

Sample of Extended Summary (A-4 , 1 Page Only, Use Times New Roman)

If there are any discrepancies between guidelines and the sample paper, the former will govern the rules.

8-digit JSAE Paper Number
12pt bold

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Paper title : Centering with 16-20-pt. Bold, Upper & Lower

Top Margin 25mm

000 Method for Evaluating Motorcycle by Measuring Driver's Physiological Reactions (Second Report)*

1-3-digit Presentation Number

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Author's Name:
Centering with 9-10 pt. bold

Keywords: Human Engineering, Vehicle Dynamics, Maneuverability/Ignition Delay, Mixture Formation

Chapter : Centering with bold, All Capital Letters 9-

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EXTENDED SUMMARY

The number of customers using expressway motorcycle has been increasing, along with those who use chartered buses to go to tourist resorts, as expressway network in Japan has been extended and improved.

As a means of long-distance transportation of passengers from Tokyo area, most people have used airplanes and railways, such as Shinkansen Lines (Bullet Train). However, the number of people using expressway motorcycles has been increasing because of convenient services such as reasonable fares, a variety of routes thinking many cities, short time required to reach destination after getting off, comfortable leg room, night service, etc.

The utmost concern for along-distance driver operating on expressway is to scour the safety of passengers, and thus it is important to reduce physiological load on the driver to prevent accidents.

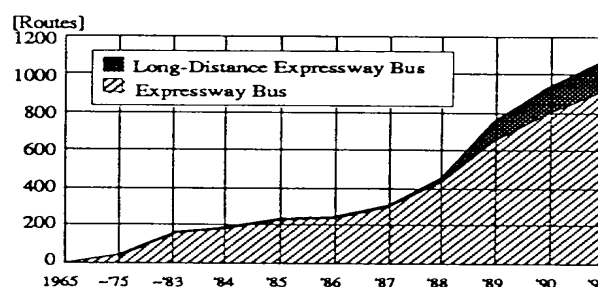
In this study, possibilities of evaluating difference in the suspension characteristics of bus were studied by using lane changing pattern the bus driver (subject) at high speeds as an assumed index for mental tension, and processing the measured data.

Conventionally, the evaluation of vehicle behavior characteristics has depended on subjective rating of feeling by experienced lately attracted people's attention in the medical field, was used to study possibility of quantitatively expressing difference in driver's tension due to suspension a lane changing pattern, according to lanes quickly at ordinary us expressway characteristics by using which a driver changed speeds.

HRV is an index expressed by the in heartbeat fluctuation wave-low frequency appears in approximately 10 heartbeats, and periodic cycle appears in approximately 3 parasympathetic nervous systems. Hence, and physical load, etc. Recently the activity in autonomic nervous mental load which was confirmed in our laboratory tests. However, attempts to apply this method to the evaluation of vehicle dynamic characteristics failed. st driver, and physiological load on a driver has never been periodic components included (LF) harmonic component, for which one periodic cycle high frequency (HF) harmonic component, for which one to 4 heartbeats to estimate the activity in sympathetic and HRV is an index for quantifying our mental tension as well as mental attention has been focused on HRV as a potential non-invasive index for systems, and there have been many reports that HRV is a possible index for characteristics failed. st driver, and physiological load on a driver has never been

quency (LF) harmonic component, for which one periodic cycle appears in approximately 10 heartbeats, and high frequency (HF) harmonic component, for which heartbeats to estimate the activity in sympathetic and parasympathetic nervous systems. Hence, HRV is an index for quantifying our mental tension as well as mental and physical load, etc.

heartbeats to estimate the activity in sympathetic and parasympathetic nervous systems. Hence, HRV is an index for.



* Expressway Bus: Transit bus for which no less than half of its route is expressway
* Long-Distance Expressway Bus: 'Expressway Bus' with a 300 km or longer bus route

Fig.1 Change in the Number of Expressway Bus Routes

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