SMART MOBILITY CHALLENGE

FORD MOTOR COMPANY FUND

2021 Challenge | Competitors Pack

Welcome to the 2021 Ford Motor Company Fund Smart Mobility Challenge.

Loughborough School of Design and Creative Arts is proud to host the 2021 Ford Motor Company Fund Smart Mobility Challenge.

The Brief

The Ford Motor Company Fund Smart Mobility Challenge invites teams of students to propose new ideas for sustainable urban solutions for communities. The outcomes might be solutions which will make people's lives better by shaping the way people live and move within their urban communities, enabling and empowering them as individuals and citizens. Solutions might enable people and goods to move freely, easily and safely, provide access to essential resources, promote connectivity, health and well-being, be green and clean, and promote energy efficient living.

There will be **awards** to invest in the projects with the most potential, to help to realise their implementation.

This year's extra-curricular and online challenge will involve a series of engaging workshops from Loughborough School of Design and Creative Arts (SDCA) to support student teams.

How the Challenge Will Run

In light of the uncertainty around the Covid-19 pandemic, the challenge is designed to run entirely online via. MS TEAMS and Miro (www.miro.com). Additional opportunities for in-person working may be possible depending on circumstances at the time.

The challenge will begin in Semester 1 and run into Semester 2, with a final deadline for entries at the end of April 2022.

The challenge comprises a live launch with representatives from the Ford Motor Company Fund, Ford Smart Mobility, Past Winners and Members from Leicestershire County Council (tbc), followed by a series of online workshops designed to help teams identify a new mobility opportunity and develop and test ideas in the real world. Teams will need to actively bring content to the scheduled online workshops as a basis for moving projects forward with support from the challenge organisers.

Student teams will also be offered short tutorials by a specialist SDCA team that have extensive experience in community-based design projects.

Additional support will also be provided to connect teams with specialist stakeholders and end user groups, alongside business and enterprise experts at Loughborough Enterpise Network (LEN).

The online workshops will cover:

(1) Mapping the mobility problem space;

(2) Choosing a problem to tackle;

(3) Creating plans for conducting field research, and analysing the data collected (including ethical clearance);

(4) Generating and evaluating ideas;

(5) Prototyping solutions in the field;

(6) Developing a business case and pitching ideas.

The workshops will be scheduled around key coursework deadlines where possible, however we cannot guarantee perfect alignment with all coursework deadlines or taught sessions across the University.

Who Can Be Involved?

This year's challenge invites Loughborough University students to participate in interdisciplinary teams wherever possible. Loughborough School of Design and Creative Arts will 'host' the challenge, but we are keen to accept entries from other schools across the University too..

Teams may comprise between 3 and 6 people and can include team members from other schools in the University. Traditionally, teams comprising different specialisms and skill sets have been highly successful. It is a good idea to sound out friends or flat mates in different schools who may be interested in taking part and encouraging them to do so.

The only rule is that each team should have at least one 'design expert' from Loughborough School of Design and Creative Arts.

Some of the workshops will be via registration only (i.e., those where guest speakers are invited and space might be limited). Each individual team member will need to register prior to each workshop. Links will be circulated nearer the time via. a dedicated MS TEAMS team for the

challenge. Students registered to the challenge (in teams) will be given access to the MS TEAMS team and a dedicated channel to work within.

Who Should a Team Comprise?

When assembling teams, different specialisms and skill sets can be really useful to bring different perspectives to solving a problem. Student's might want to consider recruiting / teaming up with other students that are specialists in, for example, being a:

- 'Decider' – someone who can make the key decisions for your team e.g. your CEO;
- 'Finance expert' – someone who's good with numbers;
- 'Marketing expert' – someone who can sell your solution;
- 'Customer empathiser' – someone who has an affinity with who you are designing for;
- 'Tech / logistics expert' – someone who can help to build and deliver a solution, and lastly
- 'Design expert' – someone who can design the solution you will submit.

Key Dates, Times & Locations	Event *NOTE: Workshop dates and time may be subject to change. Challenge organisers will email team leaders in advance of any changes.
S1, Week 4: Wednesday 27th October 2021. 1pm - 3pm (TEAMS & Miro).	Online Challenge Launch & Workshop 01: The Ford Motor Company Fund, Ford Smart Mobility, Leicestershire County Council (tbc) & Past Challenge Winners (tbc) will launch the competition and seed project topics in an interactive online workshop session.
S1, Week 5: Friday 5th November 2021. 4pm.	Deadline for student teams to sign up to the challenge.
S1, Week 6: Wednesday 10th November 2021. 1pm - 3pm (TEAMS & Miro).	Workshop 02: Choosing a project and making a research plan. This workshop will help teams begin to map their assumptions about the problem(s) they have identified, develop intitial ideas, before making research plans to investigate further.
S1, Week 8: Wednesday 24th November 2021. 1pm - 4pm (TEAMS).	Project Pitches: Student teams will pitch their initial ideas to the challenge organisers and receive feedback. Ethics forms and procedures will be outlined and the challenge organisers will support teams in connecting with relevant stakeholders and end user groups.
S2, Week 11: Wednesday 15th December 2021. 1pm - 3pm (TEAMS & Miro).	Workshop 03: Extracting insights and developing ideas. This workshop will help teams extract insights from their research findings and develop their ideas in more detail.
S1, Week 12: Wednesday 10th January 2022. 1pm – 3pm (TEAMS).	Project Updates: Student teams touch base with the challenge organisers to update on progress and plans to move forward.
S1, Week 14: Wednesday 26th January 2022. 1pm – 3pm (TEAMS & Miro).	Workshop 04: Generating and evaluating ideas.This workshop will help teams generate ideas, revisit their assumptions and assess their ideas in relation to desirability, feasibility, viability and planet-centric metrics.
S2, Week 5: Wednesday 7th March 2022. 1pm – 4pm (TEAMS & Miro).	Workshop 05: Prototyping Solutions. This workshop (supported by a Service Design consultancy - tbc) will help teams prototype their ideas. Teams will focus on prototyping within their student teams and in the real world.
S2, Week 7: Wednesday 21st March 2022. 1pm – 3pm (TEAMS & Miro).	Workshop 06: Developing a business case and pitching ideas. This final workshop (supported by Loughborough Enterprise Netwrok - tbc) will support teams with developing the business case behind their proposed solutions using a range of tools (e.g. the business model canvas), and provide guidance on pitching ideas.
S2, Week 8: Wednesday 28th March 2022. 1pm – 3pm (TEAMS).	Completing Proposals: Support on completing the proposal form for the challenge will be provided by the challenge organisers.
Friday 29th April 2022. 4pm.	Final Challenge Deadline: Student teams to submit their proposals no later than 4pm.
June 2022.	Winners Ceremony: Date and time to be confirmed.

How to Get Involved

If you have a team in mind, then one team member (preferably from Loughborough School of Design and Creative Arts) should register your team by emailing **Dr Stuart Cockbill (s.cockbill@ lboro.ac.uk).**

Try and include your team mates names, email addresses, study year (e.g., A, B, C) and your degree courses.

If you want to take part but don't have a team then please let us know ASAP and we can try to match you with others who are interested. Again, please **email Dr Stuart Cockbill** to express your interest.

Key Dates

Launch Ceremony:

Wedneday 27th October 2021 (Semester 1, Week 4) 1pm - 3pm via. MS TEAMS and Miro.

Click here to join the meeting

Student team sign up:

No later than 4pm on Friday the 12th November 2021 (Semester 1, Week 6).

Final submission deadline (via Email):

To Dr Stuart Cockbill (s.cockbill@lboro.ac.uk) no later than 4pm on Friday 29rd April 2022 (last week of the Ester break).

Challenge Deliverables

• A short (90 second) video (via. an online link) and/or up to 10 PowerPoint slides (via. email) that pitch your proposed solution concisely and effectively. Examples and guidelines will be provided by the competition organisers nearer the deadline.

• 1x completed Ford Fund Smart Mobility Challenge Entry Form. Support for filling in the forms will be provided.

• Anything else that you would like to submit (digitally only via. email) to support your entry, for example: customer journey maps, service blueprints, business model canvases, research work, visuals, storyboards, narratives, videos (via online links) etc.

About the Ford Motor Company Fund:

This project is a collaboration with the Ford Motor Company Fund; Ford's non-profit corporate foundation that leads and drives community investment and employee volunteer-related activities. The Ford Motor Company Fund aims to make people's lives better in three key areas: Education, Sustainable Communities, and Safe and Smart Mobility.

Past Challenges

The Ford Motor Company Fund Smart Mobility Challenge was first launched by Loughborough academics and Ford Fund representatives in November 2018. Ten student teams submitted entries to the first challenge for initiatives that would provide mobility solutions to society. Seven teams entered into the 2019-2020 challenge, and ten in 2020-2021.

Representatives of the Ford Motor Company Fund and Ford Mobility, alongside academics from Loughborough University and Loughborugh Enterprise Network judged the submissions and attended the in-person (and more recently) online awards ceremonies.

Past Challenge Winners

Winners of the 2018-2019 challenge were an interdisciplinary team of undergraduate and PhD students.The team created 'Pronto' - A 'smart service' that helps to increase the mobility of the elderly population by providing an intelligent 'care from a distance' platform. The team spun out into a company via the 'Start Up Lab' at Loughborough University.

Two other teams were awarded grants to support the development of their ideas. These included: 'The Caterpillar Club' - A park and stride walking school bus, and 'YOO' - a product service system designed to enable shoppers to more conveniently transport their shopping around town using a card operated 'Boris Bike' style shopping trolley.

The overall winner of the 2019-2020 challenge were an interdisciplinary team of undergraduate and PhD students: Lalith Sanathi, Arnaud Gillard, Tom Sussex and Jun Li. The team created 'Herd' - A digital platform to help mobilise communities during crises such as flooding. The team have since set up a company and are developing their app for field testing.

Two other teams were awarded grants to support the development of their ideas. These included: 'Trove' - A digital platform to make book sharing more accessible within communities, and 'UBag' - A sustainable service that delivers and stores travellers' baggage safely for hands-free journeys.

The overall winner of the 2020-2021 challenge were 'Spectrum' who developed an enhanced method of queuing in shops aimed at those with autism.

Three other teams also recevied grants. These included: 'CareMiles' – a support charity providing door to door transport for patients needing to attend medical appointments, 'HomeACTive' – an app that prompts users to be active when home working by integrating house chores into their activities, and 'Navigate Networks – an app that aims to aid navigation around train stations.