# **Vehicle Safety Performance 2021**



This pamphlet summarizes the results of the FY2021 evaluation of the overall safety performance of new vehicles on the market.

## Please use this pamphlet as a guide to choosing a safer car.

Table of Contents

P2. What is Vehicle Safety Performance Evaluation? Evaluation Technologies for Vehicle Safety Performance in FY2021

- P4. How to Read the Evaluation Results of Vehicle Safety Performance 2021
- P5. Evaluation Results of Vehicle Safety Performance 2021
- P7. Outline of the Comprehensive Evaluation



Ministry of Land, Infrastructure, Transport and Tourism

National Agency for Automotive Safety and Victims' Aid

# What is Vehicle Safety Performance Evaluation?

The Japan New Car Assessment Program conducted by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) and the National Agency for Automotive Safety and Victims' Aid (NASVA) promotes car safety through the following activities: - Evaluating and publicizing "Vehicle Safety Performance" to aid drivers in the selection safer vehicles.

- Promoting the development of safe cars by manufacturers committed to a high standard of safety performance.

#### MLIT · NASVA



# Evaluation Technologies for Vehicle Safety Performance in FY2021

#### Technologies to protect people in crashes (Collision Safety Performance)

Technologies to protect driver, vehicle occupants, and pedestrians in event of an accident, evaluated by a combination of tests duplicating vehicle and barrier impacts and vehicle and human-body impacts.



#### [Evaluation items for collision safety performance]

#### <Technology to protect the occupants of a car>

- Full frontal collision (Frontal collision)
- Offset frontal collision (Partial collision with an oncoming vehicle)
- Side collision
- Electric shock protection performance after collision
- Performance for neck-injury protection in a rear-end collision
- Passenger Seat Belt Reminder (PSBR) Evaluation

#### <Technology to protect pedestrians>

Pedestrian head protection performance

Pedestrian leg protection performance

-2-

#### New technologies to avoid crashes (Preventive Safety Performance)

An extensive range of preventive safety technologies are evaluated to assist the driver; driver alerts and automatic braking to preclude a collision are examples.



#### [Evaluation items for preventive safety performance]

- Autonomous Emergency Braking System (AEBS)
  - · Rear-end Collision with a vehicle in front
  - $\cdot$  Collision with a pedestrian in front during the day
  - · Collision with a pedestrian in the front at night (with or without street lamp)
- Lane Departure Prevention System (LDPS) (prevents straying onto the oncoming traffic lane)
- Rear-view monitoring system (allows rear-view monitoring when reversing)
- High-performance headlights (This function automatically switches between the high-beam and low-beam illumination range of headlights)
- Pedal misapplication prevention (reduces acceleration due to pedal misapplication when starting)

Technology to prepare for serious accidents (automatic emergency notifications in serious accidents)

The program evaluates systems that provide automatic accident notifications on behalf of the driver or a witness in serious accidents, such as cases involving vehicle airbag deployment.





## How to Read the Evaluation Results of Vehicle Safety Performance 2021



#### ① Overall evaluation

The star rating system ranks vehicle safety performance on a scale of one to five stars. The higher the number of  $\bigstar$ , the higher is the overall safety performance ranking. The percentage indicates the score ratio to the full score when all the scores for collision safety performance, preventive safety performance, and automatic emergency call system for accidents are totaled. The full score is 190.

## **②** FIVE STAR BEST AWARD

This safety assurance is awarded to models that receives the highest test score among  $\star \star \star \star \star$  models in the overall evaluation for FY2021.

## 3 FIVE STAR AWARD

This award is given to models receiving the highest rating ( $\star \star \star \star \star$ ) in the overall evaluation for FY2021.

### Collision Safety

The five-point scale from A to E is used based on the total score of the collision safety performance evaluation. The percentages indicate the score ratio to the full score. The full score is 100 points.

#### **5** Preventive Safety

The scores are indicated in a five-level ranking, from A to E, based on the total score of the preventive safety performance evaluation. The percentages represent the score ratio to the full score. The full score is 82.

## 6 Automatic Accident Emergency Call System

This evaluation indicates the presence or absence of a function that automatically reports occurrence of an accident. The percentages indicate the score ratio to the full score.

"Basic type" (2 points): Automatic emergency notification of the occurrence of an accident "Advanced type" (8 points): In addition to the basic notification, this type transmits information pertaining to predicted occupant injury.

To view detailed test results and test videos, please visit our Web site.



Click here to view past evaluation results.

# **Evaluation Results of Vehicle Safety Performance 2021**







Important notice: Preventive safety technologies are systems that assist the driver and no panacea for all driving conditions.
Please read carefully all relevant instruction manuals, always drive safely without overconfidence and a reliance on the system.
Note: The operating conditions of the system may differ, and it may not be fully effective depending on the surrounding conditions.







For this test vehicle, only the neck injury protection in a rear-end collision performance test(driver's seat) was conducted due to changes in the seat's main structures. For the other evaluations, the results of the tests conducted in FY2020 for the same model are used. The new evaluations apply to vehicles with VIN numbers P15-066982 and thereafter.



\*This model is evaluated based on the test results of Nissan ROOX, which is an original equipment manufacturing model, except for the result of checking the equipment of the Automatic accident emergency call system.









\*The tests were conducted on manual transmission vehicles consistent with the policy to test the best-selling models. The preventive safety systems on automatic transmission vehicles were not tested.

# **Outline of the Comprehensive Evaluation**

Prior to fiscal year 2019, collision safety performance and preventive safety performance were evaluated separately.

Since fiscal year 2020, these performance criteria have been evaluated comprehensively as a collective unit to provide vehicle owners with "Vehicle Safety Performance" information that is more readily understood.

# For more information about the evaluations, please visit our Web site.



## Collision Safety Performance (Total maximum score of 100 points)

Evaluation results	Total score for collision safety performance
A rank	84.63 points or more
B rank	71.89 or more and under 84.63 points
C rank	59.07 or more and under 71.89 points
D rank	46.33 or more and under 59.07 points
E rank	Under 46.33 points

The total of each evaluation determines performance positioning in a five-level system of ranking. An individual evaluation falling below a certain level, rules out classification as an A ranking (the highest evaluation result).



## Preventive Safety Performance (Total maximum score of 82 points)

Evaluation results	Total score for preventive safety performance
A rank	66.40 points or more
B rank	47.92 or more and under 66.40 points
C rank	31.68 or more and under 47.92 points
D rank	15.76 or more and under 31.68 points
E rank	Under 15.76 points

The total of each evaluation determines performance positioning in a five-level system of ranking. An individual evaluation falling below a certain level, rules out classification as an A ranking (the highest evaluation result).

## Comprehensive Evaluation

Evaluation results	Total score for collision safety and preventive safety
****	151.03 points or more
$\star\star\star\star$	119.81 or more and under 151.03 points
***	90.75 or more and under 119.81 points
$\star\star$	62.09 or more and under 90.75 points
*	Under 62.09 points

The number of ★ is determined by the sum of the overall scores for collision safety performance and preventive safety performance.

\* Requirements for a  $\star \star \star \star \star$  ranking

A vehicle must have the highest ranking (A-ranking) in collision safety performance evaluation, the highest ranking in the preventive safety performance evaluation, and must be equipped with an automatic accident emergency notification system to receive a five-star ranking.



# What is the National Agency for Automotive Safety and Victims' Aid (NASVA) ?

The National Agency for Automotive Safety and Victims' Aid carries out the following functions in order to prevent car accidents and support the victims of these accidents, promoting the concept of better motorization life.



N A S V A

# We are an agency specializing in automotive safety and victim's aid

The National Agency for Automotive Safety and Victim's Aid(N-ASVA) is the main body that implements national projects funded by gains on management of premiums for compulsory automobile liability insurance and mutual-aid programs. NASVA performs the three integrated functions of supporting accident victims, preventing car accidents, and protecting people from car accidents.

Pronounced "Nas-Va," NASVA is an abbreviation for "National Agency for Automotive Safety and Victims' Aid.



\*Operating hours: 10:00–12:00, 13:00–16:00 (except on weekends, public holidays, and New Year holidays)

The 0570 prefix is for the Navi Dial telephone service for a lower-than-usual landline rate (roughly 9 yen for 3 minutes). Or, call 03-6853-8002 at the usual rate.



#### Test images are available on our website



NCAP management Department National Agency for Automotive Safety and Victims' Aid 19F Arka-East building 3-2-1 Kinshi, Sumida-ku, Tokyo 130-0013 Phone: 03-5608-7587 Fax: 03-5608-8610 Website © Search by Key-word WWW.NASVA.GO.jp/mamoru/ JNCAP



Search

リサイクル適性 この印刷物は、印刷用の紙へ リサイクルできます。 \* All rights reserved.

Editorial supervisor: Ministry of Land, Infrastructure, Transport and Tourism Issued by: ©National Agency for Automotive Safety and Victims' Aid