United States
Department of
Agriculture

Forest Service
Southern Region

Road Analysis

Sumter National Forest

**May 16,
2003**

This Table of Contents has fully activated links. To see a topic, click on it.

Table of Contents

Introduction

Overview of National Forest Road Analysis

This document summarizes the key findings and results of the application of the forest-wide Roads Analysis Process (RAP) for the Sumter National Forest. The RAP analysis followed procedures in USDA publication FS-643, Roads Analysis: Informing Decisions About Managing the National Forest Transportation System. The RAP is **not a decision document** but is intended to be an assessment tool to provide the Forest Supervisor and District Rangers with information to develop and maintain roads systems.

Land allocations, management strategies and the road maintenance budget have changed significantly during the past decade. It has been determined that road analyses are needed on all National Forests and Grasslands to better coordinate our road management programs. The analysis process provides land managers with a science-based analytical tool to help balance public needs, scientific information and funding levels when determining the size, purpose and extent of future forest road systems.

The Roads Rule and Policy became effective on January 12, 2001 (Federal Register/Volume 66, No. 9) and was issued as amendments to Forest Service Manual Title 7700-Engineering, Chapter 7700-Zero Code and in Chapter 7710-Transportation Atlas, Records, and Analysis.

Road analysis occurs at two levels, the forest scale and project scale. The forest scale addresses the existing forest road system (maintenance level 3, 4 and 5 roads) from a landscape perspective. It highlights problem areas and opportunities in the road system so that land managers can make better decisions regarding the transportation system. The project scale road analysis addresses road maintenance level 1 and 2 roads as well as unclassified roads. **Project level road analysis will not be addressed in this report.**

This report uses existing information and recognizes that additional information will need to be gathered in the future. This report may periodically be updated or appended to as additional data is gathered and analyzed.

Scope of this Analysis

Three Ranger Districts are involved in two geographic areas of the state of South Carolina. The Andrew Pickens Ranger District is located at the southern end of the Appalachian Mountains. The Long Cane and Enoree Ranger Districts are located in the central piedmont of the state. All the Districts have inclusions of lands that are either privately owned or managed by other federal or state agencies. Roads managed by other federal, state, county and private entities connect to many roads on the national forest. It is not very obvious to the casual user where jurisdiction changes from one agency to another. Major state and county roads will be addressed where appropriate when considering roads managed by the Forest Service.

The Sumter National Forest Land and Resource Management Plan is currently being revised. This roads analysis document will be used to help inform the Forest Supervisor and District Rangers about road management on the Forest both now and in the future.

Chapter 1 - Setting Up the Analysis

Objectives of the Sumter Road Analysis

The objectives of transportation analysis are:

- To determine, given likely funding levels, the minimum transportation facilities needed for public and agency access to achieve forest land and resource management goals and to safeguard ecosystem health.
- To incorporate transportation system needs into the planning process.
- To direct the orderly improvement and management of the transportation system.
- To interact and involve the public, State, Local, and Tribal governments in transportation analysis.

Interdisciplinary Team Members (IDT) and Participants

The core interdisciplinary team and their specialties are:

Jim Knibbs	Team Leader
Ed Hedgecock	Engineering
Donna Alexander	Engineering

Other team members who participated and their specialties are:

Gary Peters	Wildlife
William Hansen	Hydrology
Jeanne Riley	Aquatics and Fisheries
Robin Roecker	Botany and Threatened, Endangered and Sensitive species
Joseph Robles	Recreation
Robbin Cooper	Scenery and Roadless Areas

District Involvement in the Process

The IDT met on the three Ranger Districts in the summer of 2001 with employees to review maps of roads and to gather site-specific information. This information was used to help identify issues and concerns on management of the transportation system and to refine analysis maps. The information from those meetings is contained in the process records for this report. A roads atlas is being prepared and will be maintained at both the District and Supervisor's Office.

Information Sources

The IDT identified the following information sources to use in this analysis:

- Basic road information for Maintenance level 3, 4 and 5 roads
- Deferred maintenance costs from INFRA
- Public Forest Service Roads (PFSR) project submittals
- Forest Highway listing
- Road Management Objectives
- Forest Service Manual and Handbook directions
- Draft Revised Sumter Forest Plan Environmental Impact Statement and Forest Plan

Analysis

The IDT and other team members reviewed the 71 key questions and determined which ones were appropriate to apply to the Maintenance level 3, 4 and 5 roads at the forest-scale analysis.

Public Involvement

Since public involvement has been an integral part of the Sumter Forest Plan revision effort, no extensive involvement in this process was necessary. A Public meeting was held in August 2002 both for the Forest Plan revision effort and the roads analysis process. The comments received in the Forest Plan revision process were considered in this analysis.

Chapter 2 - Describing the Situation

The National Forest Transportation System

The transportation system provides public access and facilitates forest management activities. The system is facing increased use with a declining road budget and a large backlog of "deferred maintenance" work. Deferred maintenance is generally defined as scheduled maintenance work that is needed to keep roads at their current functional level that has not been accomplished. Examples of common types of maintenance work performed would be culvert and bridge replacement, road resurfacing and ditchline work. Increasing urban development adjacent to and within the proclamation boundary on private land is creating new demands on the road system. Many of the roads were not designed to handle these new demands of traffic mix and volume. A majority of the roads on the piedmont and in the mountains have existed for a long time, pre-dating the existence of the national forest.

The total Forest road system includes approximately 2,640 miles of classified roads. This system includes State, county, and National Forest system roads. The National Forest roads have recently been divided into public and administrative road categories. The administrative roads are generally for administration of the national forest lands and resources and are not classified as public roads. However, the Secretary of Agriculture allows public use if the road is considered open to traffic. The designated public roads are generally drivable by automobile.

National Forest system roads currently total about 1,053 miles. Roads are divided into three functional classes: arterial, collector, and local. They are operated under road management objectives to minimize resource-use conflicts. These conflicts may include mixed vehicle use, wildlife considerations, and water quality concerns.

Forest highways are specially designated routes maintained by a public road agency and are of special importance to the forest. These roads may be partially funded under the Federal Lands Highway program. The forest works with the state transportation department on the designation and management of these roads. There are currently about 413 miles of designated forest highways on the Sumter National Forest.

There are five maintenance levels for Forest Service roads and they are described in Forest Service Handbook, FSH 7709.58, *Transportation System Maintenance Handbook.* User comfort and driving ease are increasingly important considerations from maintenance level 3 to 5. Approximately 58 percent of the Forest roads are in the level 3 to 5 class and another 38 percent of forest roads are in the level 1 (closed) class. The following is a description of the five maintenance levels (FSH 7709.58, Section 12.3, Item 2).

a. Level 1. Assigned to intermittent service roads during the time they are closed to vehicular traffic. The closure period must exceed 1 year. Basic custodial maintenance is performed to keep damage to

adjacent resources to an acceptable level and to perpetuate the road to facilitate future management activities. Emphasis is normally given to maintaining drainage facilities and runoff patterns. Planned road deterioration may occur at this level. Appropriate traffic management strategies are "prohibit" and "eliminate."

Roads receiving level 1 designation may be of any type, class, or construction standard, and may be managed at any other maintenance level during the time they are open for traffic. However, while being maintained at level 1, they are closed to vehicular traffic, but may be open and suitable for non-motorized uses.

b. Level 2. Assigned to roads open for use by high clearance vehicles. Passenger car traffic is not a consideration. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation, or other specialized uses. Log haul may occur at this level. Appropriate traffic management strategies are either to (1) discourage or prohibit passenger cars or (2) accept or discourage high clearance vehicles.

c. Level 3. Assigned to roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities.

Roads in this maintenance level are typically low speed, single lane with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material. Appropriate traffic management strategies are either "encourage" or “accept." "Discourage" or "prohibit" strategies may be employed for certain classes of vehicles or users.

d. Level 4. Assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double lane and aggregate surfaced. However, some roads may be single lane. Some roads may be paved and/or dust abated. The most appropriate traffic management strategy is "encourage." However, the "prohibit" strategy may apply to specific classes of vehicles or users at certain times.

e. Level 5. Assigned to roads that provide a high degree of user comfort and convenience. These roads are normally double lane, paved facilities. Some may be aggregate surfaced and dust abated. The appropriate traffic management strategy is "encourage."

The forest handles nearly all maintenance activities with service or construction contracts. The Sumter road maintenance contracts for the last few years have had to reduce the mileage maintained due to decreased funding and higher contract costs. The smaller timber sale program is one of the main reasons for the reduction in funding available for road maintenance. The forest road condition survey program has identified over 20 million dollars in deferred maintenance work on the road system.

Road management objectives will be reviewed for existing roads and proposed new roads during area analysis, watershed level analysis and for site-specific projects. These analyses will be aided by the use of a Road Analysis Process (RAP) to assist line officers in making road decisions. Timber sales will generally use existing roads or temporary roads. New road construction for timber sales will be less than in the past. The Forest will have nearly 17,000 acres where no new roads will be allowed and nearly 138,000 acres where the open road mileage may decrease over the planning period. The forest will move to more cooperation with the counties in road maintenance especially for roads serving a large number of private residences. Key roads identified in the public roads program will be upgraded as funds become available to improve the public's access and safety.

Mileage by maintenance level is summarized in Table 1 for National Forest System Roads (NFSRs).

Table 1. Miles of NFSRs by Maintenance Level

Maintenance Level	Miles
Level 1: Closed Road	399.6
Level 2: Maintained for High Clearance Vehicles	43.8
Level 3: Maintained for passenger car, low user comfort, aggregate surface	506.3
Level 4: Maintained for passenger car, moderate user comfort	97.9
Level 5: High standard passenger car road, double lane paved	5.3
Total	1,052.9

All the maintenance levels are displayed here to show the size of the road transportation system. The remainder of this report will focus on maintenance level (ML) 3, 4 and 5 roads as required by the forest scale analysis.

Most of the ML 3 and 4 roads reconstructed by the Forest Service were for commercial timber sale haul, recreation use, fire suppression and other administrative uses. Some of the roads originated prior to Forest Service ownership of the land and were reconstructed

by Civilian Conservation Corps (CCC). Some roads provide access to private lands (prescriptive rights roads) and may not have any formal rights-of-way agreements.

Roads are categorized by their functional classification. The three classifications defined in the Travel Routes National Data Dictionary ROADS are Arterial, Collector and Local. Most of the ML 3 and 4 roads are classified as local and collector roads. Table 2 summarizes all NFSRs by functional classification.

Table 2. Forest Functional Class

Functional Class Designation	Miles
Functional Class A: Primary (High standard through-routes, arterial linkages, Scenic Byways)	28.0
Functional Class C: Secondary (Key inter-forest connections to interior recreation, forest management, fire response)	97.8
Functional Class L: Local (Candidates for reduction of maintenance standards, decommissioning or obliteration)	927.1

Federally Designated Forest Highways

Appendix B lists the Forest Highway routes on each one of the Districts. There are approximately 93 miles on the Andrew Pickens Ranger District, 136 miles on the Long Cane Ranger District and 164 miles on the Enoree Ranger District.

Economic Situation

The Forest budget allocation for maintenance, construction and reconstruction of roads has averaged $560,000 (contract dollars) per year for fiscal years 2000 through 2002. The annual cost needed to maintain the transportation system to standards as defined in the road management objectives is considerably higher than the funds allocated. The Forest is receiving only about 1.4 percent of its non-critical maintenance needs (deferred maintenance). Roadwork has typically been postponed indefinitely due to funding shortfalls.

In prior years, appropriated funding has been supplemented by road maintenance work performed by timber purchasers through the commercial timber sale program. This program has declined greatly and has offered very little recent funding.

Since 1998, the Forest has conducted road condition surveys to determine the costs of maintaining the road system to standard. Road improvements (annual and deferred costs) are identified and documented in a national database called INFRA.

Table 3 and 4 summarize the costs for critical and deferred maintenance needs for implementing the Forest Service Mission, health and safety and resource protection. The Forest is being funded at about 63 percent of its need in annual maintenance. Funding allows only a small portion of deferred maintenance needs to be performed which will result in the road standards on the Forest to continually decline.

Table 3. Estimated Annual Maintenance Costs

Maintenance Level	Total Miles	Average Cost/mile ($)	Total Funding Needs ($)	Total Funding to Districts ($)	Funding Shortfall ($)
1	399.6	116	46,354	---	---
2	43.8	536	23,477	---	---
3	506.3	649	328,589	---	---
4	97.9	430	42,097	---	---
5	5.3	241	1278	---	---
Total	1,052.9	420	441,795	279,988	161,807

Based on 2003 dollars

Table 4. Estimated Deferred Maintenance Costs

Maintenance Level	Total Miles	Average Cost/mile ($)	Total Funding Needs ($)	Total Funding to Districts ($)	Funding Shortfall ($)
1	399.6	3,770	1,506,492	---	---
2	43.8	9,546	418,115	---	---
3	506.3	23,627	11,962,350	---	---
4	97.9	65,901	6,451,708	---	---
5	5.3	33,684	178,525	---	---
Total	1,052.9	19,486	20,517,190	287,198	20,229,992

Based on 2003 dollars

There is a need to identify and prioritize the minimum road system necessary for access and management of the Forest due to these critical shortfalls in funding. This includes refining Road Management Objectives (RMOs) including maintenance levels that reflect long term funding. Current planning efforts rely on area analysis or more formalized watershed assessments to identify opportunities for access management.

There are many roads on the Forest that are opened for seasonal purposes such as hunting. These roads are opened during the time of September through December. These roads need to be considered for a lower maintenance standard although opening them during deer season is considered advantages to control the very productive deer herds. Some roads are closed for wildlife nesting, soil and water protection and could be considered for year-round closure.

Chapter 3 - Identifying Issues

This Roads Analysis is being incorporated into the ongoing Forest Plan Revision effort that was begun in 1995. Fourteen issues were developed from public response to the Notice of Intent to revise the Sumter National Forest Plan. The following Forest-scale road issue was identified:

Issue 12 – Access/Road Management

Issue Statement: How do we balance the rights of citizens to access their national forests with our responsibilities to protect and manage the soil and water resources, wildlife populations and habitat, aesthetics, forest health and desired vegetative conditions?

System roads are the primary means of national forest access; however, they are also a source of many concerns. These concerns predominantly center on environmental effects of roads, which will be addressed in a later section of this report.

Some people would like to see the motorized access to the national forests increased, especially during hunting seasons, for other recreational uses or to meet forest management needs. Other people, however, think that road construction should be limited and some existing roads obliterated. Still, other comments were made that new roads should not be constructed for the purpose of logging or for OHV use. The amount of motorized access will need to be balanced with wildlife habitat needs, the desire to provide both motorized and non-motorized recreational opportunities and the obligation to protect soil and water resources.

Issue Summary

Some of the other Forest issues identified had road related aspects associated with them.

RAP Issue	Description	Associated Plan Issue
A	Access for land management activities (fire, vegetation, wildlife, recreation, minerals) including legal access across private land to isolated federal parcels.	1-14
B	Inadequate road maintenance funding	12
C	Need for improvements on high use roads and other roads impacting resources; decommissioning unneeded roads	12
D	Impacts to terrestrial plants and animals and associated habitats including T&E and rare species	1, 2
E	Impact of roads to riparian areas, water quality and aquatic habitats	4
F	Impact of roads to scenery management	6
G	Road access for recreation opportunities for the public (developed, dispersed, remote)	7
H	Impact of roads on roadless and wilderness areas	8
I	Impact of roads to special areas and rare communities	10
J	The Forest service cannot deny access to private landowners, but the location of the access must be approved by the agency. There is a need for legal access that minimizes impacts on resources.	Required by law
K	Impact of roads to rivers that are eligible for designation into the National Wild and Scenic River system	11
L	Impact of roads to the Chattooga River watershed and the Wild and Scenic River corridor	13
M	Impact of roads on Forest health and providing wood products	5,9

A. Access for land management activities (fire, vegetation, wildlife, recreation, minerals) including legal access across private land to isolated federal parcels.

There is a need for motorized access to the Forest for land management activities, law enforcement and other administrative uses. A balance is needed in allowing these uses while at the same time being responsible to protect and manage the soil and water resources, wildlife populations and habitat, aesthetics, forest health and vegetative conditions. There is a need to acquire rights-of-way to isolated federal parcels of land where none or only prescriptive rights exist.

B. Inadequate road maintenance funding

Inadequate road funding has created a backlog of maintenance work (defined as deferred maintenance). This has created the need to identify the most efficient and economical transportation system to meet agency needs, resource protection and public expectations.

C. Need for improvements on high use roads and other roads impacting natural resources; decommissioning unneeded roads

There is a need to improve public safety on heavily used roads and those roads causing adverse impacts to natural resources. Unneeded roads should be decommissioned to reduce maintenance costs and adverse environmental impacts.

D. Impacts to terrestrial plants and animals and associated habitats including threatened and endangered and rare species

Roads can have beneficial or adverse impacts on terrestrial plant and animal species. Road rights-of-ways provide the permanent early successional habitat needed for many species of rare plants on the forest. On the other hand, road right-of-way maintenance activities can adversely impact these species, when soil is disturbed or roadsides are seeded with invasive exotic species.

E. Impact of roads to riparian areas, water quality and aquatic habitats

Roads can directly affect surface and subsurface water movement patterns and indirectly affect adjacent streams through surface runoff pollutants (sediment, petroleum and other chemicals) and may alter ecological functioning. Culverts and other road drainage structures can block fish and other aquatic organisms movement within streams. There is a need to reduce impacts from roads to improve water quality, aquatic habitats and movement of aquatic organism within streams.

F. Impact of roads to scenery management

Roads provide access to view scenic landscapes but at the same time roads can have a highly negative visual impact. Road management practices need to minimize the negative impacts to scenery especially in areas designated as high scenic quality.

G. Road access for recreation opportunities for the public (developed, dispersed, remote)

Roads are needed to provide access for a variety of developed and dispersed recreational experiences. Roads can create a negative impact on remote recreation settings. Hunting access is limited by road closures. Handicap hunting access also needs to be improved.

H. Impact of roads on roadless and wilderness areas

There is a concern of developing new roads in unroaded areas. Road construction can change the character of roadless areas. Roads adjacent to wilderness areas can detract from wilderness experiences and affect resources.

I. Impact of roads to special areas and rare communities

Areas that have special or unique values need protection from certain activities. Roads can have a negative and/or positive impact to these areas.

J. The Forest Service cannot deny access to private landowners, but the location of the access must be approved by the agency. There is a need for legal access that minimizes impacts on resources.

Private land in-holdings exist across the forest and some require access through national forest system lands.

K. Impact of roads to rivers that are eligible for designation into the National Wild and Scenic River system

Roads provide access to rivers and can adversely affect the *outstandingly remarkable values* that made them eligible for consideration in the first place.

L. Impact of roads to the Chattooga River watershed and the Wild and Scenic River corridor

Roads provide public access to the river. However, they also result in adverse resource impacts including sedimentation.

M. Impact of roads on Forest health and providing wood products

Roads provide access for managing forest vegetation through prescribed burning, timber stand improvement and commercial timber sales. They are needed to manage forest stands and suppress insect and disease (i.e. southern pine beetle) outbreaks. Roads provide access for salvage of damaged and fire killed timber and other natural disasters such as fire and blowdown. Vehicle traffic on roads increases the spread of invasive exotic plants.

Chapter 4 - Assessing Benefits, Problems and Risks

This chapter is an assessment of the ecological, social and economic considerations of the current transportation system. It is done in the form of a series of questions addressed to resource professionals in that particular field.

EF (1) – What ecological attributes, particularly those unique to the region, would be affected by roading of currently roadless areas?

The Sumter National Forest contains relatively few acres currently classified as roadless, and these occur only on the Andrew Pickens Ranger District in the Southern Appalachian Blue Ridge, including land in the Ellicott Wilderness and Ellicott Rock Extension Areas, the White Rock Scenic Area and Rock Gorge. The roadless areas occur at moderately high elevations (greater than 2000 feet) and contain forests dominated by shortleaf pine, pitch pine, table mountain pine and a variety of oaks along ridgelines and south-facing slopes, eastern hemlock, white pine, and rhododendron along streams, coves, and lower slopes, and mesic oak-hickory forests on mid-slopes. Mountain laurel thickets are abundant throughout. Ecological attributes, somewhat unique to the Southern Blue Ridge, include forest health problems associated with the invasion of exotic pests, a lack of prescribed fire, and an abundance of relatively even-aged stands resulting from the historic clearing of forests followed by a lack forest management.

The roading of roadless areas, in itself, is likely to improve access to the area for a variety of forest management activities including prescribed fire. All forests co-dominated by pines, including shortleaf pine, pitch pine, and table mountain pine, are declining in the Southern Appalachians, particularly at moderate to high elevations (Southern Appalachian Assessment (SAA) 1996). These communities require moderately frequent prescribed fire (every 5-7 years) to maintain understory conditions required by a variety of plants and animals including neo-tropical migrants and nesting birds, and for regeneration of desired tree species. At least one federally threatened species, small whorled pogonia (*Isotria medeoloides*) and one Forest Service sensitive species Fraser's loosestrife (*Lysimachia fraseri*) are declining due to lack of disturbance including prescribed fire, and occur either in or in proximity to currently roadless areas on the Forest. In fact, many herbaceous plants thrive in the sunny conditions created in road rights-of-ways, including the sensitive Fraser's loosestrife.

The roading of roadless areas can increase the introduction and spread of invasive exotic plants. Although the Forest Service currently revegetates rights-of-ways with non-invasive plants only, invasive exotic plants can spread from areas maintained by other ownerships to National Forest land, where they will become established and thrive.

Many of the roadless areas exist today because the terrain is steep or other natural barriers have prevented or limited road development. Other factors that have limited the development of roads have included the costs versus the benefits derived from roading these areas.

EF (2) – To what degree do the presence, type, and location of roads increase the introduction and spread of exotic plant and animal species, insects, diseases, and parasites? What are the potential effects of such introduction to plant and animal species and ecosystem function in the area?

The seeding of road rights-of-ways with invasive exotic species, particularly sericea lespedeza (*Lespedeza cuneatum*) has had an impact on native early successional vegetation created in road rights-of-ways, particularly on the Long Cane Ranger District and to a lesser extent on the Enoree Ranger District. This species is no longer used.

Roadsides on the Enoree Ranger District harbor at least 15 populations of Georgia Aster, *Aster georgianus* for federal candidate listing under the Endangered Species Act (ESA), and two populations are known from the Long Cane Ranger District. Forestwide, all roadsides contain potential habitat for remnant prairie, savanna, and woodland species, but on the Enoree and Long Cane Ranger Districts, this habitat is typically of low quality due to the persistence and dominance of Sericea lespedeza, a non-native legume.

EF (3) – To what degree do the presence, type and location of roads contribute to the control of insects, diseases and parasites?

The arterial and collector road system is essential for maintaining a healthy forest. Most of the 3-5 roads are historical in nature, being developed to originally access the area by settlers. The entire road system (include the local roads, maintenance level 1 and 2) provides the means for early detection and control of insects and diseases. Primary insect activity on the Forest is the southern pine beetle and one of the means to control it is through prompt removal of infested timber (mainly through timber sales). Insect outbreaks are likely to continue across the Piedmont and in the Southern Appalachian Mountains, as pine stands mature. The roads are also necessary for intermediate and final timber harvests in order to keep the forest healthy through preventative stand treatments.

The impacts of southern pine beetle also raise concerns for public safety along roads. Areas of beetle-killed trees that fall within the road rights-of-way create hazards for motorists and impeded maintenance activities.

EF (4) – How does the road system affect ecological disturbance regimes in the area?

The road system on the Forest facilitates our ability to conduct prescribed fire activities necessary to restore and maintain several of our native ecosystems. Therefore, it is likely that the road system is an asset to these disturbance regimes rather than a detriment.

The mowing occurring along rights-of-ways creates ecological disturbance regimes required by many populations of federally endangered, threatened, and sensitive plants. On the Andrew Pickens, several populations of the endangered smooth coneflower, *Echinicea laevigata*, are known primarily from roadside rights-of-ways, including those

associated with FS 726, FS 744, FS 744-A, FS 744-C, FS 758, FS 752C, FS 2320, and FS 2658. On the Andrew Pickens, several sensitive species populations of Fraser's loosestrife (*Lysimachi fraseri*) and sun-facing coneflower (*Rudbeckia heliopsidis*) occur along roadside rights-of-ways, including those associated with FS 710, FS 715, FS 762, FS 708, FS 709, and FS 757. The road system appears to maintain the ecological disturbance regimes necessary for maintenance of these species populations. On both the Enoree and Long Cane Ranger Districts, several populations of the sensitive Georgia Aster (*Aster georgianus*) occur in roadside rights-of-ways, including FS 343, FS 305, though most of the populations occur along state and federal highways.

Roads often change the ecology of streams by changing hydrology flow patterns, adding pollutants and creating migration barriers.

AQ (1) – How and where does the road system modify the surface and subsurface hydrology of the area?

Road systems typically alter surface and subsurface hydrologic patterns to some extent. Roads cut into hillsides and may sever normal water flow paths along the slope altering subsurface water flow patterns. Sometimes the disturbances affect groundwater or stormflow leading to perennial or ephemeral flows into insloping ditches. Surface flow paths are altered by road surfaces, cutbanks and fillslopes through compaction and exposure of bare soil surfaces. Some of the normal function returns as plants cover and develop roots systems within the cutbanks, fill slopes and road surfaces. However, the road surface itself is usually maintained in a compacted and barren state and has long-term effects. Road surface runoff is typically doubled in comparison to forested areas. Frequent road drainage structures such as dips, leadouts, culverts and reverse grades are constructed to disperse excess flow into the adjacent forested filter zones. When this is not done effectively, road ditches carry more runoff and sediment as well as other pollutants into nearby stream systems. Changes in hillslope erosion and stream channels occur when they are overloaded with flow. Typical changes are channel degradation (down cutting) and excessive sediment movement. The degree of this effect can be a very minor to a major departure from the natural conditions.

Roads located on flat terrain can also have drainage problems. The road surface may compact or otherwise entrench (erode and be at a lower level relative to the surrounding terrain) causing water retention on the road surface, rutting and drainage problems. Roads with moderate to steep gradients and a lack of periodic surface maintenance often erode severely. These roads eventually entrench into the landscape and limit the ability of surface structures to adequately maintain drainage. They sometimes transport water for long distances, which builds up volume and velocity causing more erosion. Lack of periodic maintenance can lead to escalating costs to fix problems. Periodic maintenance sooner rather than later can save substantial costs in the future management of road systems.

These types of roads need to be identified for decommissioning/obliterations.

AQ (2): How and where does the road system generate surface erosion?

Construction, reconstruction and maintenance of roads generate surface erosion. Maintaining ditches and grading road surfaces often exposes mineral soil or aggregates road surfacing materials. This increases erosion and runoff into ditches and drainage structures. The compaction of the road surface limits rainfall infiltration. This generates erosion of fine materials in the road surface and ditches during runoff. The severity of the erosion is primarily related to road grade, road and soil types involved and frequency of surface drainage structures. The condition of fill and cut slopes, drainage ditches and road surfaces also factor in to the severity of erosion.

Maintaining vegetated or armored soil cover reduces surface erosion. Seasonal road closures help to reduce erosion on roads. Severe or chronic erosion problems can also be reduced by road obliterations/decommissioning. Sedimentation effects from roads on the Chattooga River (designated a Wild and Scenic River) have been identified and proposals have been made to correct the problem.

AQ (3): How and where does the road system affect mass wasting?

Mass wasting is seldom a problem if sensitive soils are avoided in road construction. The extent of these problem soils is limited to the Andrew Pickens Ranger District.

AQ (4): How and where do road-stream crossings influence local stream channels and water quality?

Essentially all road/stream crossings affect stream channels and water quality. The extent and severity of this effect is variable. Crossings with properly sized and installed drainage structures (bridges designed to handle infrequent floods for instance) limit hydrologic interference including the movement of water and in some cases aquatic organisms. Properly maintain surface erosion control and storm drainage structures adjacent to crossings seldom contribute to these problems. Road/stream crossings may be areas were chemicals from vehicles and accidents involving spills may enter water systems. This can produce detrimental local and downstream effects to water quality and aquatic habitats. In some instances, road surfacing materials and treatments may also contribute to adverse effects to streams and habitats.

AQ (5): How and where does the road system create potential for pollutants, such as chemical spills, oils, de-icing salts, or herbicides, to enter surface waters?

Most of the potential for the addition of pollutants is associated with road/stream crossings and areas where the road is located close to the streams. Road ditches have a high potential to convey pollutants to streams where the vegetation buffer is insufficient to absorb runoff. Pollutants can be transmitted to surface waters directly or indirectly in erosion processes. Runoff and groundwater are other likely sources to transfer pollutants to streams.

Maintaining forested buffer zones and providing frequent road surface drainage are often very effective in limiting pollutants in water.

AQ (6): How and where is the road system "hydrologically connected" to the stream system?

Road systems are hydrologically connected to the stream system typically at stream/road crossings. The hydrologic connection is typically associated with storm flows primarily but may include springs and seep areas. In addition, when road drainage structures are infrequent and stream buffers are insufficient they can become further connected for longer distances during large storm events or floods. Areas where water is absorbed into the surface, delayed or temporarily stored and later reappears are typically not considered connected to the stream system. Road ditches that lead to perennial, intermittent and ephemeral streams are connected. Road drainage from storm water runoff that is delivered to buffer areas or filter zones but remains concentrated is typically hydrologically connected. The locations of hydrologic connectivity generally require site-specific evaluation. The likelihood of hydrologic connections is greater for road stream crossing areas and roads in close proximity to the stream network. The stream network is usually much more extensive than is typically indicated by USGS topographic maps (Hansen, 2001).

How do the connections affect water quality and quantity (such as, the delivery of sediments and chemicals, thermal increases, elevated peak flows)?

Hydrologic connections with roads often extend the network of surface drainage and are likely to produce some level of effects to water quality and quantity including the delivery of sediments and elevating peak flows. As discussed, road surfaces often produce and channelize runoff above normal levels. Roads that are poorly designed or maintained are more apt to have more infrequent but a much higher severity of connections. These roads often concentrate drainage into ditches for extended distances, and in some instances, wheel tracks and erosion channels develop on the road surfaces. These poorly designed or maintained roads may carry road drainage for long distances eventually delivering abnormal quantities of flow and pollutants to localized areas. Added erosion and channel adjustments are often the result to these downstream areas when the road drainage is finally released and the potential to reach and connect to the hydrologic system is increased. When these flows are not drained to road ditches, they

may be retained on the road surface creating increased potential for rutting or fill cracking and failure. These flows may be released onto steep fill slopes generally causing erosion and in some instances delivery of sediment directly to streams. The individual circumstances and specifics determine the frequency and extent of these effects. Where road drainage is released on problem soils such as gullied terrain in the piedmont, substantial cavitations and gully enlargement may occur if mitigation measures are not included. Thermal increases are more likely to be localized when surface or subsurface flow is captured in a road ditch and delivered at some distance to a small stream system. Roads constructed near streams may reduce riparian shading that may increase stream temperature. Sediment and turbidity addition to streams from road surfaces also increase solar absorption of thermal energy resulting in increased stream temperatures. Excessive sedimentation often causes channel erosion resulting in the filling in of pools that reduce thermal refuge to organisms. Channel alterations may make the low flow character of the stream wider and shallower increasing the potential for thermal change.

AQ (7): What downstream beneficial uses of water exist in the area? What changes in uses and demand are expected over time? How are they affected or put at risk by road-derived pollutants?

South Carolina Department of Health and Environmental direct that surface water resources be maintained to provide for a full array of water use that could occur within downstream areas. Freshwaters should have the ability to support downstream uses including municipal, domestic, irrigation, industry, swimming, and a balanced indigenous aquatic community of fauna and flora. Trout waters are expected to maintain suitable conditions to support reproducing populations of trout populations. Outstanding Resource Waters are not to be degraded, maintaining for any downstream uses. The actual type and proximity to specific downstream uses varies substantially, and should be evaluated on a more site-specific basis.

Growing communities typically place an increasing demand on drinking, industrial, recreational, fishing and scenic uses of water. Changes in use and demand might be put at risk for excessive road-derived pollutants. Typically the USFS is not the major contributor of these pollutants at larger scales. However, there may be individual circumstances that would warrant change in road management strategies to reduce the risk of road-derived pollutants.

AQ (8): How and where does the road system affect wetlands?

There are a limited number of wetlands on the Sumter National Forest. Typically these are found associated with larger streams with floodplains or terraces that retain or have water inputs from adjacent areas. Typically the interface with wetlands will be associated with stream crossings that cannot be avoided. Wetlands lack the topography that is desired for good road drainage and tend to accumulate and retain water, making a difficult to manage road surface, so they have been typically avoided when possible.

AQ (10) – How and where does the road system restrict the migration and movement of aquatic organisms? What aquatic species are affected and to what extent?

Road crossings, such as culverts and fords, can act as barriers to aquatic organism movement within stream systems. Upstream and downstream migration obstacles can result in a decrease in population numbers and an increase in genetic isolation. Fish, mollusk, crayfish, amphibian and reptile populations may experience life cycle interruptions. Organisms may not have access to a large portion of good quality habitat within a stream system or watershed.

There has been no Forest wide assessment of road crossing barriers. Through general observation, there are a number of culverts and fords that appear to be barriers to aquatic organism movement within streams. Inventories should start with major crossings of key streams. Planning efforts through Watershed Assessments and area analysis should focus on this during surveys.

AQ (13) – How and where does the road system facilitate the introduction of non-native aquatic species?

The greatest impact of non-native introduction from the road system occurs on the Andrew Pickens Ranger District where Forest roads cross trout streams. Three of the seven streams with allopathic brook trout populations are accessible by road. Non-native brown trout have been stocked in two of these streams. The brook trout population has been lost in one of these streams. Restoration of brook trout streams is a costly endeavor and those that are crossed by roads are susceptible to non-native introduction. This should be identified during the planning stages for projects in these areas.

AQ (14) – To what extent does the road system overlap with areas of exceptionally high aquatic diversity or productivity, or areas containing rare or unique aquatic species or species of interest?

The Stevens Creek watershed on the Long Cane Ranger District contains a federally listed mussel and a Regional Forest listed sensitive mussel. The greatest diversity of mussel species are located in this watershed. Several *Elliptio* sp. from the watershed are currently undergoing genetic identification. A sensitive fish species is located downstream from the Forest in the Savannah River. Scattered mussel populations are being discovered with new surveys across the Enoree Ranger District and in the Broad River watershed. A sensitive darter species is also located in the Broad River watershed. The Chattooga River on the Andrew Pickens Ranger District contains several species of mussels, including a sensitive species. Also, a sensitive crayfish inhabits the Chauga River watershed and has historically been found in the Chattooga River.

Many streams have still not been surveyed for aquatic organisms, so the likelihood that more streams will be found with rare, unique or species of interest is likely to increase.

EC (1) – How does the road system affect the agency's direct costs and revenues? What, if any, changes in the road system will increase net revenue to the agency by reducing cost, increasing revenue, or both?

The arterial and collector roads are the backbone networks for all activities on the Forest. Road management is geared toward identifying and being responsive to changes in road use by the public, private landowners with the proclamation boundary and other Federal and State Agencies. Adverse effects of roads on natural resources are being identified and priorities' set for correcting problems as funding permits.

As a result, road improvements (paving) are planned on Burrells Ford [Public Forest Service Road (PFSR 708)], Cromer Road (PFSR 356) and PFSR 515 and 518. Road betterment projects (maintaining at current maintenance levels) are planned on PFSR 301, PFSR 304 and PFSR 505. Roads project on these roads are planned between 2003 and 2006. Road improvements are geared toward: reducing short-term maintenance and monitoring costs; reducing sediment into streams; improving safety; and, improving recreation access. Maintaining and upgrading these roads increase direct and indirect revenues.

EC (2) – How does the road system affect the priced and non-priced consequences included in economic efficiency analysis used to assess net benefits to society?

Road improvements indirectly result in increased net revenues through increased stumpage values for both federal and private timber and increase time periods for hauling timber during wet weather.

Commercial recreation would be improved on the Chattooga River with proposed upgrades to the Burrells Ford Road. Non-priced consequences of maintaining/improving the back bone road network include meeting public demand for recreational activities such as hunting, fishing, hiking, boating, biking, OHV and horseback riding and access to recreational facilities.

EC (3) – How does the road system affect the distribution of benefits and costs among affected people?

The arterial and collector roads primarily benefit local residents, state and federal agencies that use the roads to fulfill their management responsibilities and commodity and recreational users. These interests are what are driving the improvements and maintenance to the arterial and collector roads across the Forest.

TM (1, 2 and 3) – How does road spacing and location affect logging systems feasibility? How does the road system affect managing the suitable timber base and other lands? How does the road system affect access to timber stands needing silvicultural treatment?

The arterial and collector roads are all primarily in place. The road system accommodates ground-based logging systems (rubber-tired skidders, dozers and feller-bunchers). This system is generally adequate to meet future logging needs.

Any additions to the road network would primarily occur at the 1 and 2 maintenance level. This would primarily be to access unroaded tracts, to reduce skidding costs and improve management efficiency at the stand level. Cable logging systems (primarily skyline logging systems) would rely primarily on a ridge-top road system for access with short spur roads needed to get to the slope break to access ground over 40 percent slopes. Helicopter logging systems in the mountains would primarily utilize valley bottom road systems for log delivery to landings and for servicing of helicopters. Aerial logging systems are not likely to be used on the National Forest primarily because of log values.

Isolated Federal land tracts need to have rights-of-way obtained for future road development for efficient long-term management.

MM (1) – How does the road system affect access to locatable, leasable and salable minerals?

Again, the arterial and collector roads are all primarily in place. Though the road system was developed to accommodate ground-based logging systems it will also adequately meet the needs of any mineral development activities since these are also ground based operations. This system is most likely adequate to meet future needs.

WP (1): How does the road system affect access, constructing, maintaining, monitoring, and operating water diversions, impoundments, and distribution canals or pipes?

The National Forest maintains several small impounded lakes that are used for recreational purposes. Roads are critical for maintenance and use of these public facilities. Many of the water impoundment facilities owned by the USFS also are contributing to the backlog maintenance need for the forest due to the past lack of funding to properly maintain them.

WP (2): How does road development and use affect water quality in municipal watersheds?

Currently the Chauga and Broad Rivers have downstream municipal uses in Westminster and Columbia, South Carolina, respectively. Duncan Creek is also a backup water source for municipal use for Whitmire, SC. Road development increases sediment and the likelihood of pollution entry associated with transportation and the accidental leakage or

spill of materials. Most of these pollutants are addressed within water treatment processes. Closure or change to backup sources of water for treatment facilities will normally occur if spills are known. Under some circumstances, excessive roads or road stream crossings could reduce or eliminate an area from being considered for municipal uses. Certainly the hazards of contamination and access to the public increases as roading occur, which would be considerations in selecting a suitable municipal source of water.

WP (3): How does the road system affect access to hydroelectric power generation?

Most hydroelectric power generation is on private lands, with private access. A few National Forest roads provide some access to power generation facilities, structures or impounded water. Where this occurs, the FS should work with FERC and the generating entity to help maintain road conditions to ensure business and recreational access when appropriate. Mitigation measures needed should also be addressed when National Forest streams, riparian and other areas are affected by these uses. Road systems may also become useful as corridors that are used to relay power overhead or by buried cables after power is generated.

SP (1) and SU (1) – How does the road system affect access for collecting special forest products? How does the road system affect managing special use permit sites?

A variety of special use permits exist across the forest ranging from utility corridors and communication sites, recreation permits and road access to private land through the national forest. All of these uses depend on maintenance level 3, 4 and 5 roads for primary access as well as their connection to the state, county and federal highway systems. In general, there is a need to review what special use permits we have and add new special use permits as they are identified (i.e. use of Grassy Mountain Road by Georgia Power on the Andrew Pickens District).

GT (1) (2) – What road systems connect to public roads and provide primary access to communities? What is the current condition of these roads? What maintenance standard should they be? How does the road system connect large blocks of land in other ownerships to public roads?

Parts of Public Forest Service Roads, PFSR 506, 509 and 634 roads on the Long Cane District, PFSR 1011, 337 and 1384 on Enoree Ranger District and PFSR 744, 757 and 748 on the Andrew Pickens Ranger District need to be up-graded and jurisdiction turned over to the county because of the heavy volume of local traffic. There are numerous maintenance level 3 roads that were built to a minimum standard that need to be improved (Enoree Ranger District – roads 333, 305, 384, 301, 408; Long Cane Ranger District – roads 505, 520, 521, 565, 621; Andrew Pickens Ranger District – 748, 757, 744, 721, and 710).

PFSR 515 and 518 on the Long Cane District are major cut-off roads between two areas of the Forest and the rifle range. These roads need to be upgraded to a maintenance level 5 to meet current and projected traffic volume.

There is private commercial use of Ridge Road (PFSR 333) and Cromer Road (PFSR 356) for timber and poultry hauling on the Enoree District. Road standards need to be upgraded based on changed and increased demand. Both permitted and non-permitted use is occurring.

On the Andrew Pickens District, the county wants to widen roads WH8, WH20, and Land Bridge. The county wants to widen and pave Sparrow Road.

Other roads as they are identified will be added as addendums to this report.

GT (3) – How does the road system affect managing roads with shared ownership or with limited jurisdiction?

Many of the roads on the county network existed prior to any formal deeded rights-of-way. This makes it difficult to widen a road or to change alignment. Formal agreements need to be made. Similarly, historical access to private property exists across federal lands usually with no formal written agreement.

On the Andrew Pickens District, the Jocassee land tract was a recent addition (4,150 acres) – roads need to be classified and decisions made on which roads to close and others that need work in order to reduce resource damage or provide public access.

Cooperative reciprocal agreements with counties on maintenance need to be strengthened and broaden.

Evaluations and improvements may be needed from Forest Service roads to private lands.

The special use permit for the I-26 Corridor should be replaced by an appropriation of the ROW by the Federal Highway Administration (FHWA) for long-term management purposes (following MOU between the two agencies). Identify other roads for appropriation to improve management efficiency.

GT (4) – How does the road system address the safety of road users?

Lack of signing both for safety and information is a continuing problem across the Forest.

Lack of or reduced maintenance has created washboard surfaces and vegetation growing over the road has reduced sight distances. Steep road grades and excessive speeds also need to be addressed.

Ongoing southern pine beetle mortality of pine trees has created hazards along roads. These trees come down across roads or fall into the right-of-way creating a hazard to the public and make maintenance of these roads difficult or more costly.

Woods Ferry Campground road (State Road #574) needs to be a higher standard to match the state road system that leads to the area.

Recreational access to the Chattooga River has increased on Burrells Ford, Earls Ford, Woodall Shoals, Thrifts Ferry, Sandy Ford, Fall Creek and Big Bend #2. These roads are receiving a lot more use (including busses) raising concerns about safety.

TW (1): What are the direct effects of the road system on terrestrial species habitat?

The assumption in the background statement that roads result in habitat loss and fragmentation is misleading and inaccurate. Habitat loss and fragmentation is the combination of landscape pattern, patch size (grain and texture) and of course, habitat types. In landscapes that are predominantly forested (>70%) issues related to habitat loss and fragmentation are reduced to minor or insignificant levels. On all districts of the Sumter National Forest, all watersheds within National Forest proclamation boundaries exceed 70% in forested habitats. Roads are not a source of habitat loss and fragmentation.

TW (2): How does the road system facilitate human activities that affect habitat?

The road system does provide public access along the length of open public roads on the Sumter National Forest. Timber theft, dumping, arson, and illegal off-road traffic are some of the consequences of open access to public lands. However, on the Sumter National Forest, safety concerns are the principle cause of reducing standing snags that could reach the travel surface of an open public road.

TW (3): How does the road system affect legal and illegal human activities (including trapping, hunting, poaching, harassment, road kill, or illegal kill levels)? What are the effects on wildlife species?

Open roads provide access to public lands in rural forested landscapes on the Sumter National Forest. These roads provide necessary access to the multitude of hunters, birders, anglers and outdoor enthusiasts that depend on our National Forests for a land base to pursue their chosen activity. People engaged in illegal activities likewise have access to these same lands. In South Carolina, the Sumter National Forests provide over 60% of the public hunting lands available in the State.

Legal threats to wildlife from roads are directly proportional to the traffic volume and speed limit of highways. Interstates are more lethal to wildlife than graveled forest roads.

UR (1): Is there now or will there be in the future excess supply or excess demand for unroaded recreation opportunities?

It is difficult to forecast demand for general unroaded recreation opportunities since they encompass a variety of activities. However, the demand for several recreation opportunities (including some opportunities in unroaded recreation settings) is covered in the Draft Environmental Impact Statement (March, 2003) for the Sumter National Forest.

As for supply of unroaded recreation opportunities, there is a larger supply of unroaded recreation settings (and therefore opportunities) on the mountain district than on the piedmont districts. In the Proposed Revised Sumter Land and Resource Management Plan, there is an objective that proposes to increase the amount of land (on the piedmont districts) that is unroaded and greater than 2,500 acres in size. As this objective is accomplished in the future, the supply on the piedmont for unroaded recreation settings will be increased.

UR (2): Is developing new roads into unroaded areas, decommissioning of existing roads, or changing the maintenance of existing roads causing substantial changes in the quantity, quality, or type of unroaded recreation opportunities? And what effects might occur from these activities?

Developing new roads into unroaded areas does cause substantial change in the quantity and quality of unroaded recreation opportunities. In general, the quantity and quality of unroaded recreation opportunities decrease, depending on the location of the new road. Noise and other disturbances (such as dust and increased amounts of people) caused from the use of roads is a negative effect on the unroaded recreation users' feeling of solitude. Any road building in the "inventoried roadless areas" would negatively affect quantity and quality of the roadless recreation experience.

Decommissioning of existing roads can have a positive effect on unroaded recreation opportunities depending on the location of the road(s) to be decommissioned. By decommissioning several roads in one area, there is the potential to increase the quantity and quality of recreation opportunities. The effects of decommissioning roads can include less dust and noise from vehicles and fewer numbers of visitors due to increased difficulty in access.

Changing the maintenance level of existing roads causes less change to unroaded recreation opportunities than developing new roads. By increasing the maintenance level for instance, the speed of vehicles may increase and more people will likely be able to access the area in a variety of vehicle types. By decreasing the maintenance level, the speed of vehicles may decrease and the numbers of people who access the area may decline.

UR (3): Who participates in unroaded recreation in the areas affected by constructing, maintaining and decommissioning roads?

Specific knowledge about Forest visitors who participate in unroaded recreation is limited and is often antidotal. The Sumter National Forest completed a Forest Visitor Use survey in 2002. The final report may include information on the demographics of forest visitors using unroaded recreation opportunities. Data and analysis from this study will be included in the 2003 Monitoring and Evaluation Annual Report.

UR (4): What are these participants' attachments to the area, how strong are their feelings, and are alternative opportunities and locations available?

Roadless area attachments are strong enough to cause the creation of interest groups that advocate the protection of existing roadless areas and urge for the creation of new roadless areas. In the mountains, there are two other National Forests within a short drive and the forests also offer a variety of unroaded recreation opportunities. On the piedmont, there are much fewer alternative opportunities for unroaded recreation opportunities.

RR (1): Is there now or will there be in the future excess supply or excess demand for roaded recreation opportunities?

It is difficult to forecast demand for general roaded recreation opportunities since they encompass a variety of activities. However, the demand for several recreation opportunities is covered in the Draft Environmental Impact Statement (March, 2003) for the Sumter National Forest.

As for supply of roaded recreation opportunities, there is a large supply of these opportunities on both the mountain and piedmont districts. The majority of the recreation opportunities on the Sumter National Forest take place in roaded settings.

RR (2): Is developing new roads, decommissioning of existing roads, or changing the maintenance of existing roads causing substantial changes in the quantity, quality, or type of roaded recreation opportunities? And what effects might occur from these activities?

Most of the Sumter National Forest has a roaded natural recreation opportunity spectrum. Roaded recreation is abundant as compared to unroaded recreation.

Noise, dust and disturbances associated with road use adversely affect people who travel to the Forest to for recreational activities. Additional road building near areas of high recreation use could negatively affect the quality of the recreational experience. However, road improvements could significantly improve the quality of the recreational experience for those who prefer well-maintained roads. Road maintenance levels also affect the type of roaded recreation enjoyed. Adding roads to the low maintenance level

classification would actually increase the opportunities for high clearance vehicle driving even though poorly maintained roads may limit access for many.

RR (3): Who participates in roaded recreation in the areas affected by constructing, maintaining and decommissioning roads?

Forest specific knowledge about our visitors who participate in roaded recreation is limited and is often antidotal. The Sumter National Forest completed a Forest Visitor Use survey in 2002. The final report may include information on the demographics of forest visitors using roaded recreation opportunities.

Handicap hunter access is needed on some roads.

RR (4): What are these participants' attachments to the area, how strong are their feelings, and are alternative opportunities and locations available?

Roaded recreation attachments are strong enough to cause the creation of interest groups that advocate the protection of their preferred recreation opportunity and urge for the creation of new opportunities. Many recreationists benefit from roads, such as off-road enthusiasts, campers, day-users, and hunters. While the existing road systems in South Carolina are very extensive, the demand for roaded recreation is increasing, just as demand for unroaded recreation is increasing.

Some of the roaded recreation activities, such as hunting, horseback riding, and OHV riding are available on private land in South Carolina. The dilemma, however, is this, many can not afford to own, lease, or rent land of sufficient size to enjoy these activities, and even fewer can afford to own, lease, or rent land on a scale that provides the same or better setting as what one can find on National Forest.

The mountain district is adjacent to two other National Forest and several SC State Parks and they also offer a variety of roaded recreation opportunities. The piedmont districts have a variety of South Carolina State Parks in the general vicinity that offer some similar roaded recreation opportunities.

AU (1) – How does the road system affect access needed for research, inventory, and monitoring?

The current road system provides good access for monitoring of resource management activities on the National Forest. Forest Inventory and Analysis (FIA) plots are located in the area as well as bird monitoring points. The Sumter provides many opportunities for ongoing research with various universities because of its location and accessibility. The Calhoun Experimental Forest is located in the central piedmonts and its mission is scientific research.

AU (2) – How does the road system affect investigative or enforcement activities?

The road system provides access for law enforcement and resource protection.

PT (1) – How does the road system affect fuels management?

Typically, roads are used as control lines for prescribed burning and for access to determine conditions before and after a fuels management treatment. Road access increases management efficiency, safety, reduces costs and resource impacts from repetitive fireline construction.

PT (2) – How does the road system affect the capacity of the Forest Service and cooperators to suppress wildfires?

The road system provides access and quick response for wildfire suppression and resource protection. Roads serve as control lines and emergency access points for firefighters, and they improve access for equipment such as dozers, fire engines, water tenders and fire crew transport vehicles.

PT (3) – How does the road system affect risk to firefighters and to public safety?

On the Piedmont Districts, the topography is not very steep and roads typically are wide and have sufficient sight distance for vehicular fire traffic including firefighter transport busses. County, state and Forest Service managed road systems provide the access. Generally, the road system is adequate to meet fire suppression needs and allows orderly egress by the public from the affected area. There are isolated areas where there is typically only one way in and one way out but this is generally the exception rather than the rule.

On the Andrew Pickens District in the Southern Appalachian Mountains, roads are on steeper grades, windy and with shorter sight distances. Travel for busses is more difficult and usually requires coordination/management on any sustained firefighting effort. Public access with one way in and one way out is more typical given road locations and terrain features. There is increased risk to the public and firefighters using these roads.

PV (1) – Do areas planned for road construction, closure, or decommissioning have unique physical or biological characteristics, such as unique natural features and threatened or endangered species?

The planning process on the Forest is usually done through area analysis for managing forest vegetation (prescribed burning for fuels reduction and wildlife habitat or for maintaining healthy forests through regeneration harvests and intermediate thinnings). For fiscal year 2003 and beyond however, a portion of planning and analysis will involve watershed assessments. This is a more holistic view of ecosystems and their function versus the more informal area analysis. There is greater potential to connect issues and

projects together though it is very expensive and does not directly result in implementation of projects.

Typically, road construction is limited on the forest due in part to the fact that most areas are roaded. Road construction is usually to isolated tracts of forest to provide management access. Opportunities to address problems associated with roads in project planning typically center around safety and adverse resource impacts (usually associated with soil and water). These activities are incidental to the main project objective but opportunities do arise more often than not to correct problems.

SI (1, 2) – What are people's perceived needs and values for roads and access?

Easy access to the Forest is expected and not consciously thought of by most users of roads. Vicarious support for roads and current access exists among many users with special interest groups on both sides of the various roads issues pushing their own agendas.

Chapter 5 – Describing Opportunities and Setting Priorities

This chapter describes management opportunities and sets priorities for road management on the Sumter National Forest

Management Opportunities

There are opportunities to:

1. improve roads that are public safety concerns.
2. protect habitat related to threatened, endangered and sensitive species.
3. reduce sedimentation to streams and the Chattooga Wild and Scenic River.
4. reduce/eliminate invasive exotic plants along rights-of-way.
5. close and decommission roads that are no longer needed for management or are having substantial resource impacts.
6. develop agreements with the State and County agencies on road maintenance.
7. develop rights-of-way agreements with private landowners and with State and County agencies.
8. improve handicap hunter access on a few closed roads per District.
9. close roads to reduce maintenance costs and provide wildlife food and seclusion.
10. identify ROWs that should be appropriated by the Federal Highway Administration

Priorities

Four priority categories have been identified and are crossed referenced to Forest road issues in Chapter 3. Needs are identified in each category with specific references found in Chapter 4.

1. Public Health and Safety (Issue C)

[Reference: GT (4), PT (3)]

- ✓ Identify roads where signing for safety is needed.
- ✓ Identify high priority roads in need of maintenance or if road standards need to be changed.

2. Resource Protection and Management (Issues A, D, E, F, H, I, J, L, M, N)

[Reference: EF (2) - (4), AQ (1) – (10)]

- ✓ Continue to manage for known populations of threatened, endangered and sensitive species (TES) that occur in road rights-of-way.
- ✓ Identify areas along rights-of-way where invasive exotic species could be reduced and/or eliminated especially where they impact TES species.
- ✓ Identify areas where hazard trees need to be removed that are interfering with normal road maintenance along rights-of-way as a result of insect and disease damage.
- ✓ Identify high priority roads that are chronic sources of sediment to streams or areas of high erosion.
- ✓ Identify high priority roads where additional drainage or improved drainage structures are needed to reduce erosion/sedimentation or for fish passage.
- ✓ Identify high priority roads for closing or decommissioning/obliteration that are having substantial adverse effects.
- ✓ Reduce chronic sediment from roads that may be impacting the Chattooga River.
- ✓ Maintain and improve habitat conditions in the Stevens Creek watershed for a variety of mussels including the Carolina heelsplitter, which is federally endangered.
- ✓ Classify and implement decisions (road closures/decommissioning) on roads in the Jocassee land acquisition.
- ✓ Coordinate and work with State, Counties or Federal Highway Administration to manage and enhance Threatened and Endangered species.

3. Public/Adjacent Landowners/Other State and Federal Agencies (Issues G, K)

[Reference: GT (1)]

- ✓ Identify or begin road improvement projects.
- ✓ Identify roads where maintenance can be done by the State or County road agencies and vice versa.
- ✓ Continue to identify roads to be upgraded/downgraded based on traffic use level.

- ✓ Identify rights-of-way (ROW) needed for access to isolated federal land parcels.
- ✓ Identify ROW with State and County agencies that need to be formalized and/or improved.
- ✓ Identify roads for handicap hunter access.
- ✓ Identify roads to transfer jurisdiction to State, Counties or to Federal Highways Administration (I-26 corridor).

4. Financial (Issue B)

[Reference: EC (1)]

- ✓ Identify roads for closing to reduce annual and/or deferred maintenance costs.
- ✓ Identify road improvements to reduce short-term maintenance costs.
- ✓ Identify roads to remove from the system and/or manage as wildlife linear strips.

Chapter 6 - Reporting

This roads analysis supplements the Sumter National Forest Land and Resource Management Plan and the revision effort currently underway. The analysis is intended to inform line officers on issues related to access management. The intended audience for review of this document is the Forest Leadership Team and the Regional Office.

The results and findings can be used to set Forest-wide priorities and also direct site-specific analysis/surveys at the project, area and watershed assessment levels. Forest priorities for access management are aimed at providing for public health and safety and resource protection and management

Key Analysis Results and Findings

1. The forest road condition survey program has identified over 20 million dollars in deferred maintenance work on the road system that needs to be accomplished. [Page 11, Table 4]

2. The Forest is receiving only about 1.4 percent of its non-critical maintenance needs at the present time. [Page 11, Table 3]

3. The Forest is being funded at about 63 percent of its need in annual maintenance. [Page 11, Table 4]

4. There is a need to identify and prioritize the minimum road system necessary for public access and management of the Forest due to critical shortfalls in funding. [Page 11]

5. Road management objectives should be reviewed for existing roads and proposed new roads during planning area analysis, watershed assessments and during site-specific environmental analysis. [Page 11]

6. There is a need to establish reciprocal agreements for road maintenance with the State of South Carolina and the counties, especially for roads receiving heavy use by the public. [GT (1), (2), page 25]

7. There is a need to maintain roads to designed standards for public safety. [GT (4), page 26]

8. Seasonally opened/closed roads should be reviewed periodically to determine if they could be closed permanently in order to reduce maintenance costs and provide food and seclusion for wildlife. [page 11]

9. There is a need to acquire rights-of-way to isolated federal parcels of land where none or only prescriptive rights exist. [GT (3)]

10. Roads that are chronic sources of sediment or other pollution to streams need to be identified and prioritized for corrective actions. [Pages 18-20, AQ (1), (2), (4), (5), (6)]

11. Roads drainage structures that create severe barriers to aquatic organisms need to be identified and prioritized for corrective actions. [AQ (10), page 22]

12. Accessibility of some roads for handicap hunters needs to be improved. [RR (3), page 29]

13. Some private land in-holdings require access across the National Forest.

14. Roadside conditions as a result of maintenance activities may provide or reduce habitat for some threatened, endangered and sensitive species. [EF (4), page 17]

15. The road system is critical for both public and private forest management activities especially related to removal of timber killed by insects and disease and devastating storms. [TM (1-3), pages 23 and 24]

16. The road system facilitates fire management activities (prescribed and wildland fire). [PT (1-3), pages 30 and 31]

17. Roads managed by the Forest Service are inextricably linked to other federal, state and local road systems providing access to homes, farms, local industries and community infrastructure. [page 9]

18. Traffic has increased beyond the original design standards of some roads and they need to be upgraded. [GT (1-3), page 26]

19. Many of the roads on the county network existed prior to any formal deeded rights-of-way making road improvements difficult.

20. Reduced maintenance has created washboard surfaces and vegetation has reduced sight distances on some roads. [GT (1-2), pages 25 and 26]

21. The impacts of southern pine beetle have raised concerns for public safety along roads. Areas of beetle-killed trees that fall within the road rights-of-way create hazards for motorists and impeded maintenance activities. [GT (4), page 26]

Appendices

A - Potential Public Forest Service Road Projects
B - Sumter Forest Highways
C - ML 3-5 Roads on the Forest

Appendix A

Sumter NF Potential Public Forest Service Road Projects

Road Project Name	Road Number	Road Name	Forest Project ID	Total Miles	Total Estimated Cost (in millions)
FDR 505-Curtail	505	Curtail	LCCURTAIL	8.1	$2.77
FDR 518-Candy Branch	518	Candy Branch	LCCANDYBRANCH	4.0	$2.096
FDR 515-Parsons	505	Curtail	LCPARSONS	2.7	$0.967
Chattooga River	708	Burrells Ford	APCHATT	2.493	$2.86
	757	Woodal Shoals		2.3000	
	795	Tilly Branch		0.710	
	721	Whetstone		2.107	
Rich Mountain	744	Rich Mtn.	APRICHMTN	7.428	$1.72
Spy Rock	748-1	Spy Rock	APSPYROCK	10.505	$2.21
	748-2	Spy Rock 2			
	748-3	Spy Rock 3			
Worthys Ferry	301	Worthys Ferry	EN301	5.030	$0.32
Beisel	1011	Beisel	EN1011	0.820	$0.64
Cromer	356	Cromer	EN356	3.570	$1.8

Current Betterment Projects

Rd #	***Name***	***Mileage***	***Project Description***
356	Cromer Rd	3.6	Upgrade road surface, aggregate to asphalt
515	Parsons Mtn.	2.6	Upgrade road surface, aggregate to asphalt
518	Candy Br	4.0	Upgrade road surface, aggregate to asphalt
708	Burrell Ford	2.5	Upgrade road surface, aggregate to asphalt

FY 2003 Restoration Projects

Rd #	**Name**	**Mileage**	**Project Description**
301-C	Wild Turkey	1.6	Drainage and surface reconstruction
304	Shoals	1.5	Roadbed, drainage and surface reconstruction
505	Curltail	8.1	Widen road, reconstruct aggregate surfacing

Appendix B

Sumter National Forest
Forest Highway Routes

District - Andrew Pickens Ranger District

Route No.	County	Length (Miles)	State Roads	County Roads
101	Oconee	18.9	SC28, SC107	
102	Oconee	12.3	SC28, S196, S258	
103	Oconee	6.72	S193	
104	Oconee	13.06	S436, S90, S48	PU52
105	Oconee	3.26	SC130, S413	
106	Oconee	1.85	S325	
108	Oconee	10.61	S95	CH9, CH5
110	Oconee	5.22		TU35, TU37
111	Oconee	11.55	US76, S14, S96, S102, S538	PU48
112	Oconee	7.41	S290	
113	Oconee	2.21		PU3
	Total Miles	**93.09**		

District - Long Cane Ranger District

Route No.	County	Length (Miles)	State Roads	County Roads
302	Edgefield	13.39	S19-51, S19-35	
303	Greenwood, Abbeville	14.41	S24-112, S1-33	
304	Greenwood, Abbeville	3.98	S24-47, S1-66	
305	Abbeville	2.97	S1-251	
306	Abbeville	4.12	S1-159	
307	Greenwood, Abbeville	5.75		C24-506, C1-506
308	Greenwood, McCormick	17.38	SC28, S33-19, S33-38, S33-36, S24-65, S24-24, S33-24	
309	Edgefield, Saluda	5.73	S19-24, S41-38	

Route No.	County	Length (Miles)	State Roads	County Roads
311	Edgefield, McCormick	15.87	S19-143, S33-88	
312	Edgefield	15.29	S19-118, S19-52,	
313	Greenwood	3.79	S24-62, S24-30	
314	Greenwood, McCormick	4.56	S24-24, S33-117	
316	Abbeville, McCormick	3.50	S1-46, S33-36	
317	Edgefield, McCormick	7.50	S19-53, S19-235, S33-204	
318	Edgefield, McCormick	3.41	S19-53, S33-112	
321	Edgefield	4.60	S19-68	
322	McCormick	5.05	S33-138	
323	McCormick	3.12	S33-118	
324	McCormick	4.45	S33-317, S33-61	
325	McCormick	4.83	S33-39, S33-37	
327	McCormick	4.08	S33-38	
328	McCormick	2.95	S33-40, S33-80	
	Total Miles	135.89		

District- Enoree Ranger District

Route No.	County	Length (Miles)	State Roads	County Roads
401	Chester	11.79	S12-25, S12-49	
402	Union	11.22	S44-16	
403	Union	13.40	S44-18	
404	Union	10.11	S44-36, S44-86,	C44-2026, C44-2104
405	Union	5.97	S44-37	
406	Union	4.38	S44-44	
408	Union	5.54	S44-35	
409	Newberry, Union	8.20	S36-45, S44-45	
410	Newberry, Union	10.06	S36-45, S36-54, S44-35, S44-359	
411	Newberry	7.38	S36-55	
413	Newberry	10.20	S36-32	
414	Newberry	4.24	S36-481	
415	Newberry	15.40	S36-81	

Route No.	County	Length (Miles)	State Roads	County Roads
416	Laurens, Newberry	7.20	S30-99, S36-63	
417	Newberry	3.02	S36-439	
418	Newberry	4.40	S36-36	
419	Fairfield	16.10	SC34, S20-99	
422	Laurens	8.90	S30-26	
423	Laurens	1.52	S30-554	
424	Laurens	4.82	S30-276	
	Total Miles	163.85		

Appendix C

ML 3-5 Roads on the Forest

Road Segment Inventory - Sumter NF

Report: OBJ. ML 3 - 5

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
ADMIN_ORG:		**081201**															
1002	0.000	0.400	0.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - UNION	4TH C	
1003	0.000	0.300	0.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	
1006	0.000	0.950	0.950	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1011	0.000	1.257	1.257	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1029	0.000	0.900	0.900	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1032	0.000	0.606	0.606	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1041	0.000	1.455	1.455	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1047	0.000	1.300	1.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1047	1.300	1.312	0.012	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1057	0.000	0.915	0.915	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1058	0.000	1.334	1.334	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - UNION	4TH C	POT
1067	0.000	1.200	1.200	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1070	0.000	0.422	0.422	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1072	0.000	1.356	1.356	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1073	0.000	0.662	0.662	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1074	0.000	0.364	0.364	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - LAURENS	5TH C	
1075	0.000	0.954	0.954	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1076	0.000	1.027	1.027	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1078	0.000	0.800	0.800	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1082	0.000	0.222	0.222	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - FAIRFIELD	5TH C	
1089	0.000	0.500	0.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
350	0.800	0.832	0.032	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
350	0.000	0.800	0.800	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
350B	0.000	1.010	1.010	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
356F	0.000	1.000	1.000	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
356G	0.000	1.000	1.000	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
357	2.300	4.700	2.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
357A	0.000	0.600	0.600	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
358-1	0.000	0.300	0.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	
358A	0.000	0.800	0.800	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
359	2.100	2.130	0.030	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
359	0.000	2.100	2.100	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
359B	0.000	0.400	0.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	
359C	0.000	1.100	1.100	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
362	0.000	1.400	1.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
363	0.000	2.600	2.600	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
364	0.000	2.400	2.400	EX	FS	NFSR	3	3	C	AGG	1	FS	081201	081201	SC - LAURENS	5TH C	POT
365	0.000	3.100	3.100	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
365A	0.000	0.600	0.600	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
369	0.000	1.771	1.771	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
369A	0.000	0.554	0.554	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
371	0.000	3.100	3.100	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
371B	1.500	2.200	0.700	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	
371B	0.000	1.500	1.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	
373	0.000	2.000	2.000	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
373A	0.000	1.400	1.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
374	0.000	1.135	1.135	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
375	0.000	1.223	1.223	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
375B	0.000	0.800	0.800	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
376	0.000	2.400	2.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
376A	0.000	0.300	0.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	
377	0.000	1.826	1.826	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
378	1.600	3.000	1.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
379	0.039	1.731	1.692	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
380	0.000	1.700	1.700	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
381	0.000	0.800	0.800	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
382	0.000	1.600	1.600	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
382A	0.000	0.500	0.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
383	0.000	2.463	2.463	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
383A	0.000	0.200	0.200	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	
384	0.000	0.300	0.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
385B	0.000	0.679	0.679	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
385H	0.000	1.528	1.528	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
385J	0.000	0.959	0.959	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
386	0.000	2.601	2.601	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
386A	0.000	0.300	0.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	
387A	0.000	0.500	0.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
388	0.000	1.300	1.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
388A	0.000	0.600	0.600	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
389	0.000	1.420	1.420	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
390	0.000	2.590	2.590	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
391	0.000	2.500	2.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
392-2	0.000	1.280	1.280	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - UNION	4TH C	POT
392C	0.000	1.851	1.851	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - UNION	4TH C	POT
393	0.000	2.550	2.550	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - UNION	4TH C	POT
393A	0.000	0.860	0.860	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - UNION	4TH C	POT
394	0.000	1.800	1.800	EX	FS	NFSR	3	3	C	AGG	1	FS	081201	081201	SC - UNION	4TH C	POT
394A	0.000	1.477	1.477	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - UNION	4TH C	POT
394B	0.000	1.710	1.710	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - UNION	4TH C	
400	0.000	0.670	0.670	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - FAIRFIELD	5TH C	POT
401E	0.000	0.860	0.860	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	
402	0.000	1.210	1.210	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
402A	0.000	0.200	0.200	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	
402D	0.000	0.583	0.583	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
410C	0.000	0.371	0.371	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - FAIRFIELD	5TH C	POT
411	0.000	1.506	1.506	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - FAIRFIELD	5TH C	POT
411A	0.000	0.500	0.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - FAIRFIELD	5TH C	POT
412C	0.000	0.200	0.200	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - FAIRFIELD	5TH C	
413A	0.000	2.072	2.072	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - FAIRFIELD	5TH C	POT
413B	0.000	0.552	0.552	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - FAIRFIELD	5TH C	POT
415	0.000	1.736	1.736	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
420	0.000	0.700	0.700	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
425	0.000	0.600	0.600	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - LAURENS	5TH C	POT
427	0.000	1.600	1.600	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - LAURENS	5TH C	POT
427A	0.000	0.400	0.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - LAURENS	5TH C	
475	0.000	0.872	0.872	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
477	0.000	1.180	1.180	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
483	0.000	1.240	1.240	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - FAIRFIELD	5TH C	POT
490	0.000	1.395	1.395	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	
491	0.000	2.000	2.000	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
493	0.000	1.500	1.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
497	0.000	1.600	1.600	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
498	0.000	0.957	0.957	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - FAIRFIELD	5TH C	POT
E 91-7	0.000	0.500	0.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - LAURENS	5TH C	POT

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
E169-1	0.000	0.500	0.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
1079	0.000	0.100	0.100	EX	FS	NFSR	4	4	L	BST	1	FS	081201	081201	SC - NEWBERRY	5TH C	
356	0.000	3.800	3.800	EX	FS	NFSR	4	4	C	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
358	0.000	0.400	0.400	EX	FS	NFSR	4	4	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	
360	0.000	2.600	2.600	EX	FS	NFSR	4	4	L	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
361	0.000	3.800	3.800	EX	FS	NFSR	4	4	C	AGG	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
366	0.000	3.400	3.400	EX	FS	NFSR	4	4	C	AGG	1	FS	081201	081201	SC - LAURENS	5TH C	POT
387	0.000	1.200	1.200	EX	FS	NFSR	4	4	L	BST	1	FS	081201	081201	SC - NEWBERRY	5TH C	POT
412	0.000	3.945	3.945	EX	FS	NFSR	4	4	L	AGG	1	FS	081201	081201	SC - FAIRFIELD	5TH C	POT
499	0.000	0.300	0.300	EX	FS	NFSR	5	5	L	BST	2	FS	081201	081201	SC - NEWBERRY	5TH C	
	Total:		139.526														
ADMIN_ORG: 081202																	
2363	0.000	0.290	0.290	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	
2377	0.000	0.230	0.230	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	
2603	0.000	0.400	0.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	
2652	0.000	0.100	0.100	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	
704	0.000	0.400	0.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	
705	0.000	1.280	1.280	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
713	0.000	1.960	1.960	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
715	0.000	1.400	1.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
715A	0.000	1.580	1.580	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
716	0.000	0.900	0.900	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
719	0.000	2.320	2.320	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
719A	0.000	1.500	1.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
721A	0.000	1.610	1.610	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
721B	0.000	0.300	0.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	
722	0.000	2.500	2.500	EX	FS	NFSR	3	3	C	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
723	0.000	0.950	0.950	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
724	0.000	1.900	1.900	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
725	0.000	1.020	1.020	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
726	0.000	1.500	1.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	
727	0.000	0.300	0.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	
736	0.000	1.200	1.200	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
736A	0.000	1.000	1.000	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
737	0.000	0.800	0.800	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
738	0.000	1.810	1.810	EX	FS	NFSR	3	3	C	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
738A	0.000	1.300	1.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
739C	0.000	0.900	0.900	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
739D	0.000	0.970	0.970	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
740	0.000	1.700	1.700	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
740A	0.000	0.880	0.880	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
741	0.000	1.430	1.430	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
742	0.000	1.590	1.590	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
743	0.000	1.700	1.700	EX	FS	NFSR	3	3	C	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
744A	0.000	0.800	0.800	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
744C	0.000	2.700	2.700	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
744I	0.000	1.300	1.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
745	0.000	0.660	0.660	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
746	0.000	0.240	0.240	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	
747	0.000	0.080	0.080	EX	FS	NFSR	3	3	L	AGG	2	FS	081202	081202	SC - OCONEE	3RD C	
748-2	0.000	2.385	2.385	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
748-3	0.000	2.370	2.370	EX	FS	NFSR	3	3	C	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
748B	0.000	0.700	0.700	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
748E	0.000	0.900	0.900	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
748H	0.000	0.700	0.700	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
748K	0.000	1.900	1.900	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
749	0.000	2.700	2.700	EX	FS	NFSR	3	3	C	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
749A	0.000	0.470	0.470	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
750	0.000	1.260	1.260	EX	FS	NFSR	3	3	C	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
751	0.000	0.470	0.470	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
752	0.000	0.780	0.780	EX	FS	NFSR	1	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
752A	0.000	0.200	0.200	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	
752B	0.000	2.100	2.100	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
753	0.000	2.100	2.100	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
753A	0.000	0.560	0.560	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
755	0.000	3.000	3.000	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
757A	0.000	0.660	0.660	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
762	0.000	1.130	1.130	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
764	0.000	2.500	2.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
765	0.000	2.340	2.340	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
768	0.000	1.480	1.480	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
770	0.000	0.840	0.840	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
778	0.000	1.140	1.140	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
778A	0.000	1.850	1.850	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
782	0.000	2.200	2.200	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
784	0.000	0.100	0.100	EX	FS	NFSR	3	3	L	AGG	2	FS	081202	081202	SC - OCONEE	3RD C	
793	0.000	2.530	2.530	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
795	0.000	0.710	0.710	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
797	0.000	1.275	1.275	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
798	0.000	0.300	0.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	
710	0.000	4.180	4.180	EX	FS	NFSR	3	4	C	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
721	0.000	2.170	2.170	EX	FS	NFSR	3	4	C	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
728	0.000	0.200	0.200	EX	FS	NFSR	4	4	L	BST	2	FS	081202	081202	SC - OCONEE	3RD C	
735	0.000	0.500	0.500	EX	FS	NFSR	3	4	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	
735A	0.000	0.200	0.200	EX	FS	NFSR	3	4	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	
744	0.000	7.428	7.428	EX	FS	NFSR	3	4	A	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
748-1	0.000	5.750	5.750	EX	FS	NFSR	3	4	A	AGG	1	FS		081202	SC - OCONEE	3RD C	POT
757	0.000	2.300	2.300	EX	FS	NFSR	3	4	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
763	0.000	0.500	0.500	EX	FS	NFSR	4	4	L	BST	1	FS	081202	081202	SC - OCONEE	3RD C	
769	0.000	0.570	0.570	EX	FS	NFSR	3	4	L	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
708	0.300	2.743	2.443	EX	FS	NFSR	4	5	A	AGG	1	FS	081202	081202	SC - OCONEE	3RD C	POT
708	0.000	0.300	0.300	EX	FS	NFSR	4	5	A	AC	1	FS	081202	081202	SC - OCONEE	3RD C	POT
760	0.000	0.200	0.200	EX	FS	NFSR	5	5	L	BST	2	FS	081202	081202	SC - OCONEE	3RD C	
783	0.000	0.130	0.130	EX	FS	NFSR	5	5	L	BST	2	FS	081202	081202	SC - OCONEE	3RD C	
	Total:		112.021														
ADMIN_ORG:	**081203**																
3006	0.000	1.047	1.047	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
3006A	0.000	0.600	0.600	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	
3007A	0.000	1.167	1.167	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
3010	0.000	1.069	1.069	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
3015	0.000	2.631	2.631	EX	FS	NFSR	3	3	C	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
3018	0.000	0.154	0.154	EX	FS	NFSR	3	3	L	BST	1	FS	081203	081203	SC - MCCORMICK	3RD C	
3051	0.000	2.160	2.160	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
501	0.000	2.192	2.192	EX	FS	NFSR	3	3	C	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
501A	0.000	0.353	0.353	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
503C	0.000	0.158	0.158	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	
504	0.000	0.960	0.960	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
505E	0.000	0.474	0.474	EX	FS	NFSR	3	3	C	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
505M	0.000	1.008	1.008	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
506	0.000	1.446	1.446	EX	FS	NFSR	3	3	C	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
509C	0.000	1.015	1.015	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
512	0.000	0.335	0.335	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
515A	0.000	0.208	0.208	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	
515B	0.000	0.475	0.475	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
516	0.000	1.585	1.585	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
517	0.000	1.479	1.479	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
520	0.000	2.296	2.296	EX	FS	NFSR	3	3	C	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
521	0.000	4.835	4.835	EX	FS	NFSR	3	3	C	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
521A	0.000	1.398	1.398	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
522	0.000	1.377	1.377	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
523	0.000	2.300	2.300	EX	FS	NFSR	3	3	C	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
523A	0.000	1.300	1.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
530	0.000	0.875	0.875	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
532	0.000	0.268	0.268	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	
532A	0.000	0.878	0.878	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
532B	0.000	0.347	0.347	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	
532C	0.000	0.380	0.380	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	
534	0.000	2.012	2.012	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
535A	0.000	0.855	0.855	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
536	0.000	0.655	0.655	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
537	0.000	1.600	1.600	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
538	0.000	1.062	1.062	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - GREENWOOD	3RD C	POT
538-2	0.000	0.420	0.420	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - GREENWOOD	3RD C	
540	0.000	0.125	0.125	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - GREENWOOD	3RD C	
543A	0.000	1.700	1.700	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - GREENWOOD	3RD C	POT
543A-1	0.000	0.225	0.225	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	
543D	0.000	0.778	0.778	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - GREENWOOD	3RD C	POT
543F	0.000	1.369	1.369	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - GREENWOOD	3RD C	POT
544	0.000	1.700	1.700	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - GREENWOOD	3RD C	POT
545A	0.000	1.291	1.291	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - GREENWOOD	3RD C	POT
547	0.000	3.000	3.000	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
547A	0.000	0.718	0.718	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
547B	0.000	1.025	1.025	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
547D	0.000	0.368	0.368	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
547E	0.000	1.800	1.800	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
547J	0.000	1.236	1.236	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
548	0.000	1.433	1.433	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
550A	0.000	1.612	1.612	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
550B	0.000	2.581	2.581	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
555A	0.000	0.420	0.420	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	
556A	0.000	0.388	0.388	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - GREENWOOD	3RD C	
560C	0.000	1.622	1.622	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
560D	0.000	0.583	0.583	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
560E	0.000	0.185	0.185	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	
561	0.000	1.515	1.515	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
561B	0.000	0.616	0.616	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
563A	0.000	0.664	0.664	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
563B	0.000	0.419	0.419	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	
563E	0.000	0.411	0.411	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	
563F	0.000	0.736	0.736	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
564	0.000	0.958	0.958	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
565	0.000	4.700	4.700	EX	FS	NFSR	3	3	C	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
565A	0.000	0.882	0.882	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
565B	0.000	0.958	0.958	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
565C	0.000	0.795	0.795	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
566E	0.000	0.439	0.439	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
570	0.000	0.922	0.922	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
570A	0.000	1.605	1.605	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
570B	0.000	0.600	0.600	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
576A	0.000	1.450	1.450	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
579	0.000	0.400	0.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	
599	0.000	1.274	1.274	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
L180-2	0.000	0.565	0.565	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
L227-4	0.000	0.550	0.550	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
L241-1	0.000	0.409	0.409	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
L252-4	0.000	0.600	0.600	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	POT
L252-6	0.000	0.391	0.391	EX	FS	NFSR	3	3	L	AGG	1	FS	081203	081203	SC - MCCORMICK	3RD C	
3007	0.000	0.764	0.764	EX	FS	NFSR	4	4	L	AGG	2	FS	081203	081203	SC - MCCORMICK	3RD C	POT
505	0.000	8.100	8.100	EX	FS	NFSR	4	4	A	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
509	0.000	3.400	3.400	EX	FS	NFSR	4	4	C	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
514B	0.000	0.369	0.369	EX	FS	NFSR	4	4	L	BST	1	FS	081203	081203	SC - ABBEVILLE	3RD C	
515	0.000	2.643	2.643	EX	FS	NFSR	4	4	C	AGG	1	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
518	0.000	4.024	4.024	EX	FS	NFSR	4	4	A	AGG	2	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
518B	0.000	0.230	0.230	EX	FS	NFSR	4	4	L	AGG	2	FS	081203	081203	SC - ABBEVILLE	3RD C	
526	0.000	0.333	0.333	EX	FS	NFSR	4	4	L	AGG	2	FS	081203	081203	SC - ABBEVILLE	3RD C	
514	0.000	1.026	1.026	EX	FS	NFSR	5	5	L	BST	2	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
514A	0.000	0.495	0.495	EX	FS	NFSR	5	5	L	BST	2	FS	081203	081203	SC - ABBEVILLE	3RD C	POT
	Total:		110.776														
ADMIN_ORG:	**081207**																
301C	0.000	1.600	1.600	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
301E	0.000	2.493	2.493	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
301F	0.000	1.400	1.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	
301H	0.000	0.557	0.557	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
302	0.000	2.275	2.275	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
304	0.000	1.545	1.545	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
304A	0.000	1.223	1.223	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
305A	0.000	1.849	1.849	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
305D	0.000	1.300	1.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
305F	0.000	0.375	0.375	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
305G	0.000	0.755	0.755	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	
305H	0.000	0.972	0.972	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	
305K	0.000	0.595	0.595	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
305L	0.000	0.435	0.435	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	
307	0.000	1.900	1.900	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
307B	0.000	1.360	1.360	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
309	0.000	2.269	2.269	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
310	0.000	0.586	0.586	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
310A	0.000	0.346	0.346	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	5TH C	
313	0.000	0.425	0.425	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
316	0.000	2.014	2.014	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
318	0.000	0.100	0.100	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
320B	0.000	1.330	1.330	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
321	0.000	0.839	0.839	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
322	0.081	0.495	0.414	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
322	0.000	0.081	0.081	EX	FS	NFSR	3	3	L	P	1	FS	081207	081207	SC - UNION	4TH C	
323	0.000	2.409	2.409	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
324	0.000	2.690	2.690	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
325	0.000	1.000	1.000	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
327A	0.000	1.833	1.833	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
327B	0.000	1.650	1.650	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
329	0.000	3.962	3.962	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
329-1	0.000	0.125	0.125	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
329B	0.000	0.810	0.810	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
330A	0.500	0.790	0.290	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
333A	0.000	1.403	1.403	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	POT
333K	0.000	1.292	1.292	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	POT
334	0.000	1.609	1.609	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	POT
336	0.000	1.471	1.471	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	POT
336A	0.000	1.722	1.722	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	POT
336B	0.000	1.246	1.246	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	POT
339	0.000	0.908	0.908	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
340	0.000	1.977	1.977	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
342	0.000	0.928	0.928	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
342A	0.000	0.200	0.200	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	
343	0.000	2.047	2.047	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
344	0.000	2.900	2.900	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
344A	0.000	1.167	1.167	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
344D	0.000	0.500	0.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
345A	0.000	2.501	2.501	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
345B	0.000	0.097	0.097	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
345C	0.000	0.100	0.100	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
345F	0.000	1.937	1.937	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
347-N	0.000	0.893	0.893	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
347-S	0.900	0.906	0.006	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
347-S	0.000	0.900	0.900	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
349B	0.000	0.887	0.887	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	POT
349C	0.000	0.070	0.070	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	
351	0.000	1.400	1.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	POT
352	0.000	0.344	0.344	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	
352A	0.000	0.430	0.430	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	
353	0.000	0.872	0.872	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	POT
355A	0.000	0.200	0.200	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
397	0.000	1.533	1.533	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
404	0.000	2.422	2.422	EX	FS	NFSR	3	3	C	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
404A	0.800	1.050	0.250	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
405	0.000	1.714	1.714	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
406	0.000	1.728	1.728	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
406A	0.000	0.890	0.890	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
407	0.000	1.623	1.623	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - FAIRFIELD	5TH C	POT
407B	0.000	0.800	0.800	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - FAIRFIELD	5TH C	POT
407C	0.000	0.900	0.900	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - FAIRFIELD	5TH C	POT
408	0.000	3.107	3.107	EX	FS	NFSR	3	3	C	AGG	1	FS	081207	081207	SC - FAIRFIELD	5TH C	POT
409	0.000	2.741	2.741	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
424	0.000	1.773	1.773	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
426	0.000	1.781	1.781	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
426B	0.000	0.440	0.440	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
434	0.000	0.677	0.677	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
439	0.000	1.220	1.220	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
443	0.000	0.585	0.585	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
444	0.000	1.159	1.159	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
446	0.000	1.384	1.384	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
448	0.000	0.742	0.742	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - FAIRFIELD	5TH C	POT
450	0.000	0.472	0.472	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - FAIRFIELD	5TH C	POT
451	0.000	0.162	0.162	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - FAIRFIELD	5TH C	
454	0.000	1.218	1.218	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
457	0.000	0.500	0.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
460	0.000	0.970	0.970	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
464	0.000	0.251	0.251	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - FAIRFIELD	5TH C	
7001	0.000	0.286	0.286	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
7003	0.000	1.766	1.766	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
7004	0.000	0.200	0.200	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
7007	0.000	0.265	0.265	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
7009	0.000	0.187	0.187	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	
7020	0.000	0.260	0.260	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
E56-1	0.000	0.900	0.900	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - FAIRFIELD	5TH C	POT
E61-1	0.000	0.503	0.503	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	POT
E67-1	0.000	0.333	0.333	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	
E71-1	0.000	0.400	0.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081207	081207	SC - UNION	4TH C	

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
301	0.000	5.200	5.200	EX	FS	NFSR	4	4	C	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
305	0.000	3.100	3.100	EX	FS	NFSR	4	4	C	AGG	1	FS	081207	081207	SC - CHESTER	5TH C	POT
328	0.000	0.322	0.322	EX	FS	NFSR	4	4	L	BST	2	FS	081207	081207	SC - UNION	4TH C	
333	0.650	6.750	6.100	EX	FS	NFSR	4	4	C	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	POT
355	0.000	1.712	1.712	EX	FS	NFSR	4	4	C	AGG	1	FS	081207	081207	SC - LAURENS	5TH C	POT
312	0.000	0.157	0.157	EX	FS	NFSR	5	5	L	BST	2	FS	081207	081207	SC - UNION	4TH C	
		Total:	126.547														
ADMIN_ORG:		**081208**															
574	0.000	1.160	1.160	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
580	0.000	1.061	1.061	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
581	0.000	0.198	0.198	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	
582B	0.000	0.110	0.110	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - GREENWOOD	3RD C	
585	0.000	1.996	1.996	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
585C	0.000	1.491	1.491	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
588B	0.000	1.088	1.088	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - SALUDA	3RD C	POT
588E	0.000	0.342	0.342	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - SALUDA	3RD C	
589A	0.000	0.933	0.933	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - GREENWOOD	3RD C	POT
590	0.000	0.915	0.915	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - GREENWOOD	3RD C	POT
591	0.000	1.685	1.685	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - SALUDA	3RD C	POT
592C	0.000	0.990	0.990	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - SALUDA	3RD C	POT
592D	0.000	1.386	1.386	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - GREENWOOD	3RD C	POT
592E	0.000	0.115	0.115	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - GREENWOOD	3RD C	
594C	0.000	0.275	0.275	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - SALUDA	3RD C	
602A	0.000	0.654	0.654	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
604	0.000	2.033	2.033	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
605D	0.000	1.289	1.289	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
606B	0.000	0.685	0.685	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
606C	0.000	0.455	0.455	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
610	0.000	0.838	0.838	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
610A	0.000	1.037	1.037	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
610B	0.000	1.407	1.407	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
611	0.000	2.277	2.277	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
611A	0.000	0.334	0.334	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	
612	0.000	1.236	1.236	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
613B	0.000	0.850	0.850	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
614	0.000	0.303	0.303	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
617	0.000	1.651	1.651	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
617A	0.000	0.730	0.730	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
617B	0.000	0.802	0.802	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
618	0.000	2.184	2.184	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
619	0.000	0.700	0.700	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
620	0.000	1.240	1.240	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
621A	0.000	0.144	0.144	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	
621C	0.000	0.080	0.080	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	
622	0.000	0.896	0.896	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
623	0.000	1.365	1.365	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
628F	0.000	0.320	0.320	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
629	0.000	1.800	1.800	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
629A	0.000	1.697	1.697	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
629C	0.000	1.470	1.470	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
629D	0.000	0.824	0.824	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
631	0.000	1.033	1.033	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
632	0.000	2.200	2.200	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
632A	0.000	1.630	1.630	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
633	0.000	0.768	0.768	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
634B	0.000	0.811	0.811	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
635B	0.000	0.750	0.750	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
635C	0.000	0.585	0.585	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
636	0.000	1.970	1.970	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
636B	0.000	0.469	0.469	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
637	0.000	2.400	2.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
637A	0.000	0.725	0.725	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
637B	0.000	0.400	0.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	
638	0.000	2.173	2.173	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
639A	0.000	0.051	0.051	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	
640	0.000	2.400	2.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
641	0.000	1.400	1.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
642B	0.000	0.802	0.802	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
643	0.000	2.467	2.467	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
643A	0.000	0.450	0.450	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
644	0.000	1.356	1.356	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
644A	0.000	0.916	0.916	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
644B	0.000	0.210	0.210	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	
645	0.000	1.151	1.151	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - DILLON	3RD C	POT
651	0.000	0.850	0.850	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
652	0.000	1.327	1.327	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
652A	0.000	0.310	0.310	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	
655	0.600	1.247	0.647	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
656	0.000	1.762	1.762	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
658A	0.000	0.100	0.100	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	
659B	0.000	2.158	2.158	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
659D	0.000	1.285	1.285	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
661	0.000	1.563	1.563	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
662	0.000	1.742	1.742	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
662A	0.000	1.140	1.140	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
662D	0.000	0.693	0.693	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
663	0.000	0.600	0.600	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
664	0.000	0.305	0.305	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	
665A	0.000	1.200	1.200	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - SALUDA	3RD C	POT
666B	0.000	0.500	0.500	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
667B	0.000	0.843	0.843	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - GREENWOOD	3RD C	POT
668	0.000	1.306	1.306	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
668A	0.000	0.400	0.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	
672	0.000	1.211	1.211	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
678	0.000	0.721	0.721	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
679	0.000	1.072	1.072	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
679A	0.000	0.700	0.700	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
681A	0.000	1.115	1.115	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
688	0.000	1.438	1.438	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
688-1	0.000	0.590	0.590	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
688-3	0.000	0.530	0.530	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
688B	0.000	0.318	0.318	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	
689	0.000	0.730	0.730	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
694	0.000	0.100	0.100	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	
696	0.000	0.400	0.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	
699	0.000	1.280	1.280	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
8001	0.000	0.549	0.549	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
8008	0.000	0.300	0.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	

Road	Bmp	Emp	Miles	Stat	Jur	Sys	OpLv	ObLv	FC	Surf	Lane	P-Mt	Mng Org	AdOrg	County	CD	PFSR
8040	0.000	0.300	0.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	
C19653	0.000	0.400	0.400	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
L266-1	0.000	0.300	0.300	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	
L276-1	0.000	0.619	0.619	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
L284-1	0.000	0.167	0.167	EX	FS	NFSR	3	3	L	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	
602	0.000	2.777	2.777	EX	FS	NFSR	4	4	C	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
608	0.000	1.988	1.988	EX	FS	NFSR	4	4	L	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
615	0.000	2.700	2.700	EX	FS	NFSR	4	4	C	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
621	0.000	3.650	3.650	EX	FS	NFSR	3	4	C	AGG	1	FS	081208	081208	SC - MCCORMICK	3RD C	POT
634	0.000	3.500	3.500	EX	FS	NFSR	4	4	C	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
639	0.000	0.580	0.580	EX	FS	NFSR	3	4	L	AGG	2	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
658	0.000	2.700	2.700	EX	FS	NFSR	4	4	C	AGG	1	FS	081208	081208	SC - EDGEFIELD	3RD C	POT
660E	0.000	0.710	0.710	EX	FS	NFSR	4	4	L	AGG	2	FS	081208	081208	SC - MCCORMICK	3RD C	POT
8003	0.000	0.023	0.023	EX	FS	NFSR	4	4	L	BST	2	FS	081208	081208	SC - MCCORMICK	3RD C	
639B	0.000	0.160	0.160	EX	FS	NFSR	4	5	L	BST	1	FS	081208	081208	SC - EDGEFIELD	3RD C	
		Total:	120.522														
		Grand Total:	609.392														

Active Criteria:

where JURISDICTION = 'FS - FOREST SERVICE' And ROUTE_STATUS = 'EX - EXISTING' And SYSTEM = 'NFSR - NATIONAL FOREST SYSTEM ROAD' And OBJECTIVE_MAINT_LEVEL <> '1 - BASIC CUSTODIAL CARE (CLOSED)' And ADMIN_ORG <> '081205 - Wambaw Ranger District' And ADMIN_ORG <> '081206 - Witherbee Ranger District' And OBJECTIVE_MAINT_LEVEL <> '2 - HIGH CLEARANCE VEHICLES'