October 18, 2017

CIRCULAR LETTER 2017-26

FY 2018 AND 2019 LOCAL RAIL / HIGHWAY GRADE CROSSING SAFETY PROGRAM (SECTION 130 FUNDS)

COUNTY ENGINEERS / SUPERINTENDENTS OF HIGHWAYS
METROPOLITAN PLANNING ORGANIZATIONS - DIRECTORS
MUNICIPAL ENGINEERS / PUBLIC WORKS DIRECTORS / MAYORS
TOWNSHIP HIGHWAY COMMISSIONERS
CONSULTING ENGINEERS

The Department is now accepting applications for the Fiscal Year 2018 and 2019 Local Rail / Highway Grade Crossing Safety Program (Section 130 Funds). Attached is the application form (BSPE 04100) for the program. Applicants are requested to submit their application electronically. Information on the submittal process is provided with the form instructions.

The following safety improvements will be considered:
1. Railroad Warning Devices for the roadway or pedestrian crossings
2. Railroad Circuitry
3. Railroad Crossing Surface Renewal. This will be allowed only if the warning devices and / or circuitry are improved. Pictures of the existing crossing will need to be submitted.
4. Roadway Approaches. This will be allowed only if the warning devices and / or circuitry are improved and the existing profile grade does not meet IDOT / Illinois Commerce Commission (ICC) requirements. A drawing of the existing profile and proposed profile will need to be submitted.
5. Crossing Closure
6. Other (Signal interconnect, grade separation, or etc.)

IDOT continues to place a stronger emphasis on crossing closure, warning device, and circuitry related projects as opposed to crossing surface and roadway approach projects. The Section 130 funds will match up to $7,500 of a Railroad’s incentive for a crossing closure. The program will work with the ICC crossing closure program and incentives where possible.
A completed application, along with required attachments should be submitted to IDOT for each location where safety improvements are proposed. A complete application is considered one that contains the following:

1. Complete BSPE 04100 form
2. General overview location map
3. Detailed location map
4. Location photographs
5. Existing and proposed roadway profiles (Only if roadway approach work is proposed)

A breakdown of the estimated project cost for all phases of the project and for each of the proposed improvement types should also be included on the application. Applications with considerable missing information will be returned to the applicant be completed. Please note that IDOT may independently select projects jointly with the ICC or by review of locations having a documented history of crashes.

A co-applicant is preferred, but not required, for concurrence on the proposed scope of work and the estimated project cost. If the applicant is the local public agency (LPA), then the co-applicant is the railroad. If the applicant is the railroad, then the co-applicant is the LPA. Discussions between co-applicants are helpful, so all of the necessary improvements and realistic estimated project costs are submitted.

The maximum federal share is 90 percent for railroad warning devices and circuitry; the 10 percent match will be assigned to the railroad. Railroad crossing surface renewals will be funded at 50 percent federal share; the 50 percent match will be assigned to the railroad. For roadway approach projects, IDOT will first work with the ICC to fund these with Grade Crossing Protection Funds (GCPF). If GCPF are not available; the roadway approaches will be funded at 90 percent federal share and the 10 percent match will be assigned to the LPA.

We request county engineers work with the individual township highway commissioners to identify at-grade crossings that may need safety improvements.

Please submit applications to IDOT by December 15, 2017. Following receipt of the applications, on-site inspections at the candidate locations may be performed. After prioritization and selection of candidate projects, successful applicants will be notified by this office of the selected projects for the FY 2018 and 2019 programs.
October 18, 2017

Please contact Mr. Bill Pearsall by telephone at (217) 785-2986 or by email at william.pearsall@illinois.gov with any questions regarding the federal rail / highway grade crossing safety program.

Sincerely,

Paul Lorton, P.E.  
Engineer of Safety Programs and Engineering

Maureen Kastl, P.E.  
Engineer of Local Roads and Streets

WRP/tw

Attachment

cc: Jon-Paul Kohler, Federal Highway Administration – Illinois Division  
    Mike Stead, Illinois Commerce Commission  
    David Marth, Illinois Association of County Engineers  
    Joe Schatteman, Illinois Municipal League  
    Bryan Smith, Township Officials of Illinois  
    Charlie Montgomery, Township Highway Commissioners of Illinois
Local Public Agency

Route

County

District / CO

Railroad

Mile Post

Crossing Inventory Number

**Existing Crossing and Roadway Characteristics**

<table>
<thead>
<tr>
<th>Crossing Surface Type</th>
<th>Crossing Width</th>
<th>Angle of Crossing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Road Surface Type</th>
<th>Roadway Width</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Shoulder Type (if applicable)</th>
<th>Shoulder Width</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>ADT</th>
<th>% Trucks</th>
<th>Speed Limit</th>
<th>Posted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

**Intersecting Roads**

<table>
<thead>
<tr>
<th>100'</th>
<th>200'</th>
<th>Traffic Control Devices Present within 200' of Crossing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

**Number of School Buses**

A detailed map is required with the crossing located in the center. For rural crossings (4 miles x 4 miles) and urban crossings (1 mile x 1 mile) showing all roads. Please mark each with the letter indicated - schools (S), industrial plants / fertilizer dealers (I), landfills (L), hospitals (H), fire stations (F), ambulance garages (A), and police stations (P) with in boundaries.

**Existing Train Characteristics**

**Existing Warning Devices**

**Existing Circuitry**

<table>
<thead>
<tr>
<th>Number of Tracks</th>
<th>Trains per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Main</th>
<th>Industrial</th>
<th>Switching</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Passenger</th>
<th>Freight</th>
<th>Switch</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

**Trains Speed**

<table>
<thead>
<tr>
<th>Passenger</th>
<th>Freight</th>
<th>Switch</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

**Simultaneous Movements**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**“B” Factors – Basic Values for Railroad Protection Devices** (select all that apply, but use the lowest value as the “B” Factor)

<table>
<thead>
<tr>
<th>Existing Components in Place</th>
<th>Basic Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crossbucks, Traffic Volume Less Than 500 Vehicles per day</td>
<td>3.89</td>
</tr>
<tr>
<td>Crossbucks</td>
<td>Urban = 3.06 / Rural = 3.08</td>
</tr>
<tr>
<td>Wigwags</td>
<td>0.61</td>
</tr>
<tr>
<td>Flashing Lights</td>
<td>Urban = 0.23 / Rural = 0.93</td>
</tr>
<tr>
<td>Gates</td>
<td>Urban = 0.08 / Rural = 0.19</td>
</tr>
</tbody>
</table>

**Expected Crash Frequency (ECF)**

\[
ECF = 0.0000013 \times \text{ADT} \times \text{Trains/Day} \times \text{“B” Factor} = \underline{0}
\]
### Description of Proposed Improvement Types

- **RR Warning Devices**
- **RR Circuitry**
- **RR Crossing Renewal**
- **Roadway Approaches**
- **Other**

### Estimated Project Cost

<table>
<thead>
<tr>
<th>Typical Split (Federal / Match)</th>
<th>RR Warning Devices</th>
<th>RR Circuitry</th>
<th>RR Crossing Surface Renewal</th>
<th>Roadway Approaches</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preliminary Engineering</strong></td>
<td>90/10</td>
<td>90/10</td>
<td>50/50</td>
<td>GCPF or 90/10</td>
<td>To be determined</td>
<td></td>
</tr>
<tr>
<td><strong>Utility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ROW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Construction Engineering</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

### Project Applicant

- Railroad Company
- Local Public Agency
- IDOT District

This application was prepared by: [Name and Title]

This application was prepared on: [Date]

### Applicant’s contact information:

- **Phone**
- **Email**

It is preferred that the project applicant coordinate with the co-applicant on the proposed scope of work and estimated program costs prior to submitting the application to IDOT, but it is not required.

### Project Applicant

- Railroad Company
- Local Public Agency
- IDOT District

This application was prepared by: [Name and Title]

This application was prepared on: [Date]

### Applicant’s contact information:

- **Phone**
- **Email**

Note: A location map and detailed map must be included with the completed application. If RR Crossing Surface Renewal is included, photographs are required. If Roadway Approaches are included, a drawing of the existing and proposed profile are required.

For additional information, please contact Bill Pearsall at William.Pearsall@illinois.gov or (217) 785-2986.

See instructions for submitting the application and attachments electronically.

*If a hardcopy needs to be submitted, please send to:*

Illinois Department of Transportation
Bureau of Safety Programs and Engineering – Room 005
2300 South Dirksen Parkway
Springfield, Illinois 62764
Instructions for BSPE 04100

Below for each section of the application is where the information may be obtained, all fields should be completed. Drop down choices will be included for some fields. Applications with considerable missing information or no co-applicant will be returned to be completed. After filling out the application electronically, click the “Submit Form” in the upper right hand corner.

Required attachments should be submitted by separate email (William.Pearsall@illinois.gov). The filenames will include the AAR DOT Crossing (example for crossing 542 318N):

- 542 318N - Location Map.pdf
- 542 318N - Detailed Map.pdf
- 542 318N - Photographs x of y.pdf (where x of y denoted the number of photographs)
- 542 318N - Existing and Proposed Profile.pdf

PDF documents are preferred, however, if you are unable to convert, other file formats will be accepted.

Existing Crossing and Roadway Characteristics
Field visit.
Contact the local highway authority - local public agency (LPA).
Contact the railroad.
ICC's website (https://www.icc.illinois.gov/railroad/searchCrossingNumber.aspx?)
FRA's website (http://safetydata.fra.dot.gov/OfficeofSafety/PublicSite/Crossing/Crossing.aspx)
IDOT's website (http://www.gettingaroundillinois.com/gai.htm?mt=aadt)

Existing Train Characteristics
Contact the railroad.
ICC's website (https://www.icc.illinois.gov/railroad/searchCrossingNumber.aspx?)
FRA's website (http://safetydata.fra.dot.gov/OfficeofSafety/PublicSite/Crossing/Crossing.aspx)

“B” Factors - Basic Values for Railroad Protection Devices
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FRA's website (http://safetydata.fra.dot.gov/OfficeofSafety/PublicSite/Crossing/Crossing.aspx)

Description of Proposed Improvements
Provide a description of the proposed improvements in each improvement type as needed. Some key words to use “Install new …”, “Upgrade existing with …”, “this will require a new …”, “N/A” etc.

Example:

**RR Warning Devices:** The existing flashing lights and signals will be upgraded to flashing lights signals and gates.

**RR Circuitry:** New constant warning time circuitry will be installed. Two small bungalows will be required at the start of the CWT on each end.

** RR Crossing Renewal:** N/A

**Roadway Approaches:** The roadway at the existing hump crossing will need to be reconstructed to provide a proper profile meeting IDOT / ICC requirements. It is anticipated additional ROW will be required.

**Other:** N/A or Proposed crossing closure.

Estimated Project Cost
For each phase (PE, Utility, ROW, Construction, and CE) of each proposed improvement type provide a total (do not split). If a phase or proposed improvement type is not required, enter “0”. The totals will calculate.

Project Applicant / Co-Applicant
It is preferred that the project applicant coordinate with the co-applicant on the proposed scope of work and estimated program costs prior to submitting the application to IDOT, but it is not required.