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## **GLM** releases

## prototype electric mobility scooter

## for seniors

GLM Co.,Ltd. (Headquarters: Kyoto City), a company that develops and sells electric vehicles (EVs), has released an EV mobility concept for senior drivers.

As populations grow older, the occurrence of terrible car accidents caused by elderly drivers has become a social problem in many countries. Whilst measures are being taken, such as encouraging the voluntary return of driver's licenses, it is important to support senior drivers who lost their means of private transportation, so that they can continue to enjoy an active, independent, and outgoing lifestyle.

To address this social challenge, GLM set out to develop a compact electric scooter (EMS) for seniors, based on the concept of "inspiration to switch from a car to EMS." We have now released a concept model of our scooter.

In our concept development, we focused strongly on design, because it is one of the major obstacles people face in switching from a passenger car to an EMS for seniors. With a steadily growing number of active, youthful seniors in the community, there is a growing demand for more fashionable and attractive EMSs. Thus, one of our key design goals was to stimulate the desire to ride a mobility scooter.

The design is based on a "sphere", not giving a daunting impression of expressing kindness to elderly riders of the vehicles and pedestrians sharing the sidewalk. At first glance, it is instantly recognizable and a pleasure to ride.

We are continuing to develop this concept vehicle with a view to commercialization by the end of 2022, after further improvements to the aesthetic design and mechanical systems.



[Development history and present situation of the senior vehicle market]

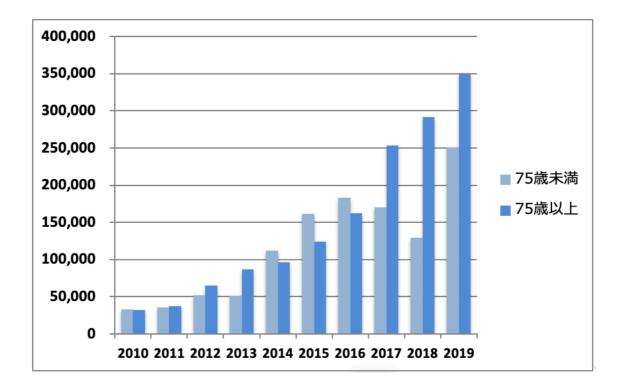
In recent years, there has been widespread social recognition of the return of senior driving licenses and active promotion of the return of the license. The only allowance for returning a license, on the other hand, is an issue of an identity card, with no allowance or compensation for losing the means of private transportation. The loss of mobility is not merely a loss of opportunity to travel between places, but also has a very significant impact on various motivations in the lives of seniors, including loss of opportunities for exercise and communication

Despite such a significant impact on their lives, due to the social climate, drivers aged 75 and over returned 350,428 licenses in 2019 (an increase of 58,839 over the previous year), accounting for 58% of the total number of drivers who returned their licenses. The number of drivers under 75 who returned their licenses also increased significantly to 250,594, an increase of 121,293 over the previous year, bringing the total number of drivers who returned their licenses to 600,000, with a total of 96% of these being seniors aged 65 and over. The figure has been increasing since 2012, and the rate of increase is expected to rise further with the increase in the number of seniors.

On the other hand, the total number of electric wheelchairs shipped is around 25,000 for both joystick and handlebar types, leaving much to be done in terms of approaching the mobility needs of those who surrendered their licenses. We will be proactively addressing current issues that do not meet growing demand, and aim to bring specific products to this market, which will undoubtedly continue to be a growing need in the years ahead.

\*Number of licenses revoked on application by year





Reference: National Police Agency, Statistics on Driving Licenses, Year 2019 edition.

[A design that inspires seniors to ride an EMS]

"I wanted to enjoy the convenience of an EMS for my transport, but it was quite hard to acquire one." We believe that so many people feel like this relates to the poor design of most EMS for seniors. This is why we have paid great attention to the design. By and large, EMSs for seniors tend to look like they were designed for old people, making them unattractive to the many seniors who still feel youthful.

Our design concept is very simple. Rather than feeling that they have no choice but to buy a typical looking EMS for seniors for the functionality, we want to offer a new kind of EMS that makes people feel, "Hey, I would love to ride that!"

Conventional mobility scooters for seniors look like they were designed just by attaching handles, tires, and seats, along with cowls and various other parts onto a frame. In contrast, in the design of cars, beauty is sculpted from a solid mass. As a car maker, we strive to create beautiful EMSs by pouring all of our car design expertise into our new mobility platform.



Our approach to this design proposal was to start development from a 3D shape. One of the most gentle of shapes, the "sphere", expresses kindness to the elderly riders of the vehicle, as well as kindness to pedestrians sharing the sidewalk. It is a shape that is comforting and approachable.

It is not difficult to imagine that as societies continue aging in the coming years, we will see more and more stylish and sophisticated, youthful, and active seniors who do not fit the stereotypical image of older generations up to now. The new mobility design that we are creating aims to change preconceived notions and ideas about EMSs and to inspire this new breed of seniors to accept and use our products. With this focus, we will continue our development work to make EMSs that people genuinely want to ride.