



## Step on It! Smart Device That Goes Where Cars Can't Is Among Employee Innovations Designed to Improve Mobility

- Finalists in Ford employee innovation challenge include Carr-E, an electric rideable platform; TriCiti, an electric folding tricycle; and eChair, an electric self-loading wheelchair
- Ford Last Mile Mobility Challenge receives proposals from Ford employees around the world submitting more than 600 electric personal assistant devices for moving people or goods in urban areas
- Number of individual Ford employees registering inventions has reached record levels, with total inventions expected to set an annual record in 2016

**DEARBORN, Mich., Nov. 3, 2016** – An innovative personal transportation system designed to fit neatly into the trunk has made the short list in a Ford challenge to create last-mile mobility solutions – the final leg of a commute between parking a vehicle and destination arrival – for urban areas.

**Carr-E** – created by Kilian Vas, a Ford systems engineer based in Cologne, Germany – is among 633 proposals for personal mobility solutions submitted by Ford employees as part of the company's Last Mile Mobility Challenge. The competition challenges employees to develop electric personal assistant devices to make transportation better in areas where vehicles are not permitted or practical – helping commuters reach their destination.

Carr-E can transport people or objects up to 260 pounds, has a range of 14 miles and a top speed of 11 mph. It's a finalist – along with TriCiti, a folding electric tricycle that can be easily adapted into a shopping cart, dolly or golf cart; and **eChair, an electric wheelchair** that can autonomously load itself into a vehicle.

“We really need to reinvent the wheel, to find new approaches to mobility,” said Vas. “When developing Carr-E, I was inspired by Ford's expansion into both an auto *and* a mobility company, but I'm also aware of how rapidly cities are growing and how getting around urban areas will become more complicated. I really wanted to create a device that makes commuting easier and more fun.”

Vas collaborated with colleague Daniel Hari and his manager Dr. Uwe Wagner, and worked with designers from Ford of Europe and prototyping specialists from RWTH Aachen University to create Carr-E. The four-wheeled device is designed to complement the use of a vehicle and support commuters along the final part of their journey.

It can also be used to transport heavy objects. Users simply place an object on Carr-E and it will follow an electronic transmitter they keep in their possession.

TriCiti, developed by James Neugebauer, Torsten Gerhardt and Robert Spahl – all working in vehicle architecture for Ford of Europe – is designed to be both a rideable device and all-purpose carrying assistant. The foldable machine can be adapted to carry shopping items and even golf bags, and can easily be taken onto public transportation or stored in a vehicle. TriCiti has a range of 19 miles and a top speed of 12 mph.

Gunther Cuypers, Robin Celis and David Longin – engineers at Ford's Lommel proving grounds in Belgium – developed eChair, a lightweight electric wheelchair with a self-loading solution designed to offer greater independence to people with reduced mobility.

“Innovation and disruption is as much at the heart of how our engineers think now as it was when Henry Ford first set about transforming the way we move,” said Walter Pijls, supervisor, innovation management for mobility, Ford of

Europe. “Personal assistant devices can help people cover the final mile of their journey quickly and easily, as well as transport heavy objects they might not be able to carry.”

The acceleration in innovation at Ford – as measured by invention disclosures – is expected to [reach record levels in 2016](#), topping last year’s record of more than 6,000. The number of individual Ford employees creating inventions also has reached record levels since the start of 2015, with more than 3,500 first-time inventors submitting new innovations.

## About Ford Motor Company

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