

# GOOD WORKING RELATIONSHIPS AND TIMELY DATA LEAD TO GOOD SOLUTIONS

## LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT (LADOTD)

### Objective

In 1996 Louisiana's fatal crash rate per 100 million vehicle miles of travel (VMT) exceeded the national average by 45 percent. Over the past decade, LADOTD and the Louisiana Highway Safety Commission (LHSC), with strong support from the Federal Highway Administration (FHWA), have been working in partnership to reduce the rate of fatal and serious injury crashes. A key element in the strength and expansion of the partnership has been faster processing and dissemination of crash data. This, along with a more inclusive and effective coordination process, has led to the implementation of broader solutions that address both engineering and behavioral safety issues.

### Approach

The process for incorporating safety into traditional transportation planning is well-defined and documented. One of the key elements is input from the State's Safety Management System, which is comprised of a series of multi-agency, multidisciplinary committees. Proposed projects are reviewed by a seven-person team of LADOTD headquarters personnel and one representative each from the LHSC and the State Police. The seven-person team receives input from a wide range of partners, including Metropolitan Planning Organizations (MPOs) and Regional Planning Commissions (RPCs), and consults with the District Administrators on project selection. Locations showing abnormal crash patterns are provided to the nine District traffic engineers, who review them and forward their priority locations to the LADOTD Safety Section. The Safety Section is responsible for crash records, with Louisiana State University (LSU) serving as a subcontractor. Engineers undertake more detailed studies of the top few locations and recommend improvements.

District engineers may propose additional safety-related projects based on their knowledge of specific locations, even if those locations do not show abnormal crash patterns. Input is also provided by MPOs, RPCs, local officials, and the public. For relatively minor improvements such as signing and striping, projects are implemented by the Districts. Projects requiring construction and right-of-way acquisition are submitted to the Safety Selection Team. The Team has the final say on how to allocate funding among different programs, including traffic safety improvements and so-called "soft-side" programs, e.g., education, outreach, and enforcement.

After the amount of funding allocated to traffic safety improvements is determined, projects are evaluated and ranked using a set of defined criteria. The criteria and specific measures are:

- Total crash rate;
- Total crash frequency;
- Injury/fatal crash rate;
- Injury/fatal crash frequency;
- Commercial vehicle crash rate;
- Commercial vehicle crash frequency;
- Pedestrian/bicycle crash frequency; and
- Tort claim frequency.

With the exception of hazardous material incidents and tort claims, crash rates and frequencies are evaluated for both roadway sections and intersections. Eight performance indicators have been defined to judge the success of the highway safety program. These map closely to project selection criteria and include:

- Lives saved per year;
- Injuries reduced per year;
- Fatal crashes eliminated per year;
- Injury crashes eliminated per year;
- Property damage only (PDO) crashes eliminated per year;
- Commercial vehicle crashes eliminated per year; and
- Hazardous materials incidents eliminated per year.

## Resources

In 1998, LADOTD established a separate highway safety budget category. Prior to this change only \$3 million in hazard elimination funds were clearly set aside for safety purposes. Following the change \$30 million became available for safety projects.

The Safe Community Program is used to help MPOs and RPCs incorporate transportation safety projects into their plans. Most funds are used to implement local roadway safety projects, but funds also can be used to support District safety committees and interagency coordination activity as well as educational programs.

Timely, reliable safety data are a key resource in promoting cooperation and developing comprehensive solutions. LSU has developed a system that permits crash data to be transferred electronically from either laptops in patrol vehicles or from local police stations. Agencies utilizing this system are able to expedite the time it takes to process crash reports and thereby drastically improve the timing of the data for all involved. The LADOTD serves as the central repository for all crash records. Information on abnormal crash locations is provided on a statewide basis to the State Police and helps them target enforcement efforts more effectively. Information also is provided in response to special requests. Aggregate reports are available to the public on the LSU web site (<http://lhsc.lsu.edu/default.asp>). A sample report is shown in Table 1. Customized queries can be developed to narrow the data to the Parish level and enable the user to select different types of roadway facilities and crashes.

## Outcomes

Important outcomes of the Louisiana safety planning process include improved cooperation and greater resource availability for safety projects. The involvement of local agencies has encouraged the development of innovative solutions such as the “tailgator” program, which educates motorists on the dangers of tailgating during college football tailgate parties and other events.

Louisiana’s safety program has had tangible benefits as well. In just four years (2001-2004) the rate of fatal and serious injury crashes per 100 million VMT was reduced significantly from 44.4 to 38.8. Alcohol-related crashes, a major focus of educational and enforcement campaigns, have declined from 55 percent of fatal crashes 10 years ago to 42 percent.

**Table 1: Safety Belt Use**

Year	Child Restraint Usage Under Age 5 (Survey)	Safety Belt Usage Age 5 and Older (Survey)	Percent of Children (below Age 5) Killed Not Properly in Child Seat	Percent of Drivers Killed Not Wearing Safety Belt	Percent of Passengers, Ages 5 and Older, Killed Not Wearing Safety Belt	Percent of All Occupants Killed Not Wearing Safety Belt
1996	82	59	70	51	58	56
1997	82	64	77	53	58	54
1998	81	66	67	56	53	55
1999	85	68	100	63	65	64
2000	85	68	59	59	64	61
2001	85	68	43	64	77	66
2002	88	69	42	64	69	65
2003	89	74	38	64	71	65
2004	86	75	64	59	69	62
2005	N/A	N/A	42	60	60	60
2006	N/A	N/A	27	60	62	60
Difference						
1-Year	N/A	N/A	-14%	-0%	3%	0%
2-Year	N/A	N/A	-16%	-4%	-15%	-6%
Average	N/A	N/A	-19%	-2%	-7%	3%

Note: The values for 2006 are calculated by taking an estimate based on the last 12 months of reporting from Friday, July 1, 2005 to Friday, June 30, 2006. These are not the actual numbers for 2006.



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Best practices are being identified and documented by the  
Transportation Safety Planning Working Group  
(TSPWG). For more information go to [tsp.trb.org](http://tsp.trb.org) or  
[www.fbwa.dot.gov/planning/SCP](http://www.fbwa.dot.gov/planning/SCP).

