



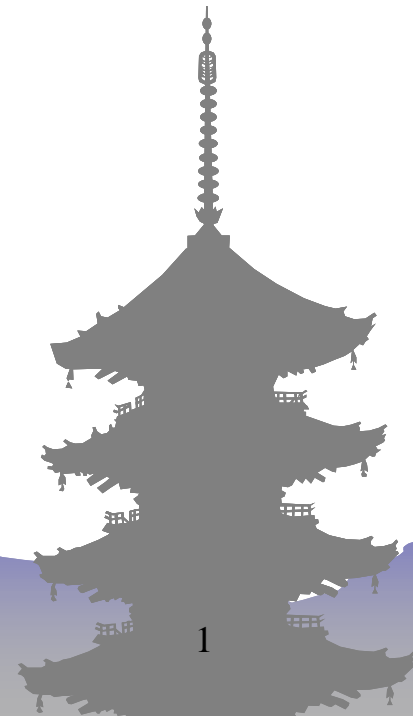
Informal Document No. GRSP-40-16

40<sup>th</sup> GRSP 12th- 15th December 2006

Agenda Item B.1.3.

# **Survey on the Effectiveness of Safety Belt Reminder System**

**Japan  
December 2006**



# 1. Objectives



- ◆ **In Japan, it has been mandatory since March 2005 to equip the driver's seat of passenger cars with the safety belt reminder system (SBR) (mandatory for new-model vehicles since September 2005).**
- ◆ **To confirm the effect, following survey has been conducted.**
  - **The rate of safety belt use with / without SBR**
  - **How and when SBR is activated**
  - **Positive and negative evaluations of its functions**
  - **Passenger seat SBR effect for future reference**



## 2. Method of Survey



- The **6448** vehicles driver's **use/non-use of safety belt** was **visually checked** at parking lot entrances of “road station of arterial roads (speed limit 60 km/h)” and “shopping mall”.
- Passenger cars were selected **with / without SBR equipped**.
- **268** SBR-equipped vehicles users were **interviewed**.

Road station of arterial road



Shopping Mall

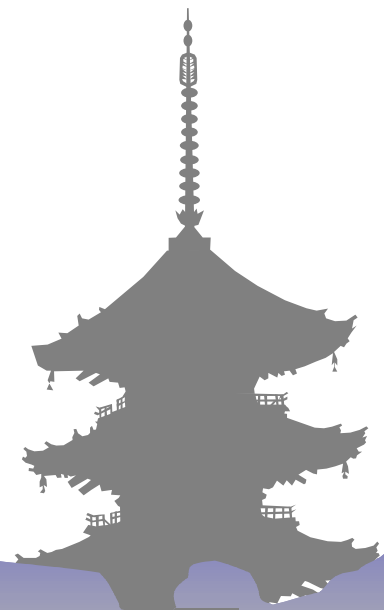




70

**With SBR**

**Without SBR**



4

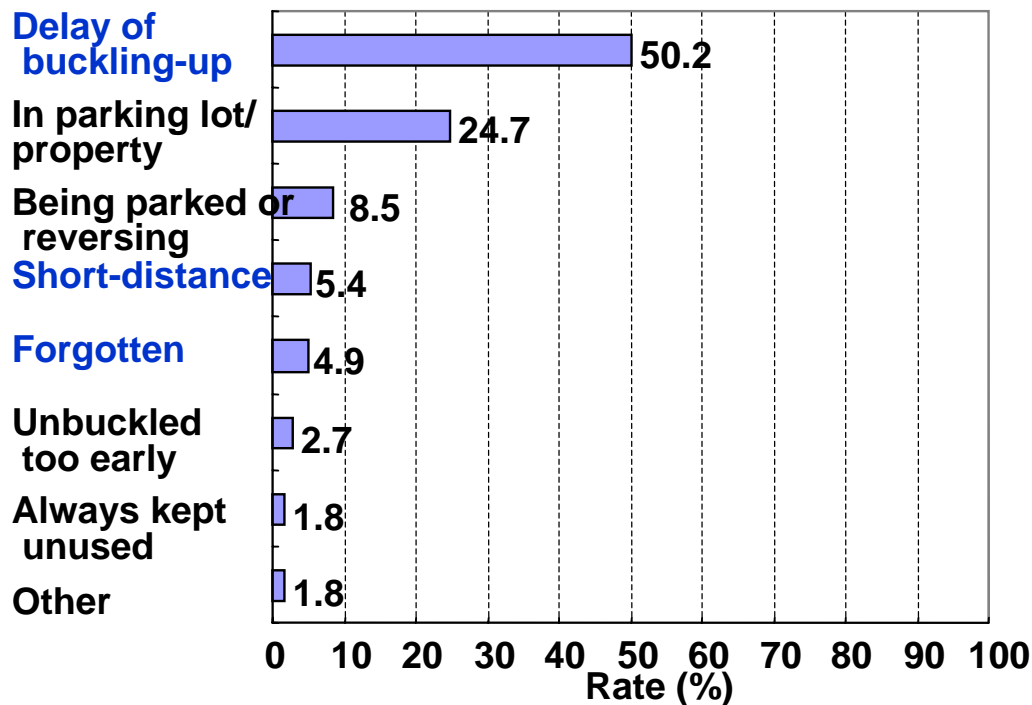


## 4. How and when SBR is activated

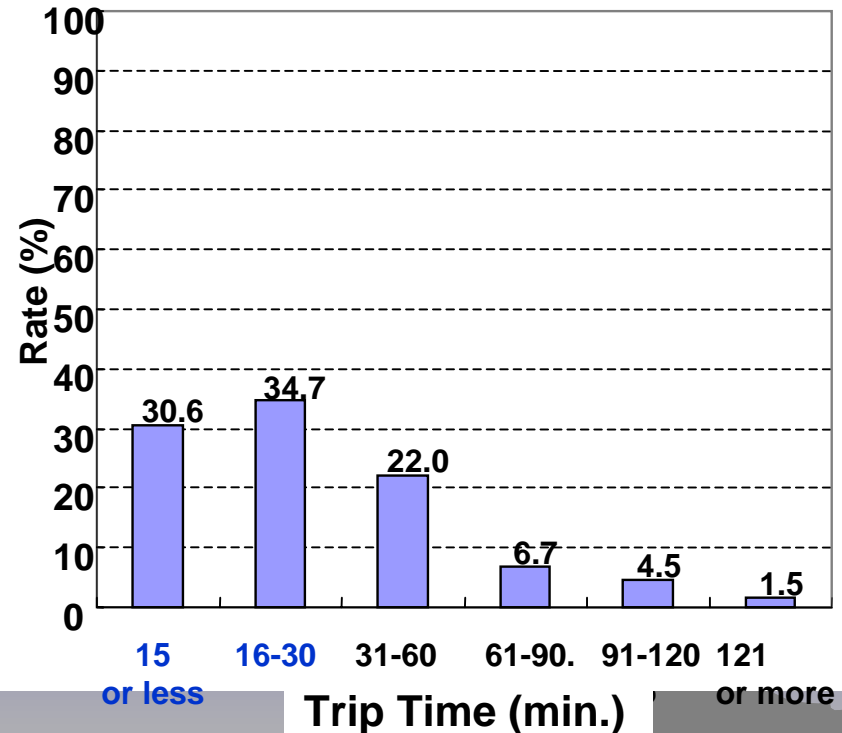


- Most of activate condition was **in short term** such as “delay of buckling-up” and “Short distance”.
- **65.3% trip time was with in 30 min.**

### Conditions of SBR Activation



### Trip Time Distribution

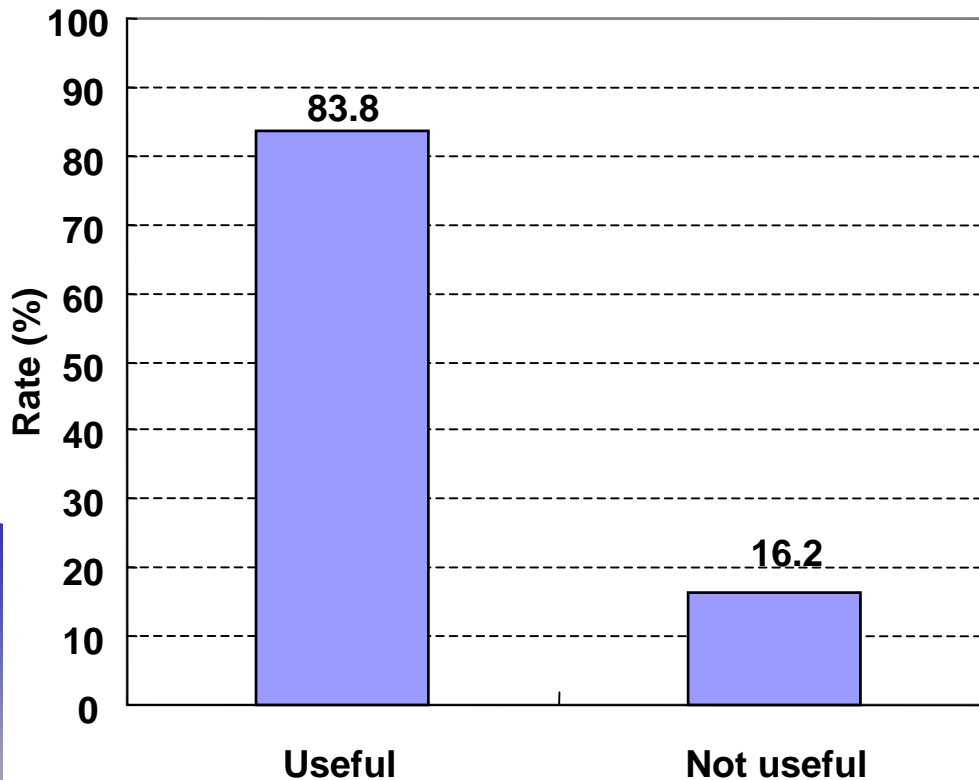


# 5. Positive and negative evaluations of its functions

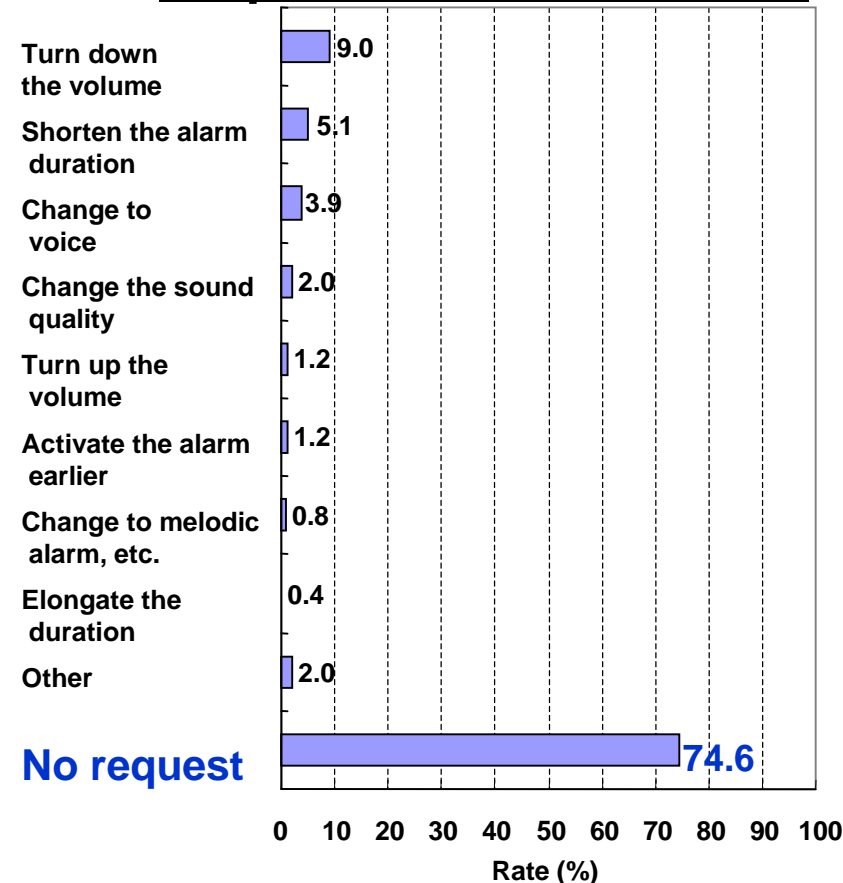


- **Approx. 84%** of the users answered that the SBR audible warning was **useful**.
- **74.6%** users answered **“No request”** for SBR function.

### Effectiveness of SBR Audible Warning



### Request for SBR function

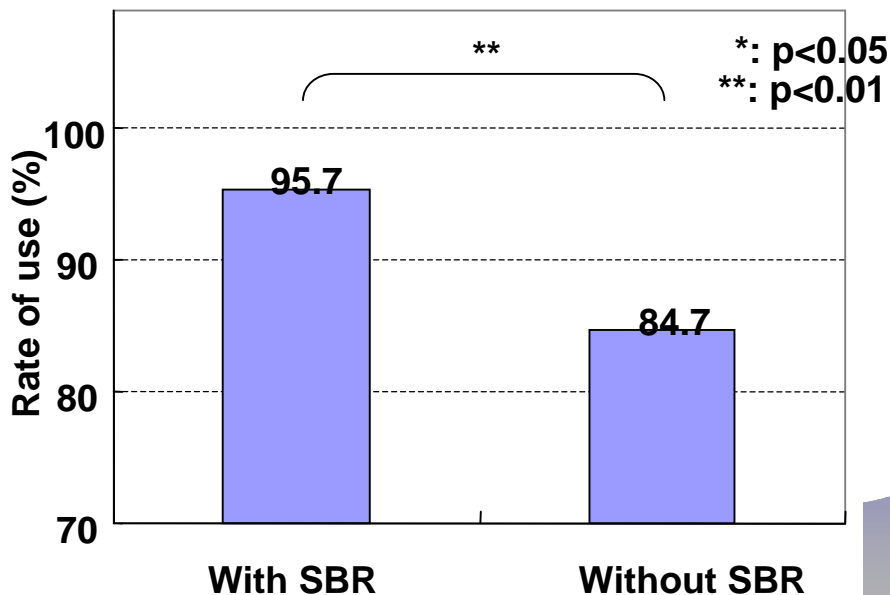


## 6. Passenger seat SBR effect for future reference

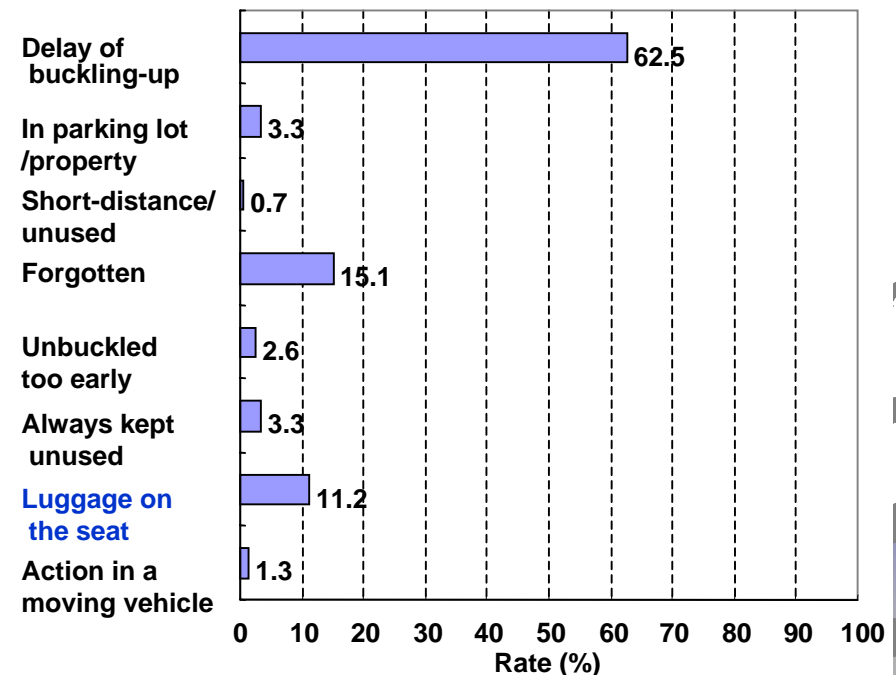


- 2443 (38%) vehicles had passenger occupants. **116 (4.7%)** vehicles were equipped **with passenger seat SBR**.
- The Safety belt use with SBR vehicle was **+11.0%** (**95.7% ← 84.7%**) **higher** than without vehicles.
- **11.2 %** was activated by **“Luggage on the seat”**.

Rate of Safety Belt Use by with / Without passenger's seat SBR



Conditions of Passenger's Seat SBR Activation



## 7. Summary



- ◆ **The rate of the driver's safety belt use with SBR vehicles were +7.2 % higher than without vehicles. Therefore, SBR is very effective to increase the driver's safety belt use.**
- ◆ **SBR was activated mostly in short term such as delay of buckling-up or short distance driving. Therefore, Short term deactivation could considerably reduce the effective.**
- ◆ **With regard to the reference investigation of passenger seat SBR, it was also effective, however, there was still a issue of caused by putting luggage and seating frequency. Therefore, further discussions for technical requirement and effectiveness study are necessary.**