



Kay Ivey  
Governor

## ALABAMA DEPARTMENT OF TRANSPORTATION

### Bureau of County Transportation

1409 Coliseum Blvd., Montgomery, Alabama 36110-2060

Phone: (334) 242-6206 FAX: (334) 353-6530

Internet: <http://www.dot.state.al.us>



John R. Cooper  
Transportation Director

January 16, 2018

### LOCAL TRANSPORTATION BUREAU MEMORANDUM 2018 - 06

**TO:** Area Local Transportation Engineers

**FROM:**

**D. E. (Ed) Phillips, Jr., P.E.**  
State Local Transportation Engineer

**RE:** Updating Information in the County Road Maintenance Database

As all of you are aware, this past year we implemented the new County Road Maintenance Certification Policy (see attached CRMC policy). This new policy changed the process in which maintenance inspections were conducted on county roads. These changes were made in an effort to improve the program by making it more efficient and flexible for both the counties and ALDOT.

One of the bigger changes in the new maintenance inspection policy is how new projects are added, and existing projects are removed from the program.

1. All new projects will be added to the program by the Local Transportation Bureau when the projects have been assumed for maintenance. This change will no longer put the responsibility on area local transportation personnel to add projects for each county in their area.
2. All existing projects will be automatically removed from the program after their designated service life has expired. This will ensure that counties are not held responsible for projects that are no longer required to be inspected under the CRMC.

These two changes will allow the focus to return to the original intent of the program, which is to ensure that the investment made by FHWA, ALDOT, and the county is being maintained to an acceptable level after the project is completed.

However, before these changes can be fully implemented, there are two new fields in the CRMC database that must be updated for every existing project.

1. Project Type
2. Project Year (year the project was put into service)

The data for **Project Type** and **Project Year** must be collected and entered into the database in order for it to determine if a project is active and must still be maintained in accordance with the CRMC. Once these two fields are populated, all projects will automatically be placed into one of two categories, **Required: YES** or **Required: NO**. If a project is in **YES**, that indicates that the service life of the project has not yet expired, and an inspection is currently required. If a project is in **NO**, that indicates that the service life of the project has expired, and an inspection is no longer required. A computer-generated letter that will only include the active projects will then be sent to each county.

In order to accomplish this task, Area Local Transportation Engineers will need to collect this data and input it into the database for each county in their area. **Project Type** and **Project Year** should only be updated for the most recent inspection completed for each project (either 2016 or 2017 depending on the county). Please note: after selecting the Project Type, you must TAB over to the Project Year in order for the date to appear correctly.

Once these fields are updated, a computer-generated letter will be sent out to each county listing the projects that the county will be responsible for maintaining to an acceptable level within the requirements of the CRMC policy (score a 70 or above).

We would like this data to be entered in as soon as possible in order to provide the counties with a list of projects that must be certified by the October 1 deadline. Therefore, please try to have the data updated in the database prior to **March 1, 2018**.

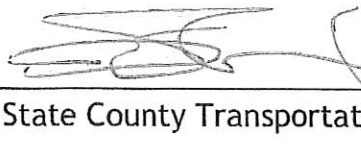
Also note that not every upgrade in the database has been completed yet, and some functions may not preform correctly at this time. However, everything required to populate **Project Year** and **Project Type** has been completed and should function properly.

If you have any questions or concerns, please feel free to call this office.

# ALABAMA

## Department of Transportation County Road Maintenance Certification Policy

Recommended for Approval



ALDOT State County Transportation Engineer

4/28/2017

Date

Approved



ALDOT Chief Engineer

5-2-17

Date

# County Road Maintenance Certification Policy

All county projects that have been constructed by agreement with ALDOT using federal or state funds are to be maintained by the county after completion. These projects will be required to be maintained to a satisfactory level in accordance with the *Guidelines for Grading County Roads* for the remainder of their designated service life.

The purpose of the county road maintenance certification (CRMC) is to ensure that the investment made by the State of Alabama and/or the Federal Government is being protected by the counties.

Every county will be required to submit a biennial County Road Maintenance Certification letter (appendix A). The maintenance certification will include an up-to-date list of projects currently within their designated service life that were constructed using federal or state funds. The condition level of the projects will be based on the inspection process outlined in the *Guidelines for Grading County Roads* (appendix B). A grade of 70 or above will be considered a satisfactory score.

## New Projects

New projects, as stipulated as part of the funding agreement, will be added to a county's certification by the County Transportation Bureau after ALDOT receives the letter of maintenance acceptance. These projects will be entered into the county road maintenance database, along with the type of project and the year completed. The type of projects that are to be included in the certification, are as follows:

1. Grade, Base, Drain, and Pave (GBDP)
2. Full Depth Reclamation (FDR)
3. Resurfacing (RS)
4. Widening and/or Resurfacing (WRS)
5. Surface Treatments/Microsurfacing (ST)
6. Pavement Striping (PS)
7. Non-NBIS Drainage Structures\* (DRAIN)
8. Miscellaneous (MISC)

\* Bridge projects that are required to be inspected under the National Bridge Inspection Standards (NBIS) will not be included in the County Road Maintenance Certification program. Structures not inspected under the NBIS (less than 20ft in length) will be graded per the Cross Drains/Side Drains element of the *Guidelines for Grading County Roads*.

## Biennial Certification Letter

The counties will receive a biennial County Road Maintenance Certification (CRMC) letter from the County Transportation Bureau at the beginning of every other August. The purpose of this certification letter will be to confirm that the county is maintaining the required projects to a satisfactory level in accordance with the *Guidelines for Grading County Roads*. Included in this letter will be a current list of projects (generated by the county road maintenance database) that the county will be responsible for certifying. Each county will be required to sign the certification letter and return it back to ALDOT by October 1 of that year.

## Suspension of Funds

If a project has not been maintained to a satisfactory level, the county will be considered to be in non-compliance with the CRMC and is subject to having their federal/state funds suspended at the discretion of the ALDOT Director. A project will be considered to be in unsatisfactory condition if it receives a failing grade (below a 70) in accordance with the *Guidelines for Grading County Roads*. Once the roadway has been repaired to an acceptable level (grade of 70 or above), the county may request the suspension of funds be rescinded. If there are any concerns or questions about the accuracy of a project grade, the County Transportation Bureau can assist in the inspection of the roadway at the request of the county.

## Removal of Projects

Projects constructed using federal or state funds are not intended to remain on the certification in perpetuity. Projects will be removed from the certification for the following reasons:

1. Projects that have been annexed by a municipality where the maintenance responsibilities have been transferred over to the municipality. The county shall provide to ALDOT documentation informing the annexing municipality of their ownership before the project can be removed from the county's annual certification.
2. Projects that have exceeded their expected service life. These projects will be automatically removed by ALDOT once their service life has expired. The number of years to be used for the service life for each project type are as follows:

1. Grade, Base, Drain, and Pave (GBDP): 20 Years
2. Full Depth Reclamation (FDR): 15 Years
3. Resurfacing (RS): 10 Years
4. Widening and/or Resurfacing (WRS): 10 Years
5. Surface Treatment/Microsurfacing (ST): 5 Years
6. Pavement Striping (PS): 2 Years
7. Non-NBIS Drainage Structures (DRAIN): 20 years
8. Miscellaneous (MISC): to be determined on a case by case basis

Note: The service life durations listed above were derived from a synthesis of National and State service life/rehabilitation publications.

Roads that include more than one of the project types listed shall remain on the certification for the longest duration applicable. Service life years will run concurrent of each other and not consecutively. Removing a project from the county road maintenance certification in no way effects that portion of road from being eligible for the expenditure of federal or state funds in the future.

## **APPENDIX A**

County Road Maintenance Certification Letter – Example



# ALABAMA DEPARTMENT OF TRANSPORTATION

## Bureau of County Transportation

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Kay Ivey  
Governor

John R. Cooper  
Transportation Director

August 1, 2018

### MEMORANDUM

TO: Mr. John Doe, County Engineer

CC: Area County Transportation Engineers

FROM: \_\_\_\_\_

D.E. (Ed) Phillips, Jr., State County Transportation Engineer

REFERENCE: County Road Maintenance Certification (CRMC)

Dear Mr. Doe:

All projects that have been constructed by agreement with ALDOT using state or federal funds are to be certified biennially by the county. These projects are required to be maintained to a satisfactory level in accordance with the *Guidelines for Grading County Roads* for the duration of their designated service life. The purpose of this certification is to ensure that the investment made by the State of Alabama and/or the Federal Government is being protected by the county. If a county project has not been maintained to a satisfactory level, the county may be subject to the suspension of Federal/State funds at the discretion of the ALDOT Director until the project is repaired to a satisfactory level.

The following projects are to be maintained by the county to a satisfactory level in accordance with *The Guidelines for Grading County Roads*:

<u>Project No</u>	<u>Project Location</u>	<u>Project Type</u>	<u>Completed</u>	<u>Expires</u>
24322-A	AL 14 E to U.S. 31 from McQueen Smith RD. - CO. RD. 4	RS	2010	2020



173(1)	From AL 14 in Autaugaville To Independence at JCT. CR 40.	ST	2014	2019
4470-A S-1285	CR 57 at Posey Cross Roads To Pine Level U.S. 31	GBDP	2005	2025
S-107(10)	CR 57 from CR 4 to the Florida State Line	FDR	2007	2022

I certify that the above list of county projects are currently maintained to a satisfactory level in accordance with the *Guidelines for Grading County Roads*.

Sincerely,

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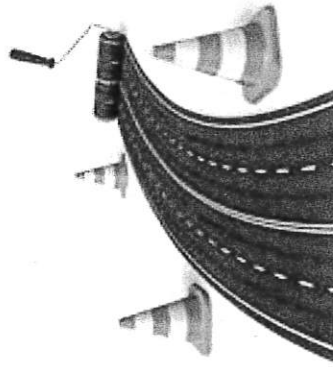
John Doe, P.E.  
County Engineer

**APPENDIX B**

Guidelines for Grading County Roads

# Maintenance Inspection

## Guidelines for Grading County Roads



*State of Alabama*

*Department of Transportation*

*Bureau of County Transportation*

**Date: April 2017 (updated)**

## Table of Contents

Roadway	Max Points
Treatment	20
Patching	9
Leveling	9
Edge Repair	8
Settlement	4

Roadside	Max Points
Striping/Pavement Markings	8
Signs	8
Encroachments	6
Shoulder High	6
Shoulder Low	6
Clearing	4
Mowing	4
Ditches	4
Drains	2
Erosion	2

## Introduction

The *Guidelines for Grading County Roads* manual was developed by a committee of ALDOT and County Engineers in order to establish a grading process to use during maintenance inspections on county roads. Each element is assigned a numerical grade that represents the overall condition of that specific feature. County road maintenance inspections are necessary to ensure the safety of the traveling public, monitor projects in accordance with the County Maintenance Certification Policy, and help identify and prioritize maintenance needs and expenditures.

The goal of this manual is to clearly define each element and promote uniformity throughout the state during the grading process. However, it should be noted this manual cannot cover every situation and there will always be some subjectivity involved when conducting roadway inspections.

## ADMONITION

This document is exempt from open records, discovery or admission under Alabama Law and 23 U.S.C. §§148(h)(4) and 409). The collection of safety data is encouraged to actively address safety issues on regional, local, and site specific levels. Congress has laws, 23 U.S.C. § 148(h)(4) and 23 U.S.C. §409 which prohibit the production under open records and the discovery or admission of crash and safety data from being admitted into evidence in a Federal or state court proceeding. This document contains text, charts, tables, graphs, lists, and diagrams for the purpose of identifying and evaluating safety enhancements in this region. These materials are protected under 23 U.S.C. §409 and 23 U.S.C. §148(h)(4). In addition, the Supreme Court in *Ex parte Alabama Dept. of Trans.*, 757 So. 2d 371 (Ala. 1999) found that these are sensitive materials exempt from the Alabama Open Records Act.

## Roadway Element Treatment: 20 Points

What to grade: The physical condition and riding quality of the surface.

What to look for: Pavement distresses, some of which are listed and defined below.

Longitudinal cracking – cracks are parallel to pavement centerline and may be caused by shrinkage of asphalt or a reflective crack caused by cracks beneath the surface.

Transverse cracking – cracks that occur approximately at a right angle to centerline. The result from surface shrinkage due to low temperature or reflective cracking.

Block cracking – cracks that divide the surface into more or less rectangular pieces; caused mainly by shrinkage of the asphalt and daily temperature cycling. Differs from alligator cracking in that alligator cracks form smaller, many sided pieces with sharp angles.

Alligator cracking – series of interconnecting cracks caused by fatigue failure of the asphalt surface under repeated traffic loading. Occurs only in areas that are subjected to traffic loading. Considered a major structural distress.

Rutting – a rut is a surface depression in the wheel paths. Significant rutting can lead to major structural failure of the pavement and hydroplaning potential. Usually caused by consolidation or lateral movement of the materials due to traffic loads.

Raveling – the wearing away of the pavement surface, caused by the dislodging of aggregate particles and loss of bitumen, causing a roughened surface texture.

Potholes – bowl shaped holes in the pavement. They generally start as small localized spots of alligator cracking or surface disintegration. Excessive moisture infiltrates the area causing small pieces of asphalt and base to dislodge and pop out under traffic.

## Roadway Element

### Treatment (Cont'd)

The following descriptions should be used as a general guide to grade the Treatment:

Grade	Description
20	Excellent condition – brand new or like new surface.
19-18	Very good/good condition – no problem or minor problems.
17-15	Satisfactory – early stages of distress may be present, such as cracking, rutting, pot holing, raveling, etc. One or more of these distresses are located at a few areas along the road.
14 -13	Fair condition – the above mentioned distresses are more developed and numerous. Begin consideration for resurfacing.
12	Poor condition – the above mentioned distresses have reached an advanced stage. One or more of these distresses are located at numerous locations. Recommend resurfacing at this point.
11-9	Serious condition – severe deterioration of the pavement. Block cracking, alligator cracking, deep rutting and/or pot holing may be present throughout section of road.
8-6	Critical condition – major deterioration of entire section of road. Possibly unsafe for vehicles to drive speed limits.
5-0	Failed condition – possible unsafe for travel.

## Roadway Element

### Patching: 9 Points

What to grade.: The physical condition and ride quality of the patch.

What to look for: The need for patching and condition of existing patches.

The following should be used as a general guide to grade patching:

Grade	Description
9	Excellent condition – does not require patching or existing patches are in excellent condition.
8	Good condition – existing patches are performing satisfactorily.
7-6	Fair condition – existing patches are somewhat deteriorated or new patches may be needed.
5-4	Poor condition – ride quality significantly affected by existing patches or the need for new patches.
3-0	Failed condition—pothole showing through existing patch or new patch needed.

## Roadway Element

### Leveling: 9 Points

What to grade: Reliability of the longitudinal and transverse profile of the pavement.

What to look for: Rutting, settlement at embankments and overall roadway profile and cross-section.

Grade	Description
9	Excellent condition—no rutting, no settlement, etc.
8-7	Good condition—minor rutting, minor settlement, etc.
6-4	Fair condition—moderate rutting, moderate settlement, etc. Leveling should be considered.
3-2	Poor condition—rutting and settlement adversely effects ride quality or allows water to stand on pavement.
1-0	Critical condition—allows water to stand on pavement in multiple locations, condition of roadway prevents travel at posted speed.

## Roadway Element

### Edge Repair: 8 Points

What to grade: The physical condition of existing edge repairs or the need for edge repairs.

What to look for: Sections of roadway where the outer edge of the pavement has been raveled or broken off by traffic.

The following descriptions should be used as a general guide to grade edge repairs:

Grade	Description
8	Excellent condition – does not require edge repairs or existing edge repairs are in excellent condition.
7	Good condition – all repairs are performing satisfactorily.
6	Fair condition – repairs are starting to deteriorate or repairs are possibly needed.
5-4	Poor condition – repairs have significantly deteriorated or repairs are needed.
3-0	Failed condition – repairs have failed or numerous edge failures have not been repaired.

## Roadway Element

### Settlement: 4 Points

What to grade: Profile of pavement over pipes, culverts, utility cuts, etc.  
 What to look for: Depressions in pavement due to settlement over or under pipes, utility cuts, bridge ends, etc.

The following descriptions should be used as a general guide to grade settlement:

Grade	Description
4	Excellent condition—little or no settlement.
3	Good condition—minor settlement.
2-1	Fair condition—moderate settlement.
0	Poor condition—major settlement.

## Roadside Element

### Striping/Pavement Markings: 8 Points

What to grade: Physical condition of striping and pavement markings.  
 What to look for: Visibility and reflectivity.

The following descriptions should be used as a general guide to grade, striping/pavement marking:

Grade	Description
8	Excellent condition—new stripe/pavement markings and good reflectivity.
7-6	Good condition—striped and good/fair reflectivity.
5-3	Fair condition—faded stripe with fair/poor reflectivity.
2-0	Poor condition—faded with poor/non-existent reflectivity.

### Signs: 8 Points

What to grade: Physical condition and conformity to the Manual on Uniform Traffic Control Devices (MUTCD).

What to look for: Presence, reflectivity, readability, etc.

The following descriptions should be used as a general guide to grade signs:

Grade	Description
8	Excellent condition—all signs are in good condition and conform to MUTCD.
7-6	Good condition—all signs in good/fair condition and generally conform to MUTCD.
5-3	Fair condition—some signs are in fair condition and partially conform to MUTCD.
2-0	Poor condition—most signs in fair/poor condition and partially conform to MUTCD.

## Roadside Element

### Encroachments: 6 Points

What to grade: The presence of fixed objects in the clear zone that create a safety hazard.

What to look for: Illegal signs, fences, parked vehicles, headwalls, non-break away mailboxes, etc.

The following descriptions should be used as a general guide to grade encroachments:

Grade	Description
6	Excellent condition—encroachments not present.
5-4	Good condition—few encroachments present.
3-2	Fair condition—several/ many encroachments present.
1-0	Poor condition—many encroachments present with possible sight distance limitations.

## Roadside Element

### Shoulder Condition

What to grade: Shoulder elevation in relation to edge of pavement and loss of usable width due to slope failure, erosion, drainage structures, etc.

What to look for: The need for clipping shoulders or adding material to shoulders.

### High: 6 Points

The following descriptions should be used as a general guide to grade high shoulders:

Grade	Description
6	Excellent condition—shoulder grade matches pavement edge with adequate cross slope for drainage.
5-4	Good condition—few locations of minor high spots.
3-2	Fair condition—several locations of minor high spots and/or few locations of major high spots.
1-0	Poor condition—shoulders generally high throughout causing water to stand on pavement after rain.

### Low: 6 Points

The following descriptions should be used as a general guide to grade low shoulders:

Grade	Description
6	Excellent condition—shoulder grade matches pavement edge with adequate cross slope for drainage.
5-4	Good condition—few locations of minor low spots.
3-2	Fair condition—several locations of minor low spots and/or few locations of major low spots.
1-0	Poor condition—shoulders generally low throughout.



## Roadside Element

### Clearing: 4 Points

What to grade: Visibility along shoulder and roadway.

What to look for: Trees, foliage, etc., that obstruct vision along roadway.

The following descriptions should be used as a general guide to grade clearing:

Grade	Description
4	Excellent condition—shoulder, front slope and back slope cleared.
3-2	Good/Fair condition—shoulder and front slope cleared.
1-0	Poor condition—shoulder and/or front slope not cleared.

### Mowing: 4 Points

What to grade: How well shoulder and other accessible areas are mowed.

What to look for: Overgrown grass on shoulder.

The following descriptions should be used as a general guide to grade mowing:

Grade	Description
4	Excellent condition—shoulder and other accessible areas mowed.
3-2	Good/Fair condition—shoulder mowed.
1-0	Poor condition—shoulder overgrown.

## Roadside Element

### Ditches: 4 Points

What to grade: The ability of the ditch to adequately drain runoff away from the shoulder and pavement.

What to look for: Check to see if ditches are clear of debris and foliage and of adequate capacity.

The following descriptions should be used as a general guide to grade ditches:

Grade	Description
4	Excellent condition—clear of debris, foliage and of adequate capacity.
3	Good condition—minor reduction of capacity due to debris and foliage.
2	Fair condition—partially filled and/or inadequate capacity.
1-0	Poor condition—ditches are filled or non-existent.

### Cross Drains/Side Drains: 2 Points

What to grade: Functionality and structural soundness.

What to look for: Partially or completely filled cross drains, side drains, and structural deterioration.

The following descriptions should be used as a general guide to grade cross drains and side drains:

Grade	Description
2	Excellent/Good condition—appears to function properly and structurally sound.
1	Fair condition—some reduced capacity and/or moderate structural deterioration.
0	Poor condition—does not function adequately due to inadequate capacity and/or structurally unsound.

## Roadside Element

### Erosion: 2 Points

What to grade: Stability of material in ditches and around headwalls.

What to look for: Loss of material in ditches and from around headwalls.

The following descriptions should be used as a general guide to grade erosion:

Grade	Description
2	Good condition—No erosion or very minor scour.
1	Fair condition—moderate erosion or scour.
0	Poor condition—major erosion or scour.



### Guidelines for grading county roads

Alabama Department of Transportation  
1409 Coliseum Boulevard  
Montgomery, Alabama 36110