

Arizona DOT's Use of Photo Log, GIS, and GPS to Visually Correlate Roadway and Roadside Geometrics to Crash Data

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Presented to:

National Safety Council - Traffic Records Forum

Minneapolis, Minnesota

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Prologue

- **Presentation is primarily a working demo of new safety analysis tools available at Arizona DOT.**
- **TRB paper will be submitted for 8/1/99 deadline.**
- **Draft TRB papers should be available to requesters by 11/1/98. Contact Joe Breyer.**
- **Stay tuned for repeat demo presentations at:**
 - **1999 ITE International Conference - Orlando - March '99**
“Enhancing Transportation Safety in the 21st Century”
New Tools for Transportation Professionals
 - **TRB - January 2000 - Washington, DC**
 - **GIS-T - Spring 1999 - San Diego, CA**

Funding

- *Identifying & Implementing Corridor Safety Improvements (SPR-458)*, through ADOT and Arizona Transportation Research Center
- Project included a pilot study for implementation of a CSIP in Arizona
- 50% of \$125k budget for analysis tools to support a CSIP process

History of ALISS

- **Accident Location Identification & Surveillance System migrated from mainframe between 1992 and present.**
- **Analysis reports had not migrated to exploit methods of newer technology.**
- **Tool delivery allows safety engineers to proceed with helpful analysis tools after a prolonged period of tabular identification and analysis.**

Objectives of Tool Building

- **Some CSIPs have experienced obstacles due to lack of factual data to support identification of the problem.**
- **ADOT needs the tools regardless of the CSIP process.**
- **Local agencies can also utilize the tools for their own community safety improvement programs due to CD-ROM distributed architecture.**

Live Demonstration

This Demo:

Pentium - 200Mhz - 64MB RAM

ArcView 3.0a & Microsoft Access 97

10x (max) CD-ROM

Current Status

- **Draft Final Report on SPR-458 to be completed in early August.**
- **ALISS to make additional advancements in data entry and location confidence.**
- **Prototype tools to be developed for widespread use as funding is identified.**

More Information

- **Tuesday - all day - vendor/state showcase**
- **ADOT Project Monitor**
 - Frank McCullagh (602) 407-3132
- **Slide Show copies? TRB paper?**
 - Leave your business card
- **Handouts for GPS, Photo Log, Data Collection/Distribution Methods**
 - Website: www.leeengineering.com
 - See me during the Traffic Records Forum