAME: I-16 Widening GDOT PI #: 0015528

PROJECT TERMINI: Pooler Parkway to I-95

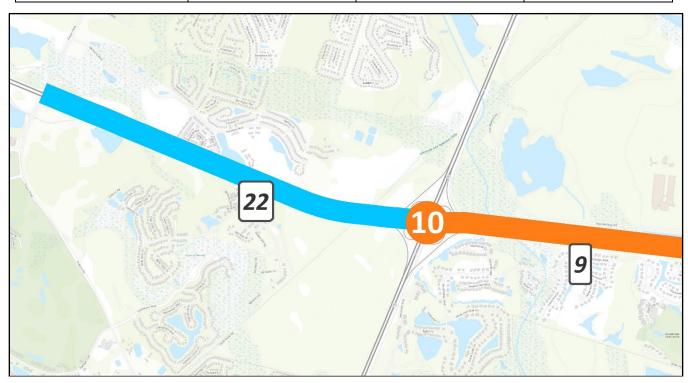
PROJECT DESCRIPTION: Widening

Thoroughfare Type: Map Project ID: 22 Total Project Cost: \$67,370,681

Comments: Widening I-16 between Pooler Parkway and I-95. Mobility 2045 Plan goals addressed by this project:

- Safety & Security
- State of good repair
- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering	2020 - 2027	\$4,508,364	
Right-of-Way			
Construction			\$62,862,317

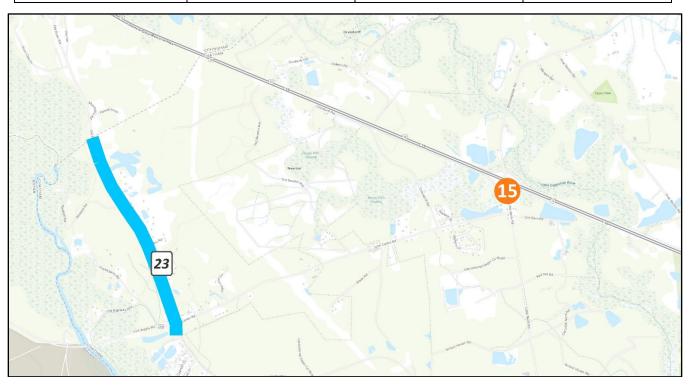


PROJECT NAME: Old River Roa	d	GDOT PI #: N/A	
PROJECT TERMINI: SR 204 and Effingham County/Chatham County line			
PROJECT DESCRIPTION: Roadway improvements			
Thoroughfare Type: Collector - Suburban	Map Project ID: 23	Total Project Cost: \$16,796,887	

Comments: Old River Road Improvements would involve both safety and operational improvements. The current two lane section would be widened to accommodate turn lanes, shoulder widening, as well as drainage improvements. Chatham County anticipates purchasing enough right of way to accommodate a future 4 lane section but anticipates a three lane section will be constructed initially. Mobility 2045 Plan goals addressed by this project:

- State of good repair
- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering		\$1,016,571	
Right-of-Way		\$3,909,890	
Construction		\$11,870,426	



PROJECT NAME: Gulfstrea	am Widening	GDOT PI #: N/A
PROJECT TERMINI: SR 21	to Airways Avenue	
PROJECT DESCRIPTION: W	Videning	
Thoroughfare Type: Collector - Suburban	Map Project ID: 24	Total Project Cost:

Comments: Widening of Gulfstream between Airways Avenue and SR 21. Mobility 2045 Plan goals addressed by this project:

- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			\$6,394,535
Right-of-Way			
Construction			

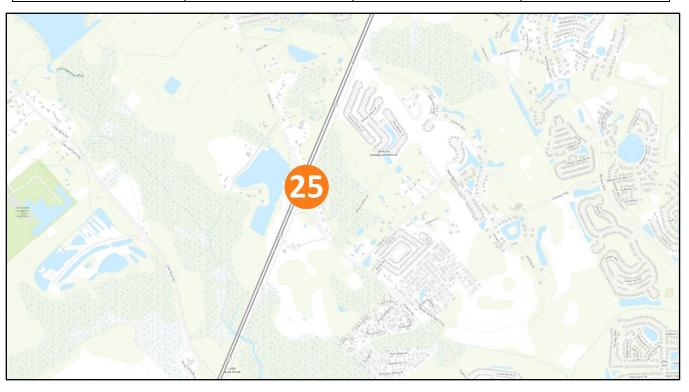


PROJECT NAME: 1-95 at C	Quacco Road Interchange Study	GDOT PI #: N/A
PROJECT TERMINI: 1-95 a	t Quacco Road	
PROJECT DESCRIPTION: I	nterchange study	
Thoroughfare Type: N/A	Map Project ID: 25	Total Project Cost: \$450,000
Commenter Interelegance	structure al atamasina mandal amalaltamastir.	incorporate Mahility 2045 Dlan

Comments: Interchange study to determine need and alternative improvements. Mobility 2045 Plan goals addressed by this project:

- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering	\$450,000		
Right-of-Way			
Construction			

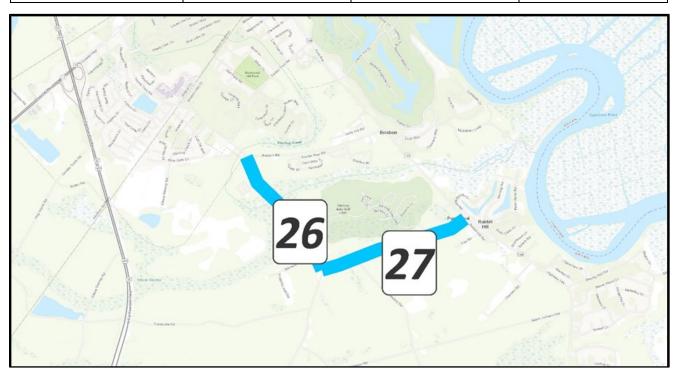


PROJECT NAME: Harris Trail Ro	oad Widening	GDOT PI #: N/A		
PROJECT TERMINI: Timber Tra	PROJECT TERMINI: Timber Trail and Port Royal Road			
PROJECT DESCRIPTION: Widening				
Thoroughfare Type: Collector - Suburban	Map Project ID: 26	Total Project Cost: \$28,970,345		

Comments: Widen Harris Trail Road from 2 lanes to 4 lanes with 20- ft raised median from Timber Trail to Port Royal Road. Mobility 2045 Plan goals addressed by this project:

- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1	Cost Band 2	Cost Band 3
	2020 - 2027	2028 - 2036	2037 - 2045
Preliminary Engineering			\$1,722,918
Right-of-Way			\$5,709,638
Construction			\$ 21,537,789

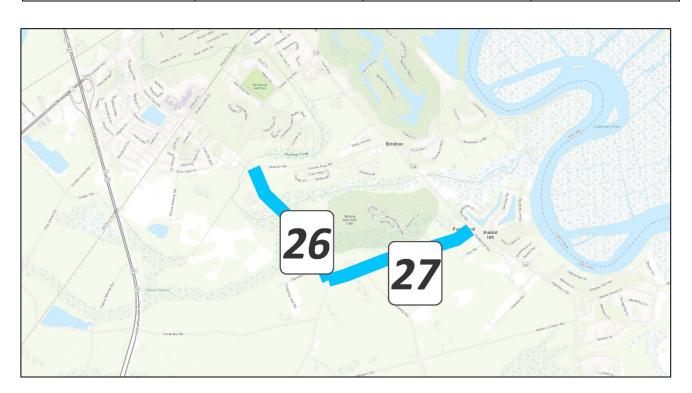


PROJECT NAME: Port Royal Ro	ad Widening	GDOT PI #: N/A
PROJECT TERMINI: SR 144 to H	Harris Trail	
PROJECT DESCRIPTION: Wider	ning	
Thoroughfare Type: Collector - Suburban	Map Project ID: 27	Total Project Cost: \$17,215,152

Comments: Widen Port Royal Road from 2 lanes to 4 lanes SR 144 to Harris Trail Road. Mobility 2045 Plan goals addressed by this project:

- System performance
- Accessibility, Mobility and Connectivity

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering		333 333	\$1,721,515
Right-of-Way			\$5,164,546
Construction			\$ 10,329,091
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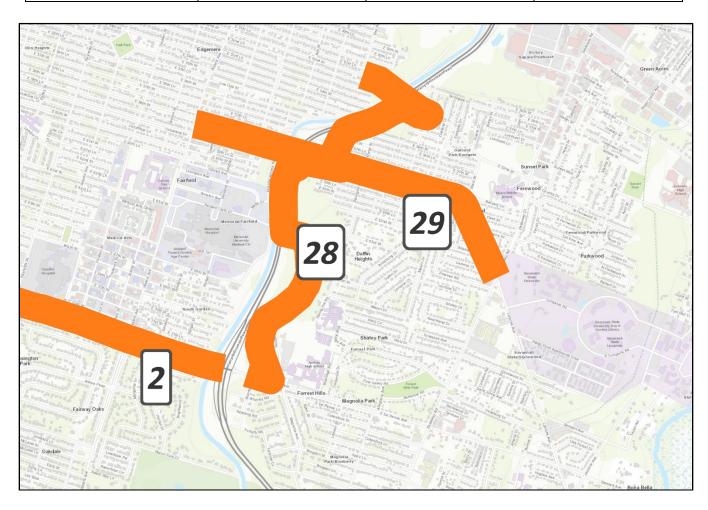


PROJECT NAME: CS 1097/DeLe	esseps/Laroche Avenue	GDOT PI #: 0010028		
PROJECT TERMINI: Waters Ave	PROJECT TERMINI: Waters Avenue to Skidaway Road			
PROJECT DESCRIPTION: DeLesseps Avenue Road and Sidewalk Improvements				
Thoroughfare Type: N/A	Map Project ID: 28	Total Project Cost: \$5,600,000		

Comments: This project involves a minor road widening and curb and gutter for drainage improvements. Sidewalks will be installed, along with crosswalks and pedestrian signals, improving accessibility and safety for pedestrians. Mobility 2045 Plan goals addressed by this project:

- Safety & Security
- Accessibility, Mobility and Connectivity
- Environment and Quality of Life

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way			
Construction	\$5,600,000		

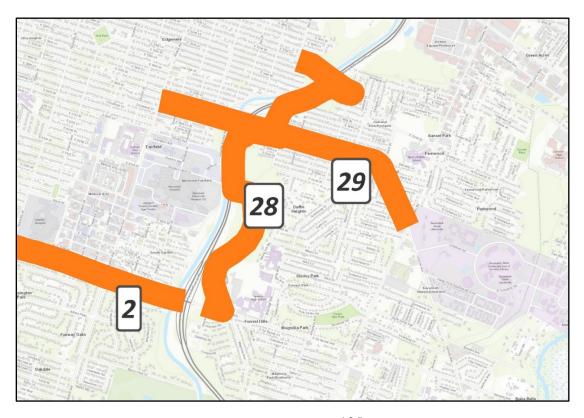


PROJECT NAME: Truman Linea	ar Park Trail – Phase II-B	GDOT PI #: 0015306
PROJECT TERMINI: DeRenne to	o 52 nd Street/Bee Road	
PROJECT DESCRIPTION:		
Thoroughfare Type: N/A	Map Project ID: 29	Total Project Cost: \$5,932,205

Comments: The Truman Linear Park Trail is the demonstration project for initial implementation under the Coastal Georgia Greenway Master Plan. Phase I trail construction is completed. Phase II is proposed as a development of a multiuse trail from Phase I at 52nd Street and Bee Road to Lake Mayer Community Park. Phase II-B will complete the multiuse trail from DeRenne Avenue to 52nd Street/Bee Road, to be implemented by the City of Savannah. The detailed project description is being developed in the concept report. *ADA compliant trail. Mobility 2045 Plan goals addressed by this project:

- Safety & Security
- Accessibility, Mobility and Connectivity
- Environment and Quality of Life

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering	\$25,000		
Right-of-Way			
Construction	\$5,907,205		



PROJECT NAME: Priority bike/ped projects in the Non-Motorized Plan		GDOT PI #: N/A
PROJECT TERMINI:		
PROJECT DESCRIPTION:		
Thoroughfare Type: N/A	Map Project ID: Not Mapped	Total Project Cost: \$12,000,000

Comments: Non-Motorized Improvements Set Aside Policy: Any bicycle, sidewalk or trail project seeking CORE MPO highway funding is considered consistent with the MPO's 2045 Metropolitan Transportation Plan provided that 1) the project is consistent with the adopted CORE MPO Non-Motorized Transportation Plan; and 2) the project has a dedicated local sponsor with local match funding commitment. Mobility 2045 Plan goals addressed by these projects:

- Safety & Security
- Accessibility, Mobility and Connectivity
- Environment and Quality of Life

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way			
Construction	\$3,000,000	\$4,500,000	\$4,500,000

PROJECT NAME: Maintenance	Projects	GDOT PI #: N/A
PROJECT TERMINI:		
PROJECT DESCRIPTION:		
Thoroughfare Type: N/A	Map Project ID: Not Mapped	Total Project Cost: \$232,135,141

Comments: Maintenance Policy: The Georgia Department of Transportation (GDOT) maintains the state highways in Georgia. Maintenance projects in the Savannah area which have been duly selected for funding by the State Transportation Board are considered to be consistent with the CORE MPO's 2045 Metropolitan Transportation Plan. Mobility 2045 Plan goals addressed by these projects:

- Safety & Security
- Accessibility, Mobility and Connectivity
- Environment and Quality of Life
- State of Good Repair
- System performance

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way			
Construction	\$65,143,240	\$79,759,791	\$87,232,109

PROJECT NAME: Transit Improvements/Bus Replacement Set Aside		GDOT PI #: N/A	
PROJECT TERMINI:			
PROJECT DESCRIPTION:			
Thoroughfare Type: N/A	Map Project ID: Not Mapped	Total Project Cost: \$18,200,000	

Comments: Transit Set Aside: based on historic Z230 funding awards, it is assumed that \$700,000 from project revenues will be reserved each year for bus purchase or transit improvements. Implementation of these transit projects will require funding flexing from FHWA to FTA.

Mobility 2045 Plan goals addressed by these projects:

- Safety & Security
- Accessibility, Mobility and Connectivity
- Environment and Quality of Life
- State of Good Repair
- System performance

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way			
Construction	\$5,600,000	\$6,300,000	\$6,300,000

PROJECT NAME: Transit Priority Improvements Using Transit Revenues		GDOT PI #: N/A	
PROJECT TERMINI:			
PROJECT DESCRIPTION:			
Thoroughfare Type: N/A	Map Project ID: Not Mapped	Total Project Cost: \$221,442,236	

Comments: Examples of priority projects include:

- Facility Construction Ferry Maintenance
- Facility Construction Ferry Dock
- Ferry Boat Construction
- Vehicle Replacement/Expansion Fixed Route
- Vehicle Replacement Paratransit
- Intelligent Transit System (ITS)
- Upgraded Farebox and Payment System
- Electric Vehicle Infrastructure
- Passenger Amenities
- Facility Improvement Project ITC
- Facility Improvement Project Gwinnett
- Vanpool Capital
- Park & Ride Capital

Mobility 2045 Plan goals addressed by these projects:

- Safety & Security
- Accessibility, Mobility and Connectivity
- Environment and Quality of Life
- State of Good Repair
- System performance

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way			
Construction	\$\$62,142,529	\$76,085,794	\$83,213,913

PROJECT NAME: Operational Improvements		GDOT PI #: N/A	
PROJECT TERMINI:			
PROJECT DESCRIPTION:			
Thoroughfare Type: N/A	Map Project ID: Not Mapped	Total Project Cost: \$140,178,281	

Comments: Operational Improvements Set Aside: based on the approximate lump sum category percentage of the total revenues in the FY 2018 - 2021 TIP, it is assumed that 9.5% of available project revenues for 2022 - 2045 will be reserved for operational improvements. The 2020 and 2021 lump sum funding amounts in the TIP are used for Operational Improvements for these two years. Mobility 2045 Plan goals addressed by these projects:

- Safety & Security
- Accessibility, Mobility and Connectivity
- Environment and Quality of Life
- State of Good Repair
- System performance

PROJECT PHASE	Cost Band 1 2020 - 2027	Cost Band 2 2028 - 2036	Cost Band 3 2037 - 2045
Preliminary Engineering			
Right-of-Way			
Construction	\$58,271,837	\$39,120,705	\$42,785,738