

BEAUFORT COUNTY TRANSPORTATION COMMITTEE  
2023/2024 TRANSPORTATION PLAN

NOVEMBER 2023



*GOAL: The Beaufort County Transportation Committee (CTC) is to provide the citizens of the county with the best and safest roads, bridges, and sidewalks possible with the funds for which the CTC is responsible for managing.*

## PROGRAM ADMINISTRATION

Members of the CTC shall be appointed by County Council for each of the eleven (11) Council Districts. At the first CTC meeting of each calendar year, a Chairperson and Vice Chairperson shall be elected by the Membership, and the Treasurer shall, subsequently, be appointed by the Chairperson with Committee approval.

Beaufort County staff shall provide the Treasurer with all necessary financial documentation with the most up-to-date projected fund balances and pending expenditures prior to each scheduled meeting. It shall be the responsibility of the Treasurer to provide the Committee documentation of the "C Fund Program" expenditures for the calendar year with the ability to respond to questions concerning past reports and offer guidance on the program financials.

CTC membership shall require that all members of the Committee attend a majority of the annual CTC meetings with minimal, excused absences. Members shall not miss more than two (2) concurrent, unexcused meetings in a single calendar year. Failure to meet the scheduled meeting attendance requirement will necessitate the Chairperson to request that County Council appoint a replacement representative for the respective County Council District.

The listing of 2022/2023 District representatives is attached to this document in Appendix 1.

Communications, coordination, questions, and requests to appear before the CTC should be addressed to the following:

Mr. Kraig L. Gordon, Chairman  
or  
Mrs. Brittanee Bishop, Program and Finance Manager  
Post Office Box 1228  
Beaufort, South Carolina 29901  
Telephone: 843.255.2692

## PROGRAM MANAGEMENT

The mission of the CTC is to work cooperatively with the SCDOT in constructing and maintaining existing and future improvements in Beaufort County in compliance with SCDOT “C” Fund guidelines. Within the Beaufort County maintained roadway system, consideration will be given to improvements to include roadway pavement resurfacing and/or preservation, roadway widening and/or realignment, dirt road paving or rocking, shoulder widening, traffic signs/signals/pavement marking installation and/or maintenance, drainage/intersection/turn lane improvements, and sidewalk/pathway construction.

The CTC will be intentional in meeting the transportation needs of the entire county and state roadway system. Consideration will be given to the distribution of funds and projects among the eleven (11) County Council Districts. The CTC will not utilize an allocation or quota system for the distribution of projects for the political districts and use data such as population, traffic studies, road rating systems, environmental impacts, right-of-way and easement acquisition, numbers of households served, and similar considerations.

Annually, the CTC and the SCDOT District Engineer shall meet and plan a two-year cycle of pavement rehabilitation for state-maintained roadways within Beaufort County. The process shall be focused on the utilization of the principles of the SCDOT Pavement Management System (PMS) as the basis for selecting roadways based on the available funding.

The CTC, through Beaufort County, will rate and evaluate local roads, utilizing the PMS process, in accordance with the approved Beaufort CTC paving and dirt road improvements rating systems and County or State design standards. The CTC will utilize the most recent engineering reporting tools to assist in the development and implementation of a County Roadway Master Plan.

The CTC shall review recommendations presented by the County and will consider proposals submitted by the SCDOT Resident Maintenance and/or Construction Engineer for roadways to be improved and the appropriate guidance shall be provided in the establishment of programs of maintenance, and construction for public roads in Beaufort County.

## PROGRAM METHODOLOGY

Annually, the CTC will allocate “C” Funds for resurfacing, utilizing adopted PMS evaluation procedures or related qualified applications for roadway repair and roadway maintenance of existing County and State secondary paved roads.

In 2016, the CTC implemented Beaufort County’s first PMS, establishing an asphalt pavement rehabilitation management plan. Pavement management is the process of identifying the maintenance/repair needs of the County’s Road network and optimizing the life cycle of the existing pavement conditions. The PMS process incorporates life cycle costs into a more systematic approach to minor and significant roadway maintenance and rehabilitation projects. The needs of the complete system, as well as the budgeting projections, are considered before improvements are implemented. Pavement management encompasses the many aspects needed to maintain a quality pavement inventory and ensure that the overall condition of the Beaufort County Road system will be sustained at an appropriate level.

In 2022, the CTC and Beaufort County staff procured a consulting firm to update the PMS. The CTC's qualified pavement engineering consultant collected, analyzed, and developed of a multi-year work program to assure successful implementation. Specific points of data collection included the roadway conditions, right-of-way data collection such as signage, width, and related information, and the conversion to a Geographic Information System (GIS) that works in concert with the county's public access county mapping system.

Based on the 2022 PMS data, the paved roadway system of the County, the survey reflected that 68% (148.24 miles) of the system is in "good" condition, 26% (48.95 miles) are in "fair" condition, 4% (5.47 miles) are in "poor" condition, and 2.0% (1.58 miles) are in "very poor" condition.

The second phase of managing the pavement system is to develop solutions to the various pavement distress conditions by determining the most cost-effective treatment with the most extended pavement life as the return on capital improvement. In identifying the three treatment alternatives (preservation, rehabilitation, and reconstruction), specific data is measured, and precise pavement values are established.

- Pavement serviceability index (PSI) is used to represent roughness.
- Pavement distress index (PDI) is used to represent distress and,
- Pavement quality index (PQI) is used to represent an overall condition index.

In considering the strategic planning in utilizing the PMS program, having a common rating factor shared by the CTC, County Engineering Department, and SCDOT is critical, and utilizing the "PQI" factor for project selection and discussion has been the most reasonable thus far.

The objective of this process is to define the most appropriate pavement preservation technique viable for the road. Alternatives to be considered include:

	PQI	PCI	CLASSIFICATION	TREATMENTS
<b>PRESERVATION</b>	3.7 – 5.0	85 - 100	VERY GOOD	REJUVENATOR
<b>PRESERVATION</b>	3.0 - 3.6	70 - 85	GOOD	MICRO-SURFACE
<b>REHABILITATION</b>	2.2 - 2.9	60 - 70	FAIR	THIN LIFT
<b>REHABILITATION</b>	1.8 - 2.1	40 - 60	POOR	HOT MIX ASPHALT OVERLAY
<b>RECONSTRUCTION</b>	0.0 - 1.7	0 - 40	VERY POOR	MILL & HMA OVERLAY

In accomplishing the objectives of a county-maintained PMS, the CTC has developed a five-year work program to the targeted roadways with the appropriate pavement preservation technique, averaging a \$2 Million allocation for corrective contractual services.

## PROGRAM PRIORITIES

The Beaufort County transportation system includes assets owned and maintained by several different entities including Beaufort County, local municipalities, and the SCDOT. The CTC has taken the intentional step of not solely using funding for resurfacing but embracing pavement preservation as a tool to make the best use of “C” Funds. As part of this pavement preservation philosophy, the CTC has attempted to look at the county-wide pavement system comprehensively.

- In support of this approach, the CTC has had the previous County roadway pavement analysis updated and the next five years in the pavement management plan developed. The CTC selected a qualified consultant, who in concert with SCDOT, collected pavement distress data on all County owned and maintained paved roadways. The data was analyzed, and each roadway was given a rating based on the state of the pavement and where in the pavement lifecycle it occurred. The rating system mirrors that used by SCDOT. These ratings were then used as part of a prioritization model to fairly and equitably develop the Year 6 to Year 10 fiscally responsible paving plan.
- Similarly, the CTC has worked to develop a 5-Year pavement preservation plan for low-volume SCDOT secondary routes within the County. The County’s consultant reviewed the most recent SCDOT-provided pavement rating data for secondary routes with an ADT of less than 500 vehicles/day. Each road’s assessment and characteristics were factored together to develop a roadway score more applicable to Beaufort County. These ratings were then used to develop a prioritization that was used to develop a 5-Year plan for low-volume SCDOT secondary roads in the County. For 2023, \$1/2 Million will be used to address the needs on low-volume SCDOT secondary roads.
- Pavement preservation and resurfacing plans for SCDOT secondary roads with ADTs between 500 and 2,000 vehicles/day will be determined annually. CTC members from each County Council District will select roadways based on the ratings and data provided by the SCDOT and public input. For 2023, CTC members will bring roads that they deem appropriate to the Committee for assessment and potential funding totaling \$1/2 Million to address the needs on SCDOT secondary roads with an ADT of 500 to 2,000 vehicles/day.

As mentioned above, the primary focus of Beaufort County CTC is to address pavement resurfacing and preservation. The CTC will, however, evaluate other appropriate capital improvement proposals based on the project’s individual merits. The methodologies used to evaluate and determine the selection process of requested improvements will be completed on an annual review basis and will follow the process outlined below:

- With approximately 78 miles of dirt roads and 3.5 miles of rocked roads, an appropriate allocation of the “C” Funds may be used to improve the roadways within the County network. Should the CTC choose to allocate funding towards the paving or rocking of County dirt roads, it shall be with the understanding that the property owners provide the necessary easements and/or right-of-way to complete the project. Requests for paving or rocking may be made by citizen petition to the County, complete with the required signatures of adjacent property owners, granting such right-of-way and/or easements to permit the improvement. Citizen requests shall be submitted during the first quarter of each calendar year, the County

staff will present its technical recommendations to the CTC during the second quarter of each year, and the CTC shall notify the neighborhood representative of the findings during the third quarter of the recommendations.

- Within the boundaries of Beaufort County, there are 339 miles of private dirt roads that fall into several categories of private maintenance.
  - The existing County Council policy (policy statement 15 & 17) outline established guidelines for accepting dirt roadways into the county system. Based upon the excessive cost of accepting and upgrading such private roadways, the CTC requires that all privately maintained dirt roadways shall be brought up to acceptable paved by the County's design standards to include all the necessary right-of-way and drainage easements in advance of consideration.
  - Alternatives for the construction of applicant dirt roadways seeking transfer into the County's roadway system include:
    - Adjoining property owners may wish to create a special tax district in keeping with county guidelines for the construction of such roadways, and/or
    - Property owners may self-procure qualified engineering and construction firms to construct an improved roadway. This development effort should include right-of-way, drainage easements, and construction plans to be County-inspected throughout the project for possible acceptance into the system.

## PROGRAM FUNDING

The self-administered Beaufort County CTC elects to receive its monthly allocation of funds directly from the South Carolina Department of Transportation (SCDOT) Commission. The Beaufort County Treasurer receives the distribution of funds, and the County's Chief Financial Officer provides necessary accounting for such funds in cooperation with the Beaufort County Engineering Department and the CTC Treasurer. To assure the highest level of accountability, program expenditures will only be disbursed upon written approval of the Chairperson and approved by the Committee. The expenditure and documentation of these funds shall be in accordance with the requirements of Code §12-28-2748 (A), including the required allocation to the SCDOT network (minimum of 25% of total funds and earmarked funds for State Funding Year (SFY) 2022/2023. In coordination with Beaufort County staff, the Committee shall approve all final bids for proposed construction at the scheduled meetings, after which the projects move forward for approval to Beaufort County's Public Facilities Committee and County Council. Any projects to be managed by SCDOT shall be submitted to the appropriate personnel at the Department for construction and project management as outlined by SCDOT's guidelines.

The "C" Funds are distributed to each County as part of the annual State Budgeting Process (SBP) in the following manner relative to the baseline data of Beaufort County:

- One-third of total funds are based on the ratio of the land area of the county to the land area of the state. (587 square miles or 1.95% of the state total)
- One-third of total funds are based on the ratio of County population to state population as determined by the latest ten-year census (187,117 county population or 3.65% of the state total), and

- One-third of total funds are based on the ratio of rural roadway mileage in the county to rural road mileage in the state (903 miles or 1.38% of the state total).

The allocations provided by the SCDOT to Beaufort County are structured along the following guidelines:

- Total Beaufort County “C” Funds allocation by the state fiscal year for the SFY 2023/2024 is forecasted to be \$2,661,100.
- SCDOT Donor Funds provided to Beaufort County are apportioned based on a ratio of the County’s user gasoline tax fees contributed more than its “C” Fund apportionment to the total excess contributions of all South Carolina counties. In SFY 2022/2022, Beaufort County Donor Bonus allocation totals \$708,546.14.
- For SYF 2023/2024, the South Carolina General Assembly approved \$20 Million earmarked funds for the Committees, equating to an allocation of \$462,900 for Beaufort County.

To assist with the contingency planning process, it is the policy of the CTC to maintain a \$500,000 reserve fund for unscheduled project requests to assure a timely response to such occurrences. An unscheduled project application shall be presented by the respective CTC district representative to include a petition by the residents, supporting documentation from Beaufort County, photographic documentation of the site conditions, project estimate, and justification based on the PMS rating factor or the County Dirt Road Inventory rating.

When deemed financially beneficial, Beaufort County may provide the following services for each project:

- Design criteria per Beaufort County’s Engineering Design Standards & Specifications.
- Expertise on traffic engineering standards for traffic management and construction practices.
- Annual roadway maintenance operational costs, based upon Public Works or SCDOT data.
- Principles for PMS rehabilitation of paved roadways within the appropriate system.
- Right-of-way and/or easement acquisition for construction and maintenance of Beaufort County’s Road network.
- Procurement of construction contracts.
- Project management, supervision, and/or quality assurance, and
- Compliance with minority and women-owned business requirements under South Carolina Code §12-28-2930.

In 2021, the Committee adopted a procurement threshold policy, where purchases up to \$25,000 may be approved with consensus of the Chairperson, Vice Chairperson, and Treasurer. Purchases exceeding \$25,000 must have majority approval by the Committee members in attendance at a scheduled meeting. All purchases must be in compliance with Beaufort County’s Procurement Code.

Beaufort County conducts all procurement and engineering activities in compliance with applicable South Carolina law and accepted departmental design standards and specifications.

## REVISIONS

The CTC will annually review and revise the County Transportation Committee Plan, make changes, or deletions, and shall be submitted to SCDOT for approval for implementation.

  
Craig L. Gordon, Chairman  
Beaufort County Transportation Committee

Submission to the CTC for review: ~~December XX, 2023~~ <sup>Nov 1, 2023</sup>, CTC Presentation for approval: ~~January XX, 2024~~ <sup>Nov 15, 2023</sup>

### Attachments:

1. 2021/2022 CTC Accomplishments
2. 2022/2023 Beaufort County Committee Roster.
3. Beaufort County Citizens: Petition for Improvements to County Maintained Roads
4. 2016/2017 Five-Year PMS Work Program & 2022 Five-Year Work Program
5. CTC: Petition for Improvements to Publicly Maintained Roads
6. 2022 CTC Dirt Road Inventory.
7. 2021 Resolution 2021/01: Dirt Road Improvements Revised
8. 2022 Five-Year Dirt Road Year Plan
9. County Council Dirt Road Acceptance Policies #15 & #17
10. SCDOT Annual Review Checklist (REVISED)
11. 2022/2023 SC DOT "C" Program Apportionment Spreadsheet
12. 2022/2023 SC DOT "C" Program Earmarked Funds Spreadsheet



## APPENDIX

### ACCOMPLISHMENTS

#### **Over 200 Miles of County Roads Get Higher Rating for Improved Pavement Conditions**



Thursday, July 21, 2022, 2:56 PM

Based on the latest study by F&ME Consultants, the 202 miles of Beaufort County maintained roadways saw its pavement conditions improve from a C to a B over the last five years.

"The County network had never been reviewed before we made the decision in 2017," said Kraig Gordon, Chairman of the Beaufort County Transportation Committee. "We felt the necessity to spend our limited funds wisely, with no political influence and to give the best to the people, visitors and residents alike."

Approximately 60 miles of roadway were improved between the 2017 and 2021 evaluations costing around \$10 million from state gasoline sales tax money. The next five-year plan has about 110 miles of road condition improved at a cost of \$8.5 million.

According to this year's work schedule, no roads will be in the "Very Poor" category.

"The Beaufort County Transportation Committee led by Kraig Gordon has done an excellent job developing a five-year plan to improve all the roadways owned by the County," said Jared Fralix, Assistant County Administrator, Infrastructure. "In the next five years, we know we can get up to an A."

Beaufort County hired F&ME Consultants, Inc. in 2021 to conduct a pavement condition survey on all County-owned roads five years after implementing the 2017 Five-Year Pavement Preservation Program. The results of the study will be included in the 2022/2023 transportation plan.

In the recent survey, almost 200 miles of roadway were determined to be "Fair," "Good," or "Very Good," which means they are serviceable and comfortable for County residents.

"A dramatic improvement was observed in roadways moving to the "Very Good" rating, which is exactly where a program like the one developed in 2017 is expected to show the most improvement and provide the best use of County funds," according to the survey report by F&ME.

The study surveyed 202 miles of Beaufort County maintained roadways in the County, as well as in the City of Beaufort, Town of Hilton Head, Town of Port Royal, and Town of Bluffton. Its purpose was to provide an update on pavement condition; measure the effectiveness of the roadways, preservation methods, and deterioration trends; and form a new five-year plan for pavement maintenance and preservation.

"The success of the 2017 Five-Year Pavement Preservation Program implemented by Beaufort County can already be measured in the 2021 survey," stated F&ME in the 2021 Beaufort County Pavement Condition Survey Report.

Compared to the 2017 survey, which concluded no County roads were "Very Good," 67 miles are now listed in the "Very Good" category. Less than one mile of roadway is still considered to be "Very Poor."