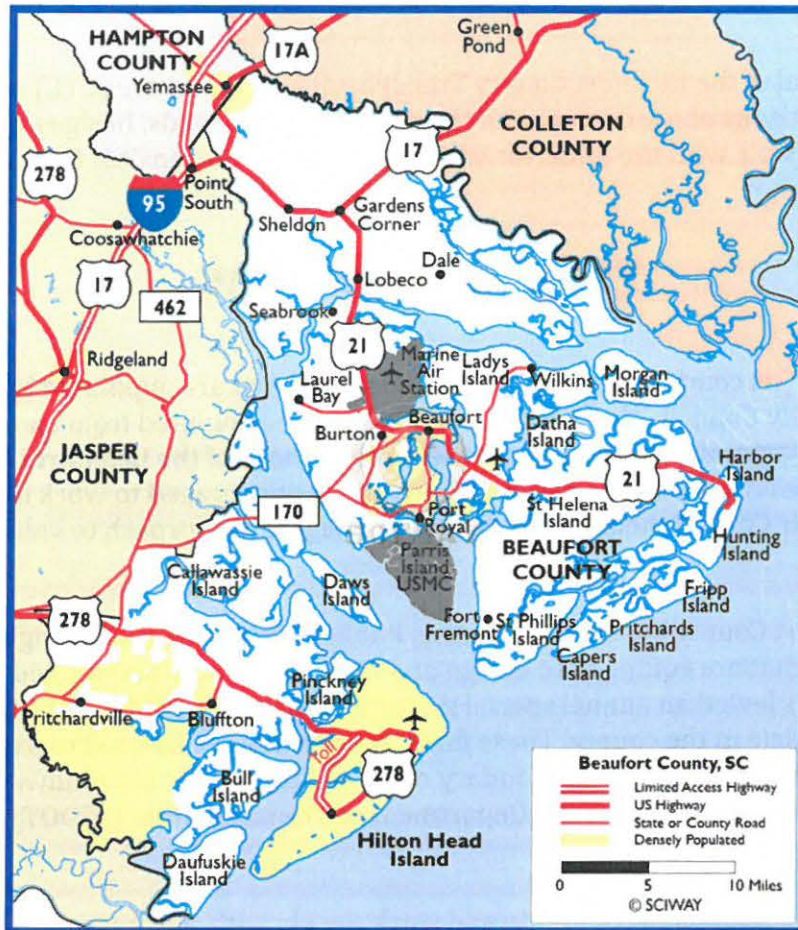


Beaufort County

2018/19 Transportation Committee Plan (CTCP)



Beaufort County 2018/19 Transportation Committee Plan (CTCP)

Program Goal

The goal of 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 are responsible for managing.

Program Overview

The CTC is composed of eleven (11) members that are appointed by the Beaufort County Council. The members of the CTC are appointed from and represent the counties electoral districts that are the same as those of the Beaufort County Council member. All members of the CTC are highly encouraged to work hand in hand with their Council members to assure an integrated approach to voluntary public service.

Beaufort County has an Engineering, Public Works, and Traffic Engineering Departments that are equipped to design and maintain county maintained roadways. The county has levied an annual special motor vehicle tax (TAG) for \$16.50 per registered vehicle in the county. These funds are intended to be used to pave, maintain and improve dirt and secondary roads within the County roadway system, in concert with the South Carolina Department of Transportation (SCDOT) "C" fund allocations.

The CTC intends to cooperate and work closely with the appropriate Beaufort County departments and the administrative staff to provide the necessary guidance for County Council to improve as many roads and other transportation-related facilities as possible with the combined funds allocated.

The CTC also will cooperate and work with the Lowcountry Council of Governments (COG) in the coordination of the Lowcountry Area Transportation Plan (LATS) through involvement in the Transportation Improvement Program (2015-2019 TIP). This Involvement will enhance the CTC mission of prioritizing primary transportation system needs as well as the primary and secondary road system of Beaufort County to best serve the public. The Chairman or the selection of an

alternate representative, of the CTC will provide such coordination with the LATS support staff as a member of the Technical Committee.

The countywide Transportation Plan (TRANS PLAN), as adopted by the CTC, was initially submitted for approval to the SCDOT on February 3, 1994. Annual updates, including this version, will be provided as approved during the last CTC meeting of the calendar year annually for approval by SCDOT in accordance with the current provisions of South Carolina Code of Law Section §12-28-2740 (the C-Fund law passed by the South Carolina General Assembly).



Organizational Structure

The Beaufort County CTC is structured with the election of a Chairperson, Vice Chair and the selection of a Treasurer. The Chairman and Vice Chairperson shall be elected from the majority of the Committee's membership during the first meeting of the Committee of each calendar year. The Treasurer shall be selected annually from the Committee's membership as qualifications dictate and appointed by the Chairperson, with Committee approval.

The County Engineer's office shall provide the Treasurer the necessary financial documentation to the CTC with the most up to date recorded fund balances and pending expenditures of the CTC financial projections concerning CTC programs.

Membership on the CTC will require that all members of the Committee shall attend a majority of the annual CTC meetings with no less than two unexcused meeting attendances in a calendar year. Failure to meet the scheduled meeting attendance requirement shall permit the Chairperson to seek out from County Council the selection of a replacement representative for the appropriate County Council district representative for an appointment.

The listing of district representatives is attached to the plan within the appendices.☐

Program Administration

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

Mr. Kraig L. Gordon, Chairman

Or

Mr. Robert McFee, PE., Division Director for Construction, Engineering, and Facilities

Post Office Box 1228

Beaufort, South Carolina 29901

Telephone: (843) 255.2700



Funding Administration

The Beaufort CTC elects and requests to receive its monthly allocation of funds directly from the SCDOT Commission. The annual distribution of money will be deposited with the Beaufort County Treasurer, which will perform the necessary accounting for such funds, in concert with the County Engineer's Office and the CTC Treasurer. Expenditures will only be dispensed upon written approval of the CTC Chairman or Vice Chairman for projects within the work program and approved by the majority of the CTC Committee membership. The expenditure and documentation of these funds shall be in accordance with the requirements of Code §12-28-2748 (A), including the required spending on the SCDOT system (minimum of 25.0% of total allocated funds), and the CTC Treasurer shall assist in maintaining such official records. The CTC will review all final bids for proposed construction at scheduled meetings of the membership, with a majority of the CTC approving only projects in concert with the Beaufort County Engineer before such CTC projects are presented to the Public Facilities Committee and County Council for approval and projects, are awarded to contractors. SCDOT projects shall be submitted to the appropriate personnel at the SCDOT for agency implementation and project management scheduling.

The SCDOT "C" funds are apportioned to each County as part of the annual July through September state budgeting process in the following manner utilizing the baseline of data as related to Beaufort County:

- One-third of total funds (587 square miles or 1.95%) based on the ratio of the land area of the county to the land area of the state

- One-third of total funds (162,233 county population or 3.51%) based on the ratio of county population to state population as determined by the latest ten-year census, and
- One-third of total funds (1,510 miles or 2.34%) based on the ratio of rural roadway mileage in the county to rural road mileage in the state.

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 is the State Funding Year (SFY) 2018/19 equals \$2,232,400.
- SCDOT donor fund 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. SFY 2018/19 Beaufort County Donor Bonus allocation equals \$356,567.

To assist with the planning process, it is a guideline of the CTC to achieve and maintain a half-million dollar reserve fund for unscheduled program request to assure a timely response to such occurrences. Such application shall be presented by the district representative of the CTC for which the individual request is located to include a completed petition by the residents, supporting documentation from the Director's of Engineering, Public Works or Traffic Engineering to support such a request and photographic documentation of the physical site conditions, project estimate for rehabilitation and prior justification based upon the Pavement Management System's (PMS) rating factors.

Beaufort County, through the Engineering, Public Works and Traffic Engineering may provide when it is cost beneficial to offer the following services for each project:

- Design criteria per the approved Beaufort County design and engineering standards
- Accepted national traffic engineering standards in keeping with SCDOT procedures for traffic management and construction practices
- Annual roadway maintenance operational cost
- Accepted CTC principles for PMS rehabilitation of paved roadways within the appropriate system
- Acquisition of right-of-way (R/W) In the ability to permit construction of the requesting roadway in keeping with Beaufort County Council policy for construction and maintenance procedures.
- Procurement of construction contracts
- Project supervision and quality assurance, and
- Compliance with minority and women-owned business requirements under the current South Carolina Code §12-28-2930.

Beaufort County Engineering, Public Works, and Traffic Engineering conducted their procurement and engineering activities in compliance with applicable South Carolina law and accepted departmental design standards and critique.

Program Priorities

The goal of the CTC is to cooperate with the SCDOT in constructing and maintaining existing, and future roadways in Beaufort County in keeping with the present SCDOT "C" funds minimum funding guidelines (25.0% of the "C" funds received from the SCDOT gasoline tax payments). Within the Beaufort County maintained roadway system, consideration will be given to road improvements to include paving / resurfacing, widening and/or roadway realignment, extending shoulders, traffic signs/signals, intersection improvements, turn lanes, sidewalks and pavement markings. Projects will be prioritized based upon a developed five (5) year plan based upon appropriate rating summary systems prepared in cooperation with the Beaufort County Engineer's office after all pertinent information has been reviewed by the CTC. Additionally, the CTC will evaluate other capital improvement proposals based upon the individual merits of each project based on the appropriate funding sources to address the requested improvement project.☐



The CTC presently utilizes several methodologies to evaluate and determine the selection process for the request for improvements to be accomplished on an annual review basis. Such methods shall include:

- Paving of dirt roads in keeping with the goals of the CTC reflects that Beaufort County presently has 58.0 miles of unpaved dirt roads in the system. One of the CTC's objectives is to improve as many of these dirt roads in the system as

financially possible, with the understanding that the community will provide the necessary R/W. Such a commitment of R/W acquisition is the responsibility of the residents to petition the County Engineer's Office with the required signatures stating the adjacent property owners will grant such R/W to permit the improvement (roadway paving, roadway rocking, etc.) to be completed. Additional standards of prioritization may be utilized in keeping with the establishment of paving dirt roads. Such a neighborhood-based request should be submitted during the first calendar quarter of each calendar year, and the County Engineer will present their technical recommendations to the CTC during the second calendar quarter of each year of all dirt roads requested to be improved upon request submitted. The CTC or their agent shall notify the neighborhood representative of the findings during the third calendar quarter of the recommendations based upon the discussions of the CTC.

Approved projects shall be programmed based upon the annual master plan of the County Engineer's Office has presented to the CTC based on the work program and funding for such construction projects. (Attached is a copy of the necessary documentation to be completed and submitted to the County Engineer's Office.)

- In addressing the assistance to municipalities, and other qualified governmental agencies requesting CTC funding for various construction/maintenance projects, the requesting agency shall provide the County Engineer's Office with a formal request outlining the description of the project, timelines, a complete break down of the estimated cost and percentages of financial participation for the funding requested of the CTC. All projects are to comply with the established guidelines of accepted projects (sidewalks, paving, resurfacing, etc.) as outlined by this organizations established procedures. Such request is accepted on an annual basis during the first calendar quarter in keeping with the timelines of the requesting the paving of dirt roads to permit a structured planning process for allocation of programmed funds under the guidelines of the CTC. Attached is a copy of the necessary documentation to be completed and submitted to the County Engineer's Office.

Pavement Management Systems

In 2016/17 the CTC implemented the utilization of the Pavement Management System (PMS) to establish asphalt pavement rehabilitation and upgrading of the county and SCDOT secondary roadway systems through an established engineering management system. Pavement management is the process of planning the maintenance and repair of the counties road network to optimize the life cycle of 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 and tasks needed to maintain a quality pavement inventory, and ensure that the overall condition of the Beaufort County road system will be sustained at an established level.

As part of the PMS, the county selected a qualified pavement engineering firm to assist as the central project point of data collection, analysis and development of a multi-year work program to assure the successful implementation. Specific points of data collection included the roadway conditions, R/W data collection such as signage, width, and related information and the conversion to a Geographic Information System (GIS) that works in concert with the counties public access county mapping system.



When breaking the paved roadway system down of the county system, the survey reflected that sixty-eight (68%) percent (148.24 miles) of the system is in “good” condition, twenty-six (26%) percent (48.95 miles) are in “fair” condition, four (4%) percent (5.47 miles) are in “poor” condition and two (2.0%) percent (1.58 miles) are in “very poor” condition.

The second phase of managing the pavement system is to address solutions to the various points of inspection by determining the most cost-effective resolution with the most extended pavement life as the return of capital improvement. In identifying the three treatment alternatives (preservation, rehabilitation, and

reconstruction), specific data is measured, and precise pavement values are established in concert with the SCDOT inventory process. Known as Pavement Quality Index (PQI), which takes into consideration:

- 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

When considering all, the objectives are to define a selected process of upgrading the selected segments of the roadway by the utilization of one of several treatments of an upgrade. Alternatives to be considered include:

	PQI	PCI	Classification	LOS	Treatments
Preservation	3.7-5.0	85-100	Very Good	A	Fog seal, rejuvenator
Preservation	3.0-3.6	70-85	Good	B	Slurry seal, chip seal, micro-surface, stress-absorbing membrane interlayer
Rehabilitation	2.2-2.9	60-70	Fair	C	Hot mix asphalt overlay
Rehabilitation	1.8-2.1	40-60	Poor	D	In-place recycling, hot mix asphalt overlay
Reconstruction	0.0-1.7	0-40	Very Poor	E	Full depth reclamation, cement reinforced

In accomplishing the objectives of a managed county maintained pavement management system, the CTC has developed for implementation a five-year work program based upon the improvements to the very poor roadways with the correct engineering principles with an average two-million (\$2,000,000) dollar allocation for corrective contractual services. (Attached in the appendix is the 2017/18 Five Year Program for review.)

Qualified governmental agencies may submit their listings of municipally maintained roads for consideration as part of the CTC's PMS program. Such a

submission will be to list all roadways (starting and ending points) with mapping details for inclusion as part of existing procedures of the PMS evaluation system. Upon successful completion of the pavement evaluation process, municipal roadways may be incorporated into the counties PQI system for future consideration by the CTC to apply the most beneficial life cycle rehabilitation program to be utilized as part of the countywide system.

Dirt Road Acceptance to the System

Within the boundaries of Beaufort County, there are several hundred miles of private dirt roads that fall into several categories of private maintenance. The existing county policy (policy statement 15 & 17) outline established guidelines for accepting such roadways into the county system.

Based upon the excessive cost of accepting and upgrading such private roadways, the CTC recommends that all privately maintained dirt roadways shall be brought up to accepted paved County Engineering Department 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 utilize engineering and construction firms on their own to construct an improved roadway. This development effort should include right of way, drainage easements and construction plan to be inspected in advance and during the construction phase by the appropriate office for possible acceptance into the public system.

Prioritizing Projects

The CTC will use information from the SCDOT, Lowcountry Council of Governments (COG), the Beaufort County Engineering, Public Works and Traffic Engineering Departments, and from the municipalities concerning the condition of secondary roads and bridges in the state and all county systems to determine their appropriateness for capital improvements and/or expansion of the existing transportation-related systems. All qualified agencies wishing to request the utilization of CTC funds shall submit the appropriate project sheets as previously outlined.

Annually the CTC and the SCDOT District Engineering Services shall meet and plan a two-year cycle of pavement rehabilitation for state-maintained roadways in Beaufort County. Such a process shall be focused upon the utilization of the principles of the PMS system as the basis for selecting roadways based upon the available funding.☐



The CTC, through the Beaufort County Engineer's Office, will rate and evaluate all local roads, not in the State system utilizing the PMS process and may choose to solicit recommendations and input from local officials, citizens, and neighborhood associations in accordance with the approved Beaufort CTC paving and dirt road improvements rating systems via established roadway resurfacing procedures, and accepted design criteria for transportation system improvements. 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 Engineer on behalf of County Council 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.

The County Engineer in concert with the CTC will establish on an annual basis the prioritization of projects as part of this report during the fourth calendar quarter for submission to all the appropriate parties of CTC interest.

Equal Consideration


A goal of the CTC is to meet the transportation needs of the entire county and State roadway system to include the municipalities as appropriate. Consideration will be given to the distribution of funds and projects among the eleven (11) County Council districts and including all municipalities within the County based upon accepted CTC engineering guidelines and principles. The CTC will not utilize an allocation or quota system for distribution of projects for the political districts, yet shall use such factors as population, traffic studies, road rating systems, environmental impacts, R/W acquisition, numbers of households served, and similar considerations.

Resurfacing and Rehabilitation of Roadways

The CTC will allocate such funds as it deems appropriate on an annual basis for resurfacing utilizing adopted PMS evaluation procedures or related qualified applications for roadway repair and roadway upkeep of existing secondary State and County pavement roads and bridges.

Revision of the Plan

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



Kraig L. Gordon, Chairman
Beaufort County Transportation Committee

CTC Presentation for approval: November 14, 2018