



The Poimo | Photo source Tokyo University

Innovation > Mobility & Transport > Inflatable scooter fits in a backpack

INFLATABLE SCOOTER FITS IN A BACKPACK

● MOBILITY & TRANSPORT

The Poimo scooter inflates in just over a minute using a pump, weighs around 5.5 kg and fits in a small backpack

Spotted: As public transportation systems around the world are disrupted by the COVID-19 pandemic, people are using bikes, e-bikes and scooters to get to work. For those living in small spaces, however, a lack of storage can be a big barrier to scooter and bike ownership. Now, a collaborative project between the University of Tokyo, research organisation Mercari R4D and designer Hisato Ogata, may have a solution.

The Japanese team has developed a prototype for an inflatable scooter that fits in a backpack. The Poimo (Portable and Inflatable Mobility) scooter inflates in just over a minute using a pump. Users then attach the handles, four wheels, battery, wireless controller and motor, and off they go.

The entire scooter weighs around 5.5 kg and fits in a small backpack. According to the designers, the soft body can protect pedestrians and riders in the event of an accident. The inflatable scooter can also be easily customised, making it adaptable for use by those with mobility issues. The researchers have also experimented with other designs, such as mobility sofas, for “relaxing at waterfront resorts”.

The designers hope the scooter could eventually be used to reduce car trips, pointing out that, “About 60 per cent of car trips in Japan are short distances, which is not very good in terms of congestion and greenhouse gases. We believe that new mobility like Poimo is needed to replace this with short-range-only personal mobility.”

The Poimo is not the only innovative transportation option we have seen here at Springwise. Recently, we have seen a growth in the desire for more sustainable transport in innovations such as

an aeroplane powered by friction, and an ultra-slim autonomous self-driving truck. The future of transport may look very different to that which we know.

Explore more: [Mobility & Transport Innovations](#) | [Sustainability Innovations](#)

29th May 2020

Website: u-tokyo.ac.jp/en

Contact: u-tokyo.ac.jp/en/general/contact.html

Takeaway:

While the Poimo is still in the prototype stage, the researchers report that users seem to enjoy riding it and find it easy to use. The team that developed Poimo hopes that it can eventually be optimised for increased portability, lighter weight, comfort and safety. But even if the Poimo does not end up being developed, it illustrates what is possible from the combination of soft robotics technology and personal mobility – something the researchers call ‘soft mobility’. It also points to the need for a variety of mobility options for commuters if we are going to improve the sustainability and liveability of major cities.