6 Signalization

6.1 Existing Conditions

Signalization is an integral part of a transportation system. Properly used, it can ensure safe and orderly progression of traffic. If improperly installed and maintained, however, it can result in unnecessary delays in traffic flows.

In the ACOG region all rural traffic signals are generally maintained by SCDOT. Maintenance and repair of traffic signals is a regular function of SCDOT's maintenance staff. The SCDOT frequently conducts traffic studies at intersections to determine whether new traffic signals are needed. The factors considered in determining whether a signal is warranted include the number of vehicles approaching the intersection, frequency and type of accidents, physical layout of the intersection, average speed, and future road construction plans.

In order to assure that signals are efficiently handling traffic flows, the timing of the light cycles for signals are periodically revisited by the maintaining authority. When there are a series of signals along a road, they are frequently connected in a system, which simplifies the process of coordinated signal timing along the road. This can help travelers avoid repeatedly hitting red lights, and can actually improve overall traffic flow on a road. There are more than 600 traffic signals in the SCACOG region. They tend to be located at major intersections along primary routes in the region.

At-grade railroad crossings are another location where signalization is important. SCDOT staff also performs the function of inspecting and maintaining these crossings, and a pool of funding is available to upgrade these crossings as needed. These funds are extremely limited which means that only a few crossings are can be completed on a yearly basis statewide. Prioritization is based on similar criteria to other safety projects.

Intelligent Transportation System (ITS) strategies are increasingly used to manage traffic flow. ITS can be defined as electronics, communications, and information processing that are integrated to improve the efficiency or safety of surface transportation. SCDOT has developed and deployed ITS across the state. These systems include the latest transportation technologies, such as closed circuit television cameras, highway advisory radios, changeable message signs, local Traffic Control Centers (TCC) and a central Traffic Command Center (TMC). A key application for ITS in rural areas is notification of non-routine traffic events, such as major delays due to accidents or construction.

6.2 Identified Needs

Table 14 provides a summary of identified signal needs for the ACOG region. These projects are not so much about installing new signals where there were none, but upgrading equipment and improving signal timing to increase traffic flow efficiency.

Table 14. SCDOT Priority Signalization Projects

COUNTY	ROUTE	DEPARTMENT
Anderson	SC 8 & SC 81 & SC 88	Consultant
Anderson	SC 28 @ S-141 and Corning	Consultant
Anderson	US 29 @ S-48	Consultant
Anderson	SC 8 & S-485 & East Church Road	Participation Agreement
Anderson	S-219 @ S-28 and 333	Consultant
Cherokee	US 221/221conn @ S-146	Consultant
Cherokee	SC 105	Preconstruction
Cherokee	US 221alt. @ SC 11/110	Consultant
Greenville	S-50 @ S-221	Preconstruction
Greenville	S-27 @ S-1912	Participation Agreement
Greenville	US 25 @ S-41	Consultant
Greenville	Harrison Bridge @ Neely Ferry	Participation Agreement
Oconee	S-35 & S-135	Consultant
Oconee	US 123 @ US 76	Consultant
Pickens	S-28	Consultant
Spartanburg	SC 295 @ Dogwood	Consultant
Spartanburg	SC 92	Consultant
Spartanburg	SC-292 & S-52	Preconstruction
Spartanburg	US 221 & S-540 (Airport Rd.)	Consultant