Informal document No. GRRF-62-21 (62nd GRRF, 25-28 September 2007, agenda item 10(c))

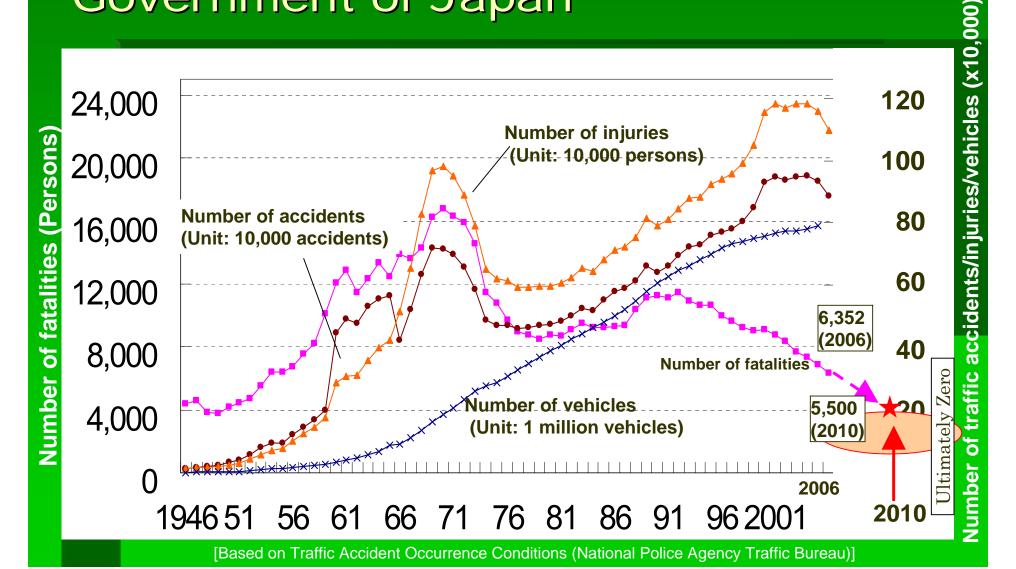
The Promotion of Active Safety Measures in Japan - collision damage mitigation brake -

September 2007



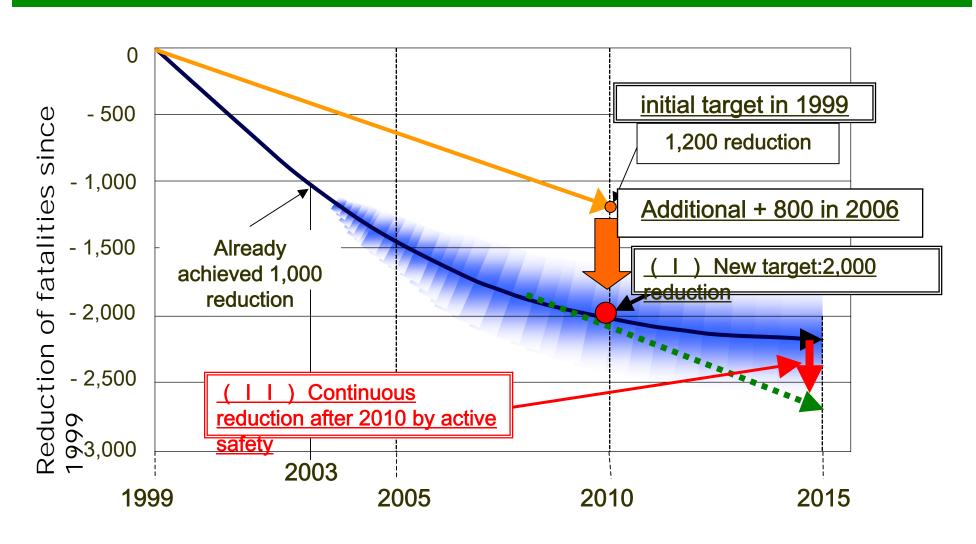
Road Transport Bureau MLIT Japan

Target of safety measures Government of Japan



"The 2006 MLIT Transport Policy Council's Report on vehicle safety"

Target of Fatality Reduction Effect by vehicle safety measures



"The 2006 MLIT Transport Policy Council's Report on vehicle safety "

Strategies for active safety measures

After success of passive safety measures, prompt action should be taken now to expand utilization of active safety for continuous reduction after 2010.

- Short term measures: incentives for priority technologies should be considered.
- Middle term measures: introduction of new type of accident analysis using driving recorder.
- Future measures: development of communication technologies is important.

Market introduction of Active Safety Technology

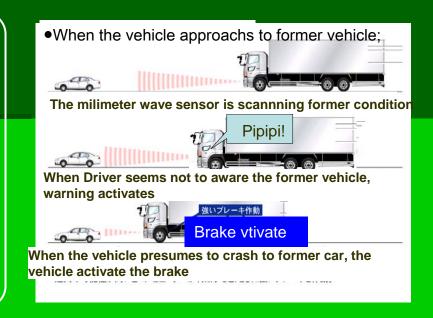
- Technical measures
 - Technical guidelines based on "the concept of driver assistance."
- Public outreach
 - Publication
 - Events
- Knowledge for users
 - Basic information about ASV technologies
- Industries' effort
 - Motor vehicle industries
 - Truck operators
- Government support
 - Clear message of importance of ASVs
 - Incentive measures

Incentives

Heavy duty vehicles equipped with collision damage mitigation brake (CDMB) are subsidized from April 2007.

Why collision damage mitigation brake on heavy duty vehicle was selected for incentives?

- Matured technologies
- Effectiveness
- Social necessity



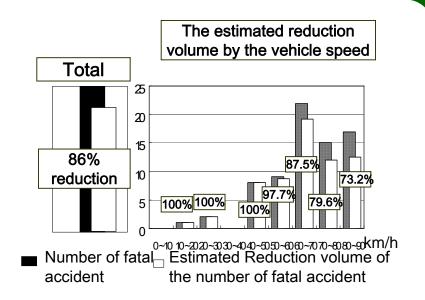
Matured Technology

It depends on the manufacture's philosophy.

Ex) Heavy duty vehicle equipped with the brake become to be sold.

Effectiveness

MLIT estimates that the number of fatal accidents related heavy duty vehicle can be reduced about 90% when collision mitigation braking system on the heavy duty vehicles reduce speed around 20 km/h.



Social Necessity

More than 55% of accidents are rear end collision

Damage to other vehicles is 12 times more severe than collision with
a passenger vehicle

Technical regulation

Technical guidelines for CDMB

For goods vehicles with a gross vehicle weight of at least 8 tons or a maximum loading capacity of 5 tons or more and ...

- When a forward obstacle has been detected and the predicted collision time falls below the collision judgment line (ex, 0.8sec), brake control function exceeding 3.3m/s² shall be started.
- When a forward obstacle has been detected and the predicted collision time falls below the collision risk judgment line (ex, 1.6sec), brake control function may be started.

At present, MLIT is discussing a technical regulation of collision damage mitigation brake equipped with these heavy duty vehicles.

Conclusion

- Transport Policy Council, which is advisory group of MLIT, revised the target of road safety in June 2006.
- Continuous fatality reduction after 2010 is one of the new target.
- To archive the new target, the promotion of the active safety technology is necessary.
- Accordingly, to promote the active safety technology, MLIT started to give new subsidy for "collision damage mitigation brake" from April 2007.
- At present, MLIT is discussing a technical regulation of collision damage mitigation brake for heavy duty vehicles.

Thanks for your attention!



