

SC Office of the Inspector General

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Review of the South Carolina C Program and Road Project Selection and Prioritization Processes

I. Executive Summary

In June 2018, the South Carolina Office of the Inspector General (SIG) initiated a review of the South Carolina C Program at the request of the South Carolina Office of the Governor. The request was based on a finding in the 2017 [SCDOT Structural Efficiencies Study](#), which noted “program development and project selection is ultimately at the discretion of the CTCs [county transportation committees] in each County as there is no prescribed or consistent methodology in place for assessing asset conditions or determining needs and priorities.”

The scope and objectives of this review were to assess the South Carolina Department of Transportation’s (SCDOT) C Program oversight role, with a focus on the project selection and prioritization processes employed by the state’s 46 separate county transportation committees (CTC). It was further an objective to identify the best practices utilized by a representative sampling of the CTCs for possible consideration or adoption by the other CTCs in order to provide for a consistent and coordinated approach among the 46 CTCs in addressing recurring maintenance of the state’s public road system.

The state’s public road system consists of 163,000 lane miles¹ of roadway. The SCDOT maintains the majority of the state’s public road system (91,000 lane miles), which consists of interstates, primary, and secondary roads, commonly referred to as the “state roads.” The balance of the public road system consists of 72,000 lane miles of local roads, which are maintained by the local governments. While many of the road maintenance projects a citizen might observe in their community are being carried out by SCDOT, other entities such as county and municipal governments, and the CTCs carry out road projects on the public road system.

The majority of the funding for maintenance and improvement of public roads comes from two sources - federal highway funds and the state motor fuel user fees, or “gas tax.” The C Program was created in 1946 to direct a portion of the gas tax revenue to local governments to address local road needs, with the county legislative delegations responsible for approving the expenditure of the funds. The C Program in its present form dates from 1994 when the [C Program Statute](#) (SC Code of Laws, §12-28-2740) was amended to create the CTCs and transfer the authority for expending C Program funds to those bodies.

The C Program funding is allocated to the CTCs based on the ratios of three factors to state totals – county land area, county population, and county rural road mileage. The “donor county adjustment” provides additional funding to those counties that collect more gas tax than they would receive from the initial calculation. A total of \$92 million was apportioned to the CTCs for fiscal year (FY) 2018, which is projected to increase to \$139 million by FY2022 due to legislated increases in the gas tax. In FY2018, the C Program funding varied from \$592,600 for Allendale County to \$6,520,605 for Greenville County. The CTCs are required to spend a minimum of 25% of their average biennial funding on state roads, and most CTCs limited their projects to state secondary and local road upkeep. Overall, CTCs have expended 50% of their funds on state roads.

¹ The total area of a roadway vs. its linear measure.

The C Program statute requires the CTCs to expend their funds based on a countywide transportation plan, but the statute does not provide any specific requirements for the plan. The Legislative Audit Council's *[A Review of the SC Department of Transportation](#)* report included the finding that most plans lacked details and had not been updated in many years. The SIG identified ten CTCs as a representative sampling group of a cross section of both urban and rural counties whereby the SCDOT administered the C Program funds on behalf of the CTC or the CTC self-administered their funding. There was improvement in the plans reviewed by the SIG with five recently updated to include detailed information on their processes, but the remaining five had not been updated in six or more years and did not provide specifics.

The SIG's review confirmed there were differences in the CTC's processes. However, among the CTCs interviewed and processes reviewed, there was consistency in the types of projects undertaken and in the use of similar, objective criteria for evaluation and prioritization of projects. In addition, those CTCs also made use of road condition data maintained by SCDOT, county governments, or municipal governments. The variation in the processes appeared more related to the availability of resources, comprised of a combination of both funding and the availability of technical staff and automated systems in their county governments.

The SIG identified five best practices in use by the CTC sampling group and SCDOT. The first was the use of a transportation asset management plan (TAMP). The TAMP strategy concept is being adopted by state departments of transportation and is now a federal requirement for the management of roads and bridges on the National Highway System. The American Association of State Highway and Transportation Officials defines the TAMP as:

“...a strategic and systematic process of operating, maintaining, upgrading, and expanding physical assets effectively throughout their life cycle. It focuses on business and engineering practices for resource allocation and utilization, with the objective of better decision making based upon quality information and well-defined objectives.”

An asset management strategy's goal is the selection of projects to achieve a defined transportation system condition and maintain that condition over the life of the system's assets at minimum cost. It is the opposite of a reactive focus of simply addressing the “worst first.”

The second best practice was maintaining an updated countywide transportation plan that provided detailed information on a CTC's project selection and prioritization process. The better transportation plans included information on the types of projects under consideration, the amount of funds allocated to the different types of projects, the CTC's prioritization criteria, and a current prioritized list of approved projects.

A third best practice was the use of a comprehensive inventory of roadway condition data to aid decision makers in determining the ideal strategies to maintain roadways in good condition.

A fourth best practice utilized by the CTCs was an automated pavement management system built on road condition and usage data. This information provides substantial benefit to the CTC, if resources permit its use. The SCDOT and at least one CTC utilized this system, which aided decision makers in determining the ideal strategies to achieve or maintain roadways in good condition over their life at the least cost.

The fifth best practice was the use of formal advisory committees to the CTCs to screen and evaluate projects. Those committees were comprised of technical personnel as well as stakeholders representing different entities in the counties, which, by their involvement, added objectivity to the process. Participation on the committees by SCDOT, county and municipal government personnel had the added benefit of improving coordination and communication among those entities performing road projects within a county.

The 2017 *SCDOT Structural Efficiencies Study* recognized Charleston County and the Charleston CTC as having successfully adopted a process based on an asset management strategy, which the study recommended could be used as a model for other CTCs. The Charleston CTC's use of pavement condition data in conjunction with their pavement management system and asset management strategy undoubtedly required time and resources to develop. It may not be realistic to expect all CTCs to have the capacity to develop a process comparable to the level of the Charleston CTC, and the cost may not be justified.

One way to achieve a common process among CTCs may be for SCDOT to add local road data to its systems, thereby allowing SCDOT to provide project selection and prioritization data to the CTCs for all roads in the counties. Significant resources would be required to collect consistent local road data statewide. However, the benefits of such an undertaking may be a shared vision for a coordinated transportation program that addresses all statewide needs (a recommendation of the *Study*), increased rigor and value of the C Program, and more coordination and cooperation in addressing the state's transportation needs. It may be beneficial to conduct a study to determine if the benefits of such an undertaking outweigh its costs.

The CTC sampling group provided valuable insight into the diverse approaches undertaken to prioritize and execute their respective C Program projects. This group also provided additional insight and recommendations to improve the C Program statewide. (*CTC Recommendations for C Program Improvement*)

The SIG extends its appreciation for the cooperation and courtesies provided by the Aiken, Barnwell, Charleston, Edgefield, Greenville, Laurens, Orangeburg, Pickens, Richland, and Spartanburg CTCs, and the SCDOT staff who participated in this review.

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II. Background

A. Predicate

In June 2018, the South Carolina Office of the Inspector General (SIG) initiated a review of the South Carolina C Program at the request of the South Carolina Office of the Governor. Specifically, the request was based on a finding in the 2017 *SCDOT Structural Efficiencies Study* (pg. 69), which noted “program development and project selection is ultimately at the discretion of the CTCs [county transportation committees] in each County as there is no prescribed or consistent methodology in place for assessing asset conditions or determining needs and priorities.”

B. Scope and Objectives

The scope and objectives of this review were to assess the South Carolina Department of Transportation’s (SCDOT) C Program oversight role, with a focus on the project selection and prioritization processes employed by the state’s 46 separate county transportation committees (CTC). It was further an objective to identify the best practices utilized by a representative sampling of the CTCs for possible consideration or adoption by the other CTCs in order to provide for a consistent and coordinated approach among the 46 CTCs in addressing recurring maintenance of the state’s public road system.

C. Methodology

The SIG coordinated with SCDOT senior leadership and the SCDOT C Program Administrative Office (C Program Office) to gain an in-depth understanding of the program’s history and operation. The SIG identified ten CTCs as a representative sampling group of a cross section of both urban and rural counties whereby the SCDOT administered the C Program funds on behalf of the CTC or the CTC self-administered their funding. The SIG conducted interviews of the ten CTCs’ senior leadership or chief administrator, and reviewed each CTC’s countywide transportation plan and other C Program data. Interview topics included the structure and operation of the committee; transportation system responsibility; sources of projects; funding priorities; funding allocations; prioritization processes; prioritization criteria; project management and funds management arrangements; relationships with SCDOT; communication with the public; and recommendations to improve the C Program.

III. South Carolina C Program Background and Operation

The state’s public road system consists of 163,000 lane miles² of roadway. The SCDOT maintains the majority of the state’s public road system (91,000 lane miles), which consists of interstates, primary, and secondary roads, commonly referred to as the “state roads.” The balance of the public road system consists of 72,000 lane miles of local roads, which are maintained by the local governments. While many of the road maintenance projects a citizen might observe in their community are being carried out by SCDOT, other entities such as county and municipal governments, and the CTCs carry out road projects on the public road system.

² The total area of a roadway vs. its linear measure.

The two largest revenue sources dedicated to road and bridge maintenance and improvement are federal highway funds and the state motor fuel user fees, or “gas tax.” The C Program was created in 1946 to direct a portion of the gas tax revenue to local governments to address local road needs, with the county legislative delegations responsible for approving the expenditure of the funds. The C Program in its present form dates from 1994 when the [C Program Statute](#) (SC Code of Laws, §12-28-2740) was amended to create the CTCs and transfer the authority for expending C Program funds to those bodies.

The C Program statute specifies the county legislative delegation as the appointing authority of the CTC membership, and that the composition of the CTC must provide fair representation from municipalities and unincorporated areas of the county. In five of South Carolina’s 46 counties, the legislative delegations have transferred appointment power to the county councils, and in seven other counties, the county councils serve as the CTCs.

Each CTC receives C Program funding based on an allocation formula set forth in the statute since 1994. This allocation formula apportions the funding based on the ratios of three factors to statewide totals – county land area, county population, and county rural road mileage. The “donor county adjustment” provides additional funding to those counties that collect more gas tax than they would receive from the initial calculation. In fiscal year (FY) 2018, the state’s CTCs received \$92 million in C Program funding, which is projected to increase to \$139 million by FY 2022 due to legislated increases in the gas tax.

Each CTC must expend its funding based on a countywide transportation plan reviewed and approved by the SCDOT and adopted by the CTC. State statute requires each CTC to expend a minimum of 25% of the biennial averaging of expenditures on state roads. In recent years, CTCs have spent on average 50% of the funding on state roads. The SC Code of Laws further provides the uncommitted balance of funds carried forward by a CTC, cannot exceed 300% of its prior year funding. By statute, each CTC must utilize a public procurement process, to include the use of competitive sealed bids and the advertisement of all projects.

The South Carolina Office of the State Treasurer (STO) holds and invests the gas tax funds, with the interest earnings accruing to the benefit of the CTCs. The SCDOT administers the funds for 27 CTCs through its C Program Office. This program administration includes the payment of obligations, financial accounting, and the retention of CTC project records. For this service, the SCDOT charges each CTC three percent (3%) of its C Program funding. Under this arrangement, the funds for SCDOT-administered CTCs continue to be held and invested by the STO until expended. The remaining 19 CTCs self-administer their C Program funding, with the funding distributed directly by the STO to these CTCs on a monthly basis. These CTCs typically receive administrative services from their county governments or, in at least one instance, an outside accounting firm for their C Program funding.

Each self-administered CTC is required to provide project reports to the C Program Office, which compiles the reports into a statewide report submitted to the General Assembly annually. The C Program Office is required to perform reviews of the 19 self-administered CTCs to ensure compliance with the statute’s provisions pertaining to spending and the types of projects undertaken. For the 27 SCDOT-administered CTCs, this information is captured through its service agreement with these CTCs. While not technically an annual audit, the C Program annual report provides a compilation of the key metrics for each CTC.

Each CTC relies on outside entities to carry out many of its duties. All projects require some degree of design, engineering, contracting, project supervision, inspection, and material testing. The SCDOT provides those services to all CTCs on state road projects, and charges various fees depending on the type of service. In certain instances, a local government or consultant may provide those services to the CTCs on state road projects, with SCDOT's approval. The CTCs must engage outside consultants to provide those services for local road projects or utilize the services of a local government. Nine CTCs interviewed by the SIG utilized county governments for those services and one CTC contracted with a consultant to manage its program.

IV. C Program Facts Determined

A. Recent Reviews of the C Program

Over the past three years, two organizations have been engaged in comprehensive reviews of SCDOT, and both devoted significant portions of their reviews to the C Program, which included a number of findings and recommendations.

The Legislative Audit Council (LAC), in its [April 2016 audit report of SCDOT](#), devoted an entire chapter to the C Program (Chapter 7 – The C Program). The LAC audit identified several C Program findings and made recommendations for implementation by the SCDOT, as well as other recommendations requiring statutory changes. The most significant findings fell into several principle areas: the structure and composition of the CTCs (lack of defined terms of office, member qualifications); the lack of specific requirements for the composition of countywide transportation plans; lack of consistency in project selection and prioritization; and findings concerning SCDOT's fees assessed to the CTCs for project management.

Among the recommendations included in the LAC audit were:

- Amend the statute to establish terms of office and minimum qualifications for CTC members;
- Amend the statute to require CTCs provide details of projects in their plans and prioritize the projects for their plans;
- Amend the statute to require updated countywide transportation plans every two years, and that the plans be made conspicuous to the public and published on county government websites; and
- SCDOT should regularly review their C Program fee structure to ensure the fees collected reflect the actual costs incurred.

The [SCDOT Structural Efficiencies Study](#), conducted pursuant to a South Carolina budget proviso 114.145 (FY 2017) and published in December 2017, also addressed the C Program and included a number of findings and recommendations. The goal of the study was to make the SCDOT operate more effective and cost-efficient. Part of the study was the engagement of SCDOT with other state entities undertaking transportation projects with the goal of improving communication and coordination to assure consistent and complimentary efforts in addressing needs statewide. As a result, the study's scope included "[Relationships with Other South Carolina Transportation Entities](#)" as one of seven key areas of focus.

The study found there was no prescribed or consistent methodology in place for assessing asset conditions or determining needs and priorities by the CTCs, and most CTCs selected projects on a reactive basis, addressing the worst roads first, as opposed to using a data-driven asset management strategy to maximize the benefit of their expenditures. The study also found there was extensive engagement and coordination between SCDOT District staff and the CTCs, with District staff providing the CTCs and counties pavement condition information from SCDOT's Pavement Management System for state road projects.

The *Structural Efficiencies Study* recommendations included the following for SCDOT's C Program oversight:

- Endeavor to develop a shared vision for a transportation system that addresses statewide needs by collaborating with local agencies on strategic and long-range processes;
- Increase the engagement of SCDOT District offices with local governments through providing data, engineering expertise, and experience to guide project selection decisions to improve transportation system performance;
- Sponsor workshops for local governments on the potential of utilizing asset management to add value to the C Program expenditures, and consider developing an asset management template for interested counties that could be replicated; and
- Promote the use of data-driven methodologies by the counties for determining infrastructure needs with the goal of implementing a common process for developing work plans to enable the CTCs to make better-informed decisions.

B. CTC Group Sampling Comparison

Allocation Formula

The funding formula that factors land area, population, and rural roads combined with the donor county adjustment produces a wide variation in funding ranging from \$592,600 (FY2018) for Allendale County to \$6,520,605 for Greenville County.

Transportation Systems

The CTCs reviewed by the SIG had considerable variations in road mileage responsibilities. Road mileage is measured in two ways – centerline miles or the length of the roadway, and lane miles, which represents the entire surface area of the roadway. Lane miles relate more directly to road repair and rehabilitation cost than centerline miles. Most CTCs either limited their projects to the repair and renovation of state secondary roads and local roads, or it was their top priority. Of the CTCs reviewed, lane miles of secondary and local roads varied from 1,361 miles (Barnwell) to 6,765 miles (Greenville).

The following table provides a comparison of lane miles and C Program funding for each of the CTCs reviewed:

	State Secondary Lane Miles	Local Lane Miles	Combined Secondary & Local Lane Miles	FY2018 C Program Funding
Aiken	2,350	2,628	4,978	\$2,878,779
Barnwell	891	470	1,361	\$823,500
Charleston	1,812	1,638	3,450	\$5,658,124
Edgefield	936	479	1,415	\$871,300
Greenville	2,230	4,535	6,765	\$6,520,605
Laurens	1,521	1,233	2,754	\$1,529,200
Orangeburg	2,259	2,325	4,584	\$2,405,500
Pickens	955	2,513	3,468	\$1,704,900
Richland	2,610	3,547	6,157	\$4,698,699
Spartanburg	1,848	4,200	6,048	\$4,902,550

Source: SCDOT

Transportation Plans

The C Program statute requires the development of a countywide transportation plan, approved by SCDOT and adopted by the CTC as the basis for spending the C Program funding. There are no statutory requirements for what is included in the plan or how often it must be updated. The LAC report noted many of the plans they reviewed were general in nature and lacked specifics on how the funds were spent. Only one plan they reviewed contained a priority list that ranked the types of projects to be funded, and most had not been updated in the five years prior to the audit. The SIG determined five CTC transportation plans provided more specificity on project prioritization and were updated in the last three years. The remaining five plans of the group sampling carried dates from 2010 and 2011.

CTC Project Selection and Prioritization Processes

The SIG found there was more consistency in project selection and prioritization among the CTCs reviewed than was expected based on the findings of the LAC Audit and the *SCDOT Structural Efficiency Study*. Project selection was limited to the repair and resurfacing of secondary and local roads by eight of the ten CTCs in the sampling group. Once projects met the criteria for consideration, all of the CTCs reported their selected projects had undergone evaluation and initial prioritization using some level of objective criteria, typically by some other entity such as SCDOT, a county, or a municipal government. Each CTC then prioritized its list using its own criteria, which, in smaller more rural counties, often included CTC members driving the roadways either individually or in a group to further assess the projects. Nine CTCs reported making subsequent changes in priorities based on economic development requests or emergency needs.

One chairperson of a more rural county CTC advised their process had been reactive, but was changing to a more proactive data-driven, objective approach. In the last year, this CTC requested a list from SCDOT of its ten highest ranked projects (within the CTC's budget) and a similar list of local roads from their county's

government. The CTC then consolidated the lists and scored them using criteria the SIG found to be common to most CTCs in the sampling group, which included pavement quality index, number of homes/businesses, traffic volume, schools/hospitals, emergency vehicle ingress/egress, public transportation access, and cost. This specific CTC's process will be enhanced by a recent consultant-developed comprehensive inventory of all local roads in the county, which included data on pavement condition for each road segment.

The level of sophistication in the use of data and systems for objective analysis appeared driven more by the availability of resources, typically provided by county public works departments, or in the case of one CTC, a consultant who manages their program. The Charleston CTC with its reliance on the Charleston County Public Works Department appeared to have the most extensive data-driven process. However, all CTCs interviewed utilized some level of objective data analysis at some point in the decision making process from either county/municipal governments or outside consultants.

Project and Funds Management Arrangements

The SCDOT provided C Program funding management for 27 CTCs. Of the self-administered CTCs in the sampling group, five received funds management services from their respective county governments and one CTC contracts with an accounting firm. The self-administered CTCs maintained C Program funds in separate bank accounts segregated from county funds and under the signature authority of the CTC's officers.

CTC-funded projects on state roads received project management from SCDOT, unless a local government entity or consultant was approved by SCDOT to manage the project. Project management on local road projects was either provided by the county or municipal government that owned the road, or by outside consultants.

C. Technical Advisory Committees

Three CTCs in the sampling group utilized formal technical advisory committees – Greenville, Richland, and Spartanburg. Greenville's Technical Advisory Committee consisted of engineers and planners from SCDOT, county, and municipal governments. This non-voting committee screens, evaluates, and initially scores all proposed projects.

The Richland CTC's Technical Advisory Committee is also non-voting and is comprised of engineers, maintenance personnel, project managers, and other road construction experts. This committee screened all projects proposed to the CTC. The improvement of coordination and communication among the various entities undertaking projects in Richland County was noted by the CTC as a secondary benefit of the committee.

Spartanburg's Technical Advisory Committee has a broad membership consisting of engineers, planners, and maintenance personnel, but also public officials including city and county officials and the SCDOT commissioner from Spartanburg's SCDOT district. The committee screened all proposed projects, and no project was considered by the CTC unless approved by the technical advisory committee.

All other CTCs interviewed received some level of technical assistance and advice but not from a formal, constituted group with specific project screening and prioritization duties.

D. CTC Relationships with SCDOT

Coordination and Communication

All CTCs in the sampling group reported some level of participation by SCDOT in their processes, which involved SCDOT's (county) resident maintenance engineers and SCDOT district staff attending meetings, or formally sitting on committees up to and including SCDOT's commissioner for Spartanburg's SCDOT district who sits on the Spartanburg's Technical Advisory Committee.

Availability of SCDOT Data and Technical Assistance

All CTCs in the sampling group reported having access to SCDOT data; but one noted additional data would be helpful.

SCDOT C Program Administration

All CTCs advised the SCDOT C Program office was beneficial and provided good service and support. Several of the self-administered CTCs noted the required reviews were thorough, and one noted, "It's not an audit, but it is."

SCDOT C Program Fee Structure

Several CTCs expressed the opinion SCDOT's project management fees on state road projects funded by the CTCs were too high. They advised the fees charged for similar work by local governments or consultants were half (or less) of the SCDOT fees. Two SCDOT-administered CTCs noted they were considering becoming self-administered because they felt the 3% SCDOT funds administration fee was too high. By saving the fee or a portion of it, they would be able to devote the savings to more projects.

V. Best Practices Identified

A. Adoption of a Transportation Asset Management Strategy

Asset Management Strategy is a relatively new concept to governmental entities charged with the responsibility of maintaining large transportation infrastructure. The American Association of State Highway and Transportation Officials define transportation-related asset management as follows:

"Transportation Asset Management is a strategic and systematic process of operating, maintaining, upgrading, and expanding physical assets effectively throughout their lifecycle. It focuses on business and engineering practices for resource allocation and utilization, with the objective of better decision making based upon quality information and well-defined objectives."

All state DOTs are now required to adopt a Transportation Asset Management Plan (TAMP) for roads and bridges on the National Highway System. The SCDOT's TAMP has been submitted to the Federal Highway Administration for approval. The aim of asset management is to provide a structured approach to roads

maintenance to enable DOTs to operate, maintain, and restore their highway assets to meet key performance requirements over their life cycles at the least cost.

The *SCDOT Structural Efficiency Study* noted Charleston County had been successful in adopting an asset management strategy for its C Program and recommended its use as a model for other CTCs. The Charleston CTC allocates up to 80% of its funding to its “Priority No. 1,” which is defined as follows:

“The CCTC [Charleston County Transportation Committee] desires to maintain the paved road system in Charleston County in a good condition by systematically utilizing preservation, rehabilitation, and reconstruction techniques to keep our good roads in good condition while addressing the needs of the failed roads in a logical manner.”

B. Maintaining Timely and Relevant Countywide Transportation Plans

A timely (updated at least every two years) countywide transportation plan should contain: specificity on the types of projects to be undertaken; the basis for allocating funding to different types of projects; a description of the CTC’s selection and prioritization process; the CTC’s project prioritization criteria; and a current prioritized list of approved projects. A current plan with adequate detail serves as a communication tool to assure stakeholders the CTC has a sound process to address the needs of a county.

C. Availability and Use of Comprehensive Transportation System Condition Data

Access to and use of comprehensive, consistently determined inventory data, including pavement condition and usage data on a county’s entire road system, provides a source of objective data which can be used as the basis for the CTC’s project selection and prioritization processes.

D. Use of Automated Pavement Management Systems

Automated pavement management systems built on system condition and usage data provide substantial benefit, if resources permit their use. SCDOT and at least one CTC utilize such systems, which can aid decision makers in determining the ideal strategies to achieve or maintain roadways in good condition over their life at the least cost.

E. The Use of Formal Technical Advisory Committees

The Greenville, Richland, and Spartanburg CTCs utilized formal technical advisory committees, which were comprised of a broad membership of transportation experts and interested stakeholders from throughout their counties and provided the following benefits:

- The assurance projects undertaken by the CTC have been objectively screened and prioritized;
- The fact the committee with its broad county membership, approved the project, provides some assurance the project will benefit the county as a whole; and

- The operation of the committee provides the secondary benefit of raising the level of coordination and communication among the various transportation entities undertaking projects in the county.

VI. Summary Observations and Considerations

Project selection and Prioritization

The predicate for this review was a perceived lack of consistency in project selection and prioritization among the CTCs. While the CTCs' processes for project selection and prioritization were as diverse as the group sampling, there was consistency in the types of projects undertaken (secondary and local road maintenance), and the prioritization criteria used, at least for the initial prioritization of the project. In most cases, projects were screened and prioritized based on pavement condition data obtained by SCDOT for state roads, or by a county or municipal government for local roads. The CTCs applied their individual prioritization criteria, which the SIG found to be consistent and objective. Most reported subsequently adjusting their prioritizations due to changed circumstances, such as economic development projects or emergency repairs.

The [*SCDOT Structural Efficiencies Study*](#) noted it would be ideal for all 46 counties to implement a common process for inventory and evaluation of roadway pavements, along with the adoption of asset management strategies for analyzing the condition data and selecting and prioritizing projects.

Several CTCs/counties had such systems, processes and available resources in terms of not only C Program funds, but also the availability of technical staff at the county and municipal government levels. It does not appear realistic for most counties to adopt a unified system without additional resources. One way to achieve a common process may be for SCDOT to add local road data to its systems, which would allow SCDOT to provide project selection and prioritization data to the CTCs for all roads in the counties. Significant resources would be required to collect consistent local road data statewide. However, the benefits of such an undertaking may be a shared vision for a coordinated transportation program that addresses all statewide needs (a recommendation of the [*Study*](#)), increased rigor and value of the C Program, and more coordination and cooperation in addressing the state's transportation needs. It may be beneficial to conduct a study to determine if the benefits of such an undertaking outweigh the costs.

C Program Funding Adequacy

Feedback from several CTCs in rural counties without large municipalities noted their counties' funding only addressed a fraction of their needs. A comparison of the total C Program funding and local road mileage versus the cost of road renovation seems to provide confirmation. There are 71,925 lane miles (area of the roadway) of local roads in the state, which fall under the responsibility of the counties and municipalities. The LAC in its recent SCDOT audit reported the cost of resurfacing one lane mile of roadway at \$124,300. The \$92 million of FY 2018 C Program funding, after adjustment to the \$69 million that could be spent on local roads (75%), would provide for the resurfacing of 557 miles or 8% of the state's local road mileage.

C Program Funding Allocation Formula

The C Program funding formula may need re-examination because the three factors used in the formula appear not to have direct relationships to the costs CTCs are currently addressing. One CTC chairperson recommended the re-evaluation of the C Program funding formula. The chairperson did not express any concern with the formula, other than it had been in place for almost 25 years and the needs and uses of the funds had likely changed. A study with the goal of developing a funding allocation that uses a combination of factors directly related to road upkeep cost may be beneficial.

Countywide Transportation Plans

Five of the countywide transportation plans the SIG reviewed improved from the LAC 2016 findings, but there is room for further improvement. The remaining five, last updated in 2010 or 2011, did not provide significant detail on the types of projects considered, funds allocation, selection and prioritization processes, prioritization criteria, or lists of approved projects. Current plans, updated every two years, that contain detailed information on the CTC's processes to include lists of approved projects, provide confirmation to the public the CTC is addressing the county's needs competently.

The CTC sampling group provided valuable insight into the diverse approaches undertaken to prioritize and execute their respective C Program projects. This group also provided additional insight and recommendations to improve the C Program statewide. (*CTC Recommendations for C Program Improvement*)

The SIG extends its appreciation for the cooperation and courtesies provided by the Aiken, Barnwell, Charleston, Edgefield, Greenville, Laurens, Orangeburg, Pickens, Richland, and Spartanburg CTCs, and the SCDOT staff who participated in this review.