

POLICY AND PROCEDURE

FOR

UPGRADING  
LOW VOLUME GRAVEL ROADS  
TO PAVED

IN

COLE COUNTY MISSOURI

ADOPTED 5/19/97

## **POLICY AND PROCEDURE**

### **FOR UPGRADING LOW VOLUME GRAVEL ROADS TO PAVED**

**GOAL** - It is a goal of the County of Cole to promote public safety and to enhance the quality of life for all of its citizens. As such, we realize the importance of having an adequate transportation network and vital role that it plays in achieving this goal. By establishing a systematic approach by which our lower volume gravel roads can be upgraded to paved, we are fulfilling an important part of this goal.

**PURPOSE** - To provide a formal written procedure for upgrading lower volume gravel roads to paved. These roads are to be the roads that currently do not qualify for the existing Policy and Procedure for Upgrading Gravel Roads to Paved (asphalt) last updated June 24, 1996. Also, this Policy and Procedure is intended to address the gravel subdivision roads accepted into the County's Highway System but are not to upgrade to paved without the monetary participation of the landowners. It is the intent of this policy to maximize the available funds for the betterment of our county. To provide a means by which requests for upgrading can be reviewed uniformly and fairly for all. These roads will be upgraded using a lesser quality surface material, essentially the same way the State Highway Department (currently MODOT) upgraded farm to market roads in the late 1950's and early 1960's.

**METHOD OF REQUESTS** - Method of request will be by petition with one 100 percent of affected property owners being required to sign the petition for normal consideration by the Cole County Commission. This does not preclude the County's right to initiate such improvements per the state statute.

**FORM OF PETITION** - The petition will be submitted only on forms approved by the County. (A copy is attached.) Requests for upgrading can be made singularly or in combination.

**MINIMUM REQUIREMENTS** - Current or projected funding levels will not permit the paving of all our gravel roads under the current Policy and Procedure for Upgrading Gravel Roads to Paved. Therefore, this policy is specific to those roads that do not and will not qualify in the future. Roadways must meet the following requirements to be considered for this policy:

1. Maximum vehicular volume of 125 Average Daily Traffic and not projected to increase significantly in the future. The Department of Public Works will determine the traffic counts and projections.
2. Property owners must dedicate the necessary rights of way (60-foot minimum) before any construction being done.
3. In subdivisions the landowners will be required to have deposited in a mutually acceptable banking institution the money determined by the Department of Public Works. The amount of money required will be equal to the estimated cost of all materials required to upgrade the entire subdivision road system. The County will only do subdivisions as a whole.

**ESTABLISHING PRIORITIES** - After meeting the minimum requirements for upgrading, each roadway will be evaluated utilizing:

1. TRAFFIC VOLUME
2. ROUTE CLASSIFICATION (RC)
3. MAINTENANCE HISTORY (MF)
4. OPTIMIZING BUDGETS
5. RESIDENTIAL DENSITY (RD)
6. REGIONAL BALANCE

The Priority Index Equation from the current Policy and Procedure for Upgrading Gravel Roads to Paved will be used to rank the petitioned roads.

The equation for the priority index is **PI = RC + MF + RD**

**Route Classification (RC)**

Arterial = 6

Collector = 4

Local = 2

(The difference between a Collector Route and a Local Route is a Collector Route has traffic entering it from other County maintained roads.)

**Maintenance Factor (MF)**

4 x (Maintenance Rating / 5)

**Residential Density (RD)**

The number of residential structures / mile of road.

**ENGINEERING DESIGN STANDARDS** - Each project will be designed by a professional engineer using the following standards:

1. MODOT Table of General Design Data
2. The latest version of the Rules for Land Subdivision of Cole County Missouri
3. Standard Specifications for Street and Road Construction, Cole County Missouri.

When upgrading a low volume gravel road to paved the horizontal and vertical alignment of the

roadway should be compatible with the anticipated running speeds. Therefore, each roadway will be reviewed at the critical locations using the above referenced standards to establish its design speed. Should costs or right-of-way prohibit the upgrading of all substandard sections, warning devices will be placed according to the Manual on Uniform Traffic Control Devices (MUTCD).

**RIGHT-OF-WAY ACQUISITION** - Due to availability of funds, County Policy regarding right-of-way acquisition is as follows:

1. The County is requesting that required right-of-way be donated by the property owners so that all available funding can be spent on the upgrading of county roadways.
2. Roadways where property owners are willing to donate the required right-of-way will have preference in the upgrading program.
3. On projects that effect large numbers of the traveling public, or where safety factors warrant, the County of Cole reserves the right to acquire needed right-of-way in accordance with the Missouri Revised Statutes.

**PARTICIPATION IN COSTS - PROPERTY OWNERS** - Property owners will be responsible for donating the necessary right-of-way to complete the improvements (minimum of 60 feet) and moving all obstructions such as fencing outside the road right-of-way.

**COUNTY** - The County will be responsible for all engineering and construction costs to complete the project utilizing current county design standards.

**ROADWAYS AFTER COUNTY PLANNING** - County maintained gravel roadways constructed after adoption of County Planning may be considered for upgrading based on the following criteria:

1. In subdivisions where 90% of all houses are constructed the roads may be upgraded under this policy.
2. Surface width will be twenty-two (22) feet on a prepared subgrade.
3. These projects will be initiated by requests, County Commission approval being required.
4. Property owners will be responsible for *all material costs.* (The county will provide the labor and equipment).
5. The landowners will be responsible for adjusting all driveways to match new pavement.

**ADMINISTRATIVE REVIEW OF PETITION** - All petitions will be referred to the Department of Public Works for verification of property owner signatures, minimum requirements, and priority rating. Departmental comments will then be submitted to the Citizens Advisory Committee for their review. After thorough consideration of all factors, the Committee will submit its recommendations in writing to the Cole County Commission for their review and approval.

**DEVELOPMENT OF FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM** - The Cole County Commission will direct the Public Works Department to include their recommendations in a five-year capital improvement program. Each year before budget hearings, the Citizens Advisory Committee will review the current capital needs and recommend to the County Commission any modifications required to the Capital Improvement Program.

Recommended for approval by the Cole County Road and Bridge Advisory Committee

**ORIGINAL SIGNED**

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John "Jay" Jordan, Chairman  
Road & Bridge Advisory Committee

Wayne Bernskoetter  
Rudolf Lemke, P.E.  
Ray Lahmeyer, P.E.  
Paul LePage  
Marcellus Markway  
Mike Wyss

Adopted by the COLE County Commission this 19th day of May, 1997.

\_\_\_\_\_  
Robert "Bob" Jones  
Presiding Commissioner

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Michael D. Forck  
Eastern Commissioner

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Eric Peters  
Western Commissioner

ATTEST \_\_\_\_\_  
William "Bill" Deeken  
County Clerk



## TABLE OF GENERAL DESIGN DATA

### LOW VOLUME ROADS

AVERAGE DAILY TRAFFIC AT TIME OF COMPLETION		UNDER 50 ADT	50 TO 125 ADT
DESIGN SPEED IN MPH	LEVEL	40	40
	ROLLING	30	30
	MOUNTAINOUS	20	30
STOPPING SIGHT DISTANCE IN FEET 3.5' TO .5'	LEVEL	275	275
	ROLLING	200	200
	MOUNTAINOUS	125	200
SAG CURVATURE K VALUES	LEVEL	40	40
	ROLLING	40	40
	MOUNTAINOUS	40	40
GRADIENTS BY PERCENT	LEVEL	7	7
	ROLLING	11	10
	MOUNTAINOUS	15	15
CURVATURE BY DEGREE 0.08 FT/FT	LEVEL	12.25	12.25
	ROLLING	22.75	22.75
	MOUNTAINOUS	53.5	22.75
SURFACE WIDTH		22	22
ROAD BED WIDTH		26	26
CUT SLOPE (NOT STEEPER)		1 1/2 : 1	1 1/2 : 1
FILL SLOPE (NOT STEEPER)		1 1/2 : 1	2 : 1
FORE SLOPE (NOT STEEPER)		2 : 1	2 : 1
DEPTH OF DITCH (MINIMUM)		1.5	1.5
BRIDGES	WIDTH (FEET)	22	24
	LOADING	HS - 20	HS - 20

### GENERAL NOTES

STANDARDS AS LISTED APPLY TO DESIGN SPEED ONLY AFTER DESIGN SPEED IS DETERMINED, OTHER STANDARDS LISTED UNDER DESIGN SPEED ARE MINIMUM AND SHOULD BE USED ONLY WHEN THEY MAKE POSSIBLE AN APPRECIABLE REDUCTION OF CONSTRUCTION COSTS.

IT IS PERMISSIBLE TO CHANGE DESIGN SPEED WITHIN A SINGLE PROJECT IF TOPOGRAPHY OR OTHER CONDITIONS SUCH AS A STUB ROAD INDICATES SUCH PROCEDURE WILL RESULT IN PRACTICAL AND ECONOMICAL CONSTRUCTION.

EXCEPTION TO LISTED STANDARDS MAY BE CONSIDERED ON A PROJECT-BY-PROJECT BASIS FOR CONSIDERATION OF SPECIAL CONDITIONS.

RIGHT-OF-WAY WIDTH SHOULD ACCOMMODATE CONSTRUCTION, DRAINAGE AND PROPER MAINTENANCE,