



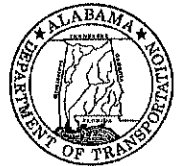
ALABAMA DEPARTMENT OF TRANSPORTATION

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Kay Ivey
Governor

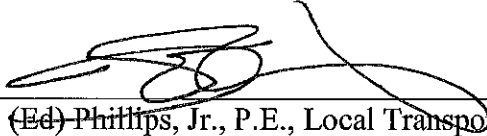
John R. Cooper
Transportation Director

April 12, 2019

LOCAL TRANSPORTATION BUREAU MEMORANDUM 2019-17

TO: Alabama Counties/Cities/Towns
ALDOT Region/Area Local Transportation Engineers
ALDOT Local Transportation Bureau Staff

FROM:


D.E. (Ed) Phillips, Jr., P.E., Local Transportation Bureau Chief

REFERENCE: FY 2020 HIGH RISK RURAL ROADS (HRRR) PROGRAM
CALL FOR APPLICATIONS

The purpose of this Memorandum is to serve as the official "Call for Applications" for the FY 2020 High Risk Rural Roads (HRRR) Program, as well as provide guidance for the preparation of HRRR project applications (see attached HRRR Program Application Guidance).

The Alabama Department of Transportation (ALDOT) has allocated a portion of Highway Safety Improvement Program (HSIP) funds to establish a High-Risk Rural Roads (HRRR) Program for FY 2020. The intent of this program is to identify site-specific and programmatic safety improvements in an effort to reduce the statewide fatality rate on rural roads. Therefore, ALDOT is placing a call to all local agencies (counties, cities, etc.) to submit applications in accordance with the HRRR Program Application Guidance (attached).

Any local agency is eligible to apply for these safety funds, as long as the selected project is located on a roadway that is classified as a rural major collector, a rural minor collector, or a rural local road. Projects must also be located outside of an FHWA Census-defined urbanized area. The available federal funding that has been set aside for FY 2020 will be \$4,124,978. HRRR projects have a 10% funding match requirement by the local agency sponsor. Due to the funding authorization constraints, funding will be limited to construction only. Projects may be implemented by contract or through force account work, as approved by ALDOT.

When developing project applications, sponsors should consider that project plan submittals must be finalized and receive FHWA funding authorization prior to October 1, 2020.

Please see the attached 2020 HRRR Program Application Guidance for more details on the program and application submittals. In addition to the Application Guidance, each county will also be provided with a map locating all class B crashes and above. This map is intended to help counties identify sites for potential HRRR projects.

If you should have any questions or comments, please contact James Boyer at (334) 242-6619.

DEP/dep

c: Mr. John R. Cooper, Transportation Director
Mr. Don Arkle, P.E., Chief Engineer
Mr. Ed Austin, P.E., Assistant Chief Engineer, Policy & Planning
Mrs. Linda Guin, FHWA Alabama Division
Mr. Steve Walker, Design Bureau Chief

FY 2020 High Risk Rural Roads (HRRR) Program Application Guidance

Section 148(g)(1) of title 23, United States Code (U.S.C.), established a High-Risk Rural Roads (HRRR) special funding rule. This rule requires States to obligate a portion of their Highway Safety Improvement Program (HSIP) funds to an HRRR safety program when the fatality rate on rural roads increases over the most recent two-year period. This fatality rate is based on roads classified as rural major collectors, rural minor collectors, and rural local roads.

Eligibility

Projects must be located on a Rural Major Collector, Rural Minor Collector, or Rural Local classified road. Projects must be located outside of an urbanized area as defined by the U.S. Census.

Any local public governmental agency is eligible to sponsor a project application.

Sponsors may submit more than one application for funding.

Project applications will be accepted for three distinct project types:

- General Safety Projects
- Traffic Control Devices
- Unshielded Bridge Ends

The three project types are described herein.

At the discretion of ALDOT, project status reports will be required to ensure that the selected projects are advancing. Project awards may be rescinded if reasonable project development is not pursued, to ensure expenditure and prevent the lapsing of Federal funds.

Project Application Procedures

Complete project applications are due before **August 1, 2019** and shall be mailed to the ALDOT Local Transportation Bureau with a copy sent to the ALDOT Area Local Transportation Engineer.

HRRR projects will be evaluated and selected by the HRRR Selection Committee by a competitive selection process. The selection committee will consist of a representative from the ALDOT Local Transportation Bureau, the ALDOT Design Bureau Traffic & Safety Operations Section, and the Alabama Division of FHWA.

The HRRRP Project Selection Committee will review project applications to confirm that projects meet eligibility requirements, as well as determine overall project prioritization. If additional information or clarification is found to be necessary by the HRRR Selection Committee, the applicant and/or the ALDOT Area Local Transportation Section will be notified.

All applicants will be notified concerning the final status of their applications as soon as possible following project selections. We anticipate this occurring prior to October 1, 2019 to allow one full year for project development, plan preparation and FHWA authorization. **Project Plan Submittals must be final, complete and receive FHWA authorization prior to October 1, 2020.** Funding for projects not authorized prior to October 1, 2020 will be rescinded at the discretion of ALDOT.

Projects shall have a "soft" maximum of \$100,000.00 in Federal-Aid per selected project. HRRRP projects shall have a 90% Federal/10% Local split. Federal-Aid funding will be in the amount of 90% of the bid price. Any contract overruns will be the responsibility of the local governmental agency.

Note: While the soft \$100,000 maximum is meant to ensure equal opportunity and distribution of HRRR funds to all agencies, the amount of Federal-Aid allocated to any selected project application will be at the sole discretion of the HRRR Project Selection Committee. Projects may be awarded more than the maximum amount if proper justification is provided in the project application. Proper justification will be based on the funds

available, the safety need identified, and the type of improvement(s) proposed.

Some items of work may be determined to be "non-participating" and therefore, not funded through Federal-Aid funds. The sponsor may retain those items within the project (at the sponsor's expense) or remove the items from the project.

After an application is approved, neither the scope of work or limits of work can be changed without the prior written approval of the ALDOT Local Transportation Bureau.

Project Application Criteria

Projects may be performed by contract (through State Services) or by force account but may not combine both methods in the same project. Applicants shall identify the desired method in the application. Method approval shall be at the discretion of the ALDOT Local Transportation Bureau. Projects approved for force account reimbursement shall follow the procedures outlined in *Memorandum 2017-09* (Dated August 2, 2017).

Due to the time restraints for authorization of HRRR funding, projects involving right-of-way acquisition will not be eligible.

Due to the time restraints for authorization of HRRR funding, projects requiring utility relocation will only be eligible as part of the contract let through State Services. Force account procedures will not be allowed for projects involving utility relocation. The scope and estimated utility relocation costs shall be included in the application.

All HRRR projects will follow the *Local Transportation Procedural Guidelines for Federal Aid Projects (Section 4)*. Project development (initiation, environmental clearances and plan requirements, etc.) will be evaluated by the ALDOT Local Transportation Bureau on a case-by-case basis considering the scope and nature of each project.

General Safety Projects

These projects are intended to reduce the number and severity of crashes on rural roads by improving or eliminating identified safety issues. This project type covers a broad range of safety improvements that include, but is not limited to, the following:

- Improve superelevation on horizontal curves
- Shoulder widening and/or improvements
- Improve pavement friction / increase skid resistance
- Modify horizontal / vertical curve geometry
- Improve sight distance
- Increase safety clear zones
- Widen or construct medians
- Flatten roadside shoulder grades

1. The application should include at a minimum:

(a) Transmittal letter summarizing:

- Project location
- Why the site was selected for an HRRR project (include summary of supporting data)
- Proposed safety improvements and how they are expected to reduce the number and severity of crashes.

(b) Detailed location map showing project limits and total project length.

- For roadway projects, also identify the segment of which the project area is a part.
- For intersection projects, also identify the node of which the project area is a part.

(c) Most recent three calendar years of CARE crash history data (or local police reports).

(d) Summarized Traffic counts including method of collection. Raw data is not needed.

- (e) Relevant supporting data as referenced in the *Manual for Selecting Safety Improvements on High Risk Rural Roads*, if applicable:
 - Crash modification factor (CMF)
 - Benefit-Cost Ratio
 - Crash Reduction Factors
 - (f) Project location crash rates and calculations (see crash rate appendix for example)
 - For roadway projects, provide the crash rate for the entire segment.
 - For intersection projects, provide the crash rate for the node.
 - (g) Reiker Horizontal Curve Analysis Summary (when applicable)
 - (h) Color photographs of significant project details
 - (i) Detailed project cost estimate including pay items, quantities, and estimated unit costs.
2. A single application may be submitted for multiple project locations. Each location shall be identified by a unique site number and prioritized by need. All required information shall be provided for each site, including individual cost estimates. Individual sites may be selected for funding by the HRRR Project Selection Committee.
3. The following will be considered when evaluating and prioritizing General Safety Projects:
- Safety benefit of specific improvement applied
 - Applicability of safety improvement applied with respect to identified need
 - Cost effectiveness of safety improvement applied with respect to identified need

- Local sponsor project justification
- Roadway classification
- Traffic count
- Project cost
- Total crashes
- Crash Rates involving fatalities and/or incapacitating injuries
- Crash Modification Factor (CMF)
- Benefit-Cost Ratio
- Crash Reduction Factor

Traffic Control Device Projects

These projects are intended to reduce the crash rate on rural roadways by improving traffic control devices at specific locations. This project type includes, but is not limited to, the following:

- Center / edge line markings
- Rumble strips
- Center / edge line raised pavement markers
- Install / Upgrade signage at horizontal / vertical curves
- Install / Upgrade to larger signs
- Upgrade retroreflectivity on signs
- Install pavement markings

Note: While traffic striping is an eligible safety improvement, a specific location must be identified, and the action should be justified by data. General striping maintenance projects will not be considered for HRRR funding.

1. The application should include at a minimum:

(a) Transmittal letter summarizing:

- Project location
- Why the site was selected for an HRRR project (include summary of supporting data)
- Proposed safety improvements and how they are expected to reduce the number and severity of crashes.

- (b) Detailed location map showing project limits and total project length.
 - For roadway projects, also identify the segment of which the project area is a part.
 - For intersection projects, also identify the node of which the project area is a part.
- (c) Most recent three calendar years of CARE crash history data (or local police reports).
- (d) Summarized Traffic counts including method of collection. Raw data is not needed.
- (e) Relevant supporting data as reference in the *Manual for Selecting Safety Improvements on High Risk Rural Roads*, if applicable:
 - Crash modification factor (CMF)
 - Benefit-Cost Ratio
 - Crash Reduction Factors
- (f) Project location crash rates and calculations (see crash rate appendix for example)
 - For roadway projects, provide the crash rate for the entire segment.
 - For intersection projects, provide the crash rate for the node.
- (g) Reiker Horizontal Curve Analysis Summary (when applicable)
- (h) Color photographs of significant project details
- (i) Detailed project cost estimate including pay items, quantities, and estimated unit costs.

2. A single application may be submitted for multiple project locations. Each location shall be identified by a unique site number and prioritized by need. All required information shall be provided for each site, including individual cost estimates. Individual sites may be selected for funding by the HRRR Project Selection Committee.

3. The following will be considered when evaluating and prioritizing Traffic Control Device Projects:
 - Safety benefit of specific improvement applied
 - Applicability of safety improvement applied with respect to identified need
 - Cost effectiveness of safety improvement applied with respect to identified need
 - Local sponsor project justification
 - Roadway classification
 - Traffic count
 - Project cost
 - Total crashes
 - Crash Rates involving fatalities and/or incapacitating injuries
 - Crash Modification Factor (CMF)
 - Benefit-Cost Ratio
 - Crash Reduction Factor

Unshielded Bridge End Projects

These projects are intended to reduce the severity of crashes by proactively installing standard bridge end treatments at all bridge structures, including culverts, that currently do not have bridge end treatments.

In situations where bridge end treatments are currently not present, and the installation of bridge end treatments require the replacement of existing substandard bridge rail, the bridge rail may be an eligible item but will be subject to review by the HRRR Selection Committee on a case by case basis.

The repair or replacement of existing substandard bridge end treatments will generally not be considered.

1. The application should include at a minimum:
 - (a) Transmittal letter summarizing:
 - Project location(s)
 - Why the site was selected for an HRRR project (include summary of supporting data)
 - Proposed safety improvements and how they are expected to reduce the number and severity of crashes.
 - (b) Detailed location map showing site locations, including BIN and corresponding bridge sufficiency ratings
 - (c) Most recent three calendar years of CARE crash history data (or local police reports).
 - (d) Summarized Traffic counts including method of collection. Raw data is not needed.
 - (e) Color photographs of structure and all 4 bridge ends.
 - (f) Detailed project cost estimate including pay items, quantities, and estimated unit costs (per site).

2. A single application may be submitted for multiple project locations. Each location shall be identified by a unique site number and prioritized by need. All required information shall be provided for each site, including individual cost estimates. Individual sites may be selected for funding by the HRRR Project Selection Committee.

3. The following will be considered when evaluating and prioritizing Unshielded Bridge End Projects:
 - Roadway classification
 - Traffic count
 - Project cost
 - Total crashes per site, especially those involving fatalities and/or incapacitating injuries
 - Structure condition grades and sufficiency ratings

APPENDIX: CRASH RATE EXAMPLE

A Segment is defined as the length of roadway between and connecting two adjacent Nodes.

When calculating crash rates for General Safety Projects, the entire length of the segment (of which the project area is a part) must be used. It should be noted that the actual project limits may cover an area less than the entire segment, however the entire length of the Segment must be used in the calculations.

The project crash rate is to be calculated utilizing the combined number of crashes involving fatalities and/or incapacitating injuries contained in the crash history data, the AADT for the Segment, and the Segment length.

EXAMPLE:

$$\text{Crash Rate} = \frac{(\text{Number})}{(\text{AADT})(\text{Length in miles})(3 \text{ yr})(365 \text{ days})}(1,000,000)$$

The crash rate should be expressed as number per million vehicle miles.

When calculating crash rates for intersection projects, the project crash rate is to be calculated utilizing the combined number of crashes involving fatalities and/or incapacitating injuries contained in the crash history data and the AADT for the Node.

EXAMPLE:

$$\text{Crash Rate} = \frac{(\text{Number})}{(\text{AADT})(3 \text{ yr})(365 \text{ days})}(1,000,000)$$

The crash rate should be expressed as number per million vehicles.