

Traffic Safety Facts

Traffic Tech – Technology Transfer Series

Traffic Safety Performance Measures for States and Federal Agencies

The National Highway Traffic Safety Administration and the Governors Highway Safety Association (GHSA) have agreed on a minimum set of performance measures to be used by States and Federal agencies in the development and implementation of behavioral highway safety plans and programs. An expert panel from NHTSA, State Highway Safety Offices, academic and research organizations, and other key groups assisted in developing the measures.

Performance measures are required for each State's traffic safety activities. Federal regulation 23 CFR 1200.10(a)(1) requires States to develop a performance plan each year that includes at least one performance measure for each goal enumerated in the plan. Audits of NHTSA's impaired driving program by the DOT inspector general and NHTSA's high-visibility enforcement programs by the Government Accountability Office have emphasized the importance of developing and refining a common set of performance measures that cover key traffic safety program areas and that will be used by all States and NHTSA (as well as other Federal agencies dealing with traffic safety). These examples illustrate the importance of establishing a common set of performance measures that cover key safety program areas that will be used by all States and NHTSA.

Several types of performance measures were developed to satisfy different needs:

- *Outcome measures* – used to set national and State goals, allocate resources and measure overall progress (may include crashes, injuries, or fatalities, and may be presented as numbers, rates, percentages, or ratios);
- *Behavioral measures* – provide a link between specific activities and outcomes by assessing whether the activities have influenced behavior (may include observed behavior on the road such as direct observations of seat belt use or vehicle speed, or self-reported behavior, program awareness, and attitudes obtained through surveys); and
- *Activity measures* – document program implementation and measure specific actions taken to reduce crashes, injuries and fatalities (a variety of actions taken by law enforcement, courts, media, education, and others).

The three types of performance measures work together to document overall highway safety program performance. Activity measures document what was done; behavior measures document whether the activities changed behavior; and outcome measures document whether the behavior change reduced crashes, injuries, and fatalities.

The initial minimum set of performance measures contains 14 measures: 10 core outcome measures, 1 core behavior measure, and 3 activity measures. The measures cover the major areas common to State strategic highway safety plans and use existing data systems.

Core Measures	Description	Data Sources
C-1	Number of traffic fatalities (3-year or 5-year moving averages)	FARS
C-2	Number of serious injuries in traffic crashes	State crash data files
C-3	Fatalities/VMT (including rural, urban, and total fatalities)	FARS, FHWA
C-4	Number of unrestrained passenger vehicle occupant fatalities, all seat positions	FARS
C-5	Number of fatalities in crashes involving a driver or motorcycle operator with a blood alcohol concentration of .08 g/dL or higher	FARS
C-6	Number of speeding-related fatalities	FARS
C-7	Number of motorcyclist fatalities	FARS
C-8	Number of unhelmeted motorcyclist fatalities	FARS
C-9	Number of drivers 20 or younger involved in fatal crashes	FARS
C-10	Number of pedestrian fatalities	FARS
B-1	Observed seat belt use for passenger vehicles, front seat outboard occupants	Survey
A-1	Number of seat belt citations issued during grant-funded enforcement activities	Grant activity reporting
A-2	Number of impaired-driving arrests made during grant-funded enforcement activities	Grant activity reporting
A-3	Number of speeding citations issued during grant-funded enforcement activities	Grant activity reporting

C = Core measures; B = Behavioral measure; A = Activity Measures

The minimum set of performance measures and the areas where additional work is required represent the general consensus but not the unanimous opinion of the panel.

States will set goals for and report progress on each of the 11 core outcome and one behavioral measures annually, beginning with their 2010 Highway Safety Plans and Annual Reports. States should define and use additional performance measures for their other high-priority highway safety areas as appropriate. NHTSA will use the core measures as an integral part of its reporting to the Congress, the public, and others.

NHTSA and GHSA will work actively and cooperatively to support the implementation of these measures and to develop additional or improved measures needed to monitor traffic safety outcomes, behavior, and activities. NHTSA and GHSA agreed to the need for three additional measures, but acknowledged that further development and refinement was necessary prior to implementation of these measures. The definition of “serious injury crashes” also needs to be standardized.

1. Traffic injury data for outcome measures. NHTSA and GHSA convened a working group in 2008 to assist each State in identifying the best way to report serious injuries for core outcome measure C-2 using the State’s current crash data file and to move toward common and improved injury data definitions and reporting practices.
2. Public awareness surveys to track driver attitudes and awareness of highway safety enforcement and communication activities and self-reported driving behavior. GHSA and NHTSA will convene a working group in 2008 to develop and test a basic set of survey questions including information on seat belt use, impaired driving, and speeding. States will begin reporting survey information in their 2010 Highway Safety Plans and Annual Reports.
3. Speed-monitoring for measuring speed levels and tracking trends. Since State DOTs typically are responsible for traffic monitoring, NHTSA, FHWA, and GHSA will work with AASHTO to convene a working group in 2008 to review objectives and resources and develop guidance for appropriate speed reporting capability. Work will begin by 2009 toward establishing speed monitoring and reporting systems.
4. Law enforcement activities to track both regular operations and special activities such as high-visibility enforcement campaigns. States will report the number of

citations and arrests from all grant-funded enforcement activities for activity measures A-1, A-2, and A-3 annually beginning with their 2010 Highway Safety Plans and Annual Reports. States will extend reporting as the necessary reporting technologies and systems are developed and implemented. NHTSA and GHSA convened a working group in 2008 to assist States in improving arrest and citation data collection and reporting. The Pacific Institute for Research and Evaluation is under contract to work with GHSA and NHTSA to develop more comprehensive performance measures for enforcement activities by May 2009.

The following points apply both to the 14 measures in the initial minimum set and to the additional measures to be added as outlined above.

- NHTSA, with the assistance of the States, will develop uniform definitions, protocols, and reporting requirements for each recommended performance measure. This is critical for measures requiring data that all States do not collect and report at present.
- NHTSA will assist States in establishing data collection and analysis systems for all measures that not all States report at present.
- As additional measures from the developmental activities are added to the minimum set, not all States may be able to implement them immediately.
- Some behavior and activity measures may be reported only from a portion of a State. For example, seat belt use observations currently sample only a portion of each State’s roads.
- All core outcome and behavior measures should be reported on a calendar year basis. That is, all counts of fatalities and serious injuries should be from January 1 to December 31 and belt use should be reported for the calendar year in which surveys were conducted. Activity measures should be reported on a federal fiscal year (October 1 to September 30) basis.

How to Order

Download a copy of *Traffic Safety Performance Measures for States and Federal Agencies* (22 pages plus appendices) from <http://www.dot.gov>, or write to the Office of Behavioral Safety Research, NHTSA, NTI-130, 1200 New Jersey Avenue SE., Washington, DC 20590, fax 202-366-7394. Patty Ellison-Potter, Ph.D., was the project manager for this study.



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