

# **Roadway Safety Review Project**

PRESENTED AT THE

**89th Annual Purdue Road School**

March 25th, 2003

By

**Joseph A Fletcher, P.E.**  
Project Manager, Indiana LTAP

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**ROADWAY SAFETY  
REVIEWS**

FOR INDIANA ROADS AND STREETS

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**CRASH FACTORS**

DRIVER  
VEHICLE  
ROADWAY

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**DRIVER**

"A yellow-light accelerator met  
a green-light anticipator"

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## VEHICLE

Brakes  
Steering  
Tires

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## ROADWAY

Crash Statistics on local roads  
Need for Safety Improvement  
Lack of Money for Safety

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## ROADWAY SAFETY REVIEW PROJECT – WHAT IS IT ?

- A cooperative effort among FHWA, INDOT, JTRP, and INLTAP

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### **TO ASSIST LOCAL AREAS**

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- To evaluate hazardous locations
- To determine expected crash types
- To determine countermeasures
- To obtain funding for implementation

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### **WHAT IS A ROADWAY SAFETY REVIEW ?**

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- A safety evaluation of an existing road or street segment, or intersection, by an independent team of safety experts.

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### **WHO ARE THESE SAFETY EXPERTS?**

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- The review teams will consist of safety experts from FHWA, INDOT, Indiana LTAP, and local street and highway organizations.

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**WHAT IS THE PURPOSE OF THE REVIEW?**

- To provide an unbiased evaluation of the existing hazards, along with suggestions for ways to reduce these hazards.

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**PROCEDURE**

- Local area contacts LTAP to request review(s)
- Local area provides data to LTAP, such as volumes, speeds, physical characteristics
- Review team meets with local personnel
- Review team conducts field review
  - Determines crash potential of site(s), types of crashes to be expected, and determines countermeasures.

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**PROCEDURE**

- LTAP assists local area with application for Hazard Elimination and Safety (HES) funds.

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## LIABILITY CONCERNS

- RSR – Proactive approach to solving problems.
- RSR – Part of an overall risk management program.

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## THE NEXT STEP

- We need a County and a City or Town to request roadway safety reviews of selected locations in their area to use as pilot studies to refine the procedure. If you would like to participate in the project please contact the Indiana LTAP office at 800-428-7639, or contact me directly by email at [fletcher@ecn.purdue.edu](mailto:fletcher@ecn.purdue.edu)

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## SUMMARY

- The Indiana LTAP, in cooperation with FHWA, INDOT, and JTRP is developing a procedure to conduct roadway safety reviews for local street and highway departments in Indiana by request. These reviews will be for the purpose of determining the types of crashes to be expected at a particular location, to suggest countermeasures, and to assist in obtaining funds to implement these countermeasures.

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## **Roadway Safety Reviews** For Indiana Roads and Streets

This morning I would like to spend a few minutes talking about a new project which the Indiana LTAP has started. This project is called Roadway Safety Reviews for Indiana Roads and Streets, and is a cooperative project involving the Federal Highway Administration (FHWA), the Indiana Department of Transportation (INDOT), the Joint Transportation Research Program at Purdue University (JTRP) and the Indiana LTAP.

As you all know, there are three factors which may be involved in vehicle crashes. These are the driver, the vehicle and the roadway. An excellent example of the factor involving the driver can be seen in the following quote taken from a crash report by the investigating officer at a crash several years ago: “A yellow-light accelerator met a green-light anticipator”. There is nothing we can do about this type of situation – this is obviously a driver error.

Vehicles may be involved in certain situations if there is a failure of some part of the vehicle, such as brakes, steering, or most likely, the tires. Again, there is not much we can do about these vehicle failures.

However, we can and should do something when the failure involves the roadway. We know that local roads – those under the jurisdiction of our counties, cities and towns – have a much higher crash rate than state highways or the Interstate system. There are a number of reasons for this, but the most important reason is that there is not enough money available for the local areas to take care of all of the problems that exist. Many local areas lack the professional expertise to evaluate their problem areas, as well as to decide what improvements need to be made.

The Roadway Safety Review Project – what is it? As I mentioned before, it is a cooperative effort among FHWA, INDOT, JTRP and the Indiana LTAP. Its primary purpose is to assist local jurisdictions in evaluating hazardous locations, determine the types of crashes to be expected at those locations, suggest countermeasures to eliminate or reduce the problems, and assist the local areas in obtaining funding to implement the suggested countermeasures. This is done by means of a roadway safety review.

A roadway safety review is a safety evaluation of an existing roadway or intersection by an independent team of safety experts, taken from the personnel of FHWA, INDOT, LTAP and other local street and highway experts. The purpose of the review is to provide an unbiased evaluation of the existing hazards at the specific location, along with suggestions as to how to alleviate the problems.

The procedure to be followed in the roadway safety review project starts with a local area contacting the Indiana LTAP with a request for a review. Then the local area provides LTAP with certain data, such as traffic volumes, speeds, physical characteristics



at the site, etc. Then the review team meets with the local personnel to discuss the project and then conducts a field review of the site. At this field review, the review team determines the crash potential of the site, the types of crashes to be expected, and determines countermeasures to be applied at the site. LTAP then assists the local area with an application for funding to implement the countermeasures, if desired. Funding may be available from Hazard Elimination and Safety funds (HES funds) through the Indiana Department of Transportation.

Whenever safety is mentioned in connection with a review or evaluation or whatever, the question of liability is raised. I am not an attorney, and I would not attempt to provide legal advice, but common sense says that the type of safety review that we are talking about here is a proactive approach to solving safety problems, and as such should be valuable as a defense in the case of liability action as a result of a crash at the location in question. A roadway safety review could be a part of an overall risk management program on the part of the local area.

In order for us to continue with the project, we need for a local area- a city, county or town- to request a roadway safety review of one or more locations under their jurisdiction to use as a pilot study to refine the established procedures. If you would like to participate in the project, please contact the LTAP office at 1-800-428-7639, or contact me directly by email at [fletcher@ecn.purdue.edu](mailto:fletcher@ecn.purdue.edu)

In summary, the Indiana LTAP, in cooperation with FHWA, INDOT and JTRP, is developing procedures to conduct roadway safety reviews for local street and highway departments in Indiana. These reviews, by request, will be for the purpose of determining the types of crashes to be expected at a particular location, to suggest countermeasures, and to assist in obtaining HES funds to implement these countermeasures. If anyone has any questions, I will be glad to answer them now. Thank you.