

**RUN 4 WALES™**

**CARDIFF  
UNIVERSITY**  
**PRIFYSGOL  
CAERDYDD**



**THE RACE FOR  
SUSTAINABILITY**

# CARDIFF HALF MARATHON

The Cardiff Half Marathon is an annual race held in the Welsh capital city of Cardiff, typically in October.

The event was established in 2003, and included a marathon with 1,200 participants.

It is organised by **Run 4 Wales**, who took ownership of the event in 2012. It has since grown considerably with 27,500 spaces sold ahead of the 2019 event - making it the second largest half marathon in the UK.

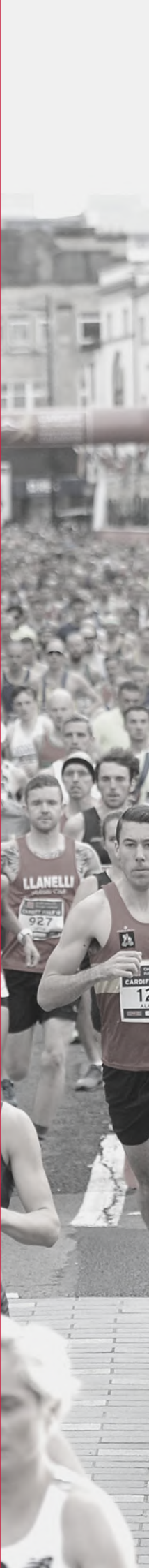
It has hosted prestigious Welsh, British, World and Commonwealth Half Marathon Championships and those that have taken on the course include Olympian Mo Farah, actress Ruth Jones, BBC Radio DJ Scott Mills and Welsh Rugby International Gareth Thomas.

Cardiff University has been title sponsor of the race since 2016, which is formally referred to as the **Cardiff University Cardiff Half Marathon**.

It is undeniable that as the number of runners and spectators continue to rise, so does the overall environmental footprint of the event. More carbon emissions generated by runners, an increase in spectator travel and the production of tangible and consumable items for those taking part.

As organisers, Run 4 Wales recognise the necessary commitment required to alleviate some of these negative impacts and the importance of avoiding a situation where the economic, social and health benefits that stem from the staging of the event are eclipsed by environmental consequences.

Run 4 Wales and Cardiff University have partnered and undertaken research on the economic and environmental impact of the race - Wales' largest mass participation event. This report highlights findings from the research and how it has informed Run 4 Wales' Environmental Policy and Green Action Plan, and led to initiatives that have reduced the environmental impact of the event.



# A SPOTLIGHT ON THE 2018 EVENT



# CARDIFF UNIVERSITY RESEARCH

Cardiff University has undertaken a number of studies that have examined the economic and environmental impact of major sporting events and festivals in the UK.

Their research has informed the development of UK Sport's eventIMPACTS toolkit, and is used by event organisers across the UK and beyond.

Run 4 Wales and Cardiff University has partnered and undertaken research on the Cardiff University Cardiff Half Marathon using the eventIMPACTS toolkit.

## THE RESEARCH

Cardiff University research focused on measuring the economic and environmental impact of the race, in particular runner travel.

This involved conducting an online survey with runners following the race in 2017 and 2018. The survey was used to collect information on participants profile (age, gender, ethnicity, type of runner), participation in the Cardiff Half Marathon and other races across Wales, home location, method of travel to the race, duration of stay, overnight stay, spending on a range of items (including race fee, travel, accommodation, food and drink, merchandise, retail shopping and other leisure activities) in the capital and rest of Wales, reuse and recycling of items, and overall rating of the race and its communications.

Almost 5,000 runners took part in the survey.



# CARDIFF UNIVERSITY FINDINGS

- 2018 was the first Cardiff Half Marathon for 47% of runners.
- 2018 saw a 9.3% increase in female runners (compared to 2017).
- 58% of runners achieved a 'Personal Best', a 6.3% increase compared to 2017.
- 22% of runners came from Cardiff and 58% the rest of Wales. 20% of runners came from the rest of the UK and 1% outside UK.
- Runners travelled a total distance of 2.33 million kilometers (1.45 million miles) to take part in the 2018 race. The average runner travelled 122 kilometres (76 miles).
- 70.6% of the total distance travelled was by car (2% less compared to 2017).
- Compared to 2017, there was an increase in the distance travelled by rail (7.1%), bus (6%), coach and minibus (4.7%), walking (8.7%) and cycling (2.1%).
- Compared to 2017, there was a 12% decrease in distance travelled by air.
- 2018 saw a 32% decrease in CO2e travel related emissions.
- Runners spent an estimated £1.9 million in Cardiff (including the race fee) and a further £0.4 million in the rest of Wales.



# CARDIFF UNIVERSITY FINDINGS (CONTINUED)

- The average runner spent £99 in Cardiff, almost one-third of this was the race fee. Runners spent £19 on food and drink and £12 on retail shopping.
- 24% of runners stayed in overnight accommodation in Cardiff. 62% stayed in hotels and bed and breakfast, and 22% stayed with friends and family.
- 46% of runners were aware of the race organisers 'Run, Refuel, Recycle' campaign.
- Runners recycled a range of items including water and other drink bottles (50%) and banana skins (25%). Only 2% of runners recycled nothing.
- 63% of runners reused their race t-shirt, and 37% their goodie bag.
- Runners rated the following as 'excellent' or 'good': volunteers, race medal, race route, course entertainment, and the overall day experience.
- Over 4,500 suggestions were received on how the race could be improved. These included the start of the race and timing pens, toilets and changing facilities, race t-shirt and goodie bag.
- 37% of runners considered the race goodie bag was an important part of the race, and 55% would prefer the bag and its contents to be made of different material.
- 93% of runners stated they were 'very likely' or 'likely' to run the Cardiff Half Marathon in 2019.



# 2018 CARDIFF HALF MARATHON IN FIGURES

## ECONOMIC IMPACT

**19,095  
RUNNERS**

**£1.9M**  
SPENT IN  
CARDIFF

**£0.4M**  
SPENT IN REST  
OF WALES

**£2.3M**  
TOTAL  
SPEND

# 2018 CARDIFF HALF MARATHON IN FIGURES

## TRAVEL IMPACT

On average, each runner travelled 122km to and from the race.



70.6% BY CAR



4.7% BY COACH/MINIBUS



6% BY BUS



7.1% BY RAIL



8.7% ON FOOT



2.1% BY BIKE



0.7% BY AIR

346 tonnes travel CO<sub>2</sub>e emissions  
(32% less than 2017)





**CREATING A MORE  
SUSTAINABLE  
CARDIFF HALF  
MARATHON**

# ADDRESSING THE IMPACT - TRAVEL & CARBON

The number of runners taking part in the Cardiff University Cardiff Half Marathon has increased considerably. Cardiff University research has found that the race does bring a number of economic benefits to Cardiff and rest of Wales. However, the research also shows that how runners choose to travel to the race has a significant environmental impact.

Run 4 Wales is committed to creating a more sustainable race - including travel, waste and recycling, energy use, materials used in merchandise - all of which can contribute to a significant reduction in the environmental impact of the Cardiff University Cardiff Half Marathon.

One of the greatest challenges is reducing the environmental impact of runner and spectator travel. Based on Cardiff University's research, Run 4 Wales has taken the following steps to help drive down the environmental impact of runner travel:

- Improved messaging on race website and in information packs sent to participants, encouraging sustainable travel via rail, bus and bike.
- Reduced fees for pre-bookable car parking spaces for those opting to travel by mini bus/coach, to encourage groups to travel in fewer vehicles.
- Partnered with the cities NextBike cycle rental scheme, offering free and discounted bike hire during event weekend.
- Began a process of lobbying local public transport providers, using Cardiff University's research findings to encourage them to consider offering additional and earlier services on the event weekend that will encourage greater use of public transport.
- Partnered with GoCarShare, listing the event on the platform so participants can buddy up with other runners looking to lift share to the event.
- Working with Size of Wales to offer runners the chance to offset their carbon footprint when signing up via an optional donation.

# ADDRESSING THE IMPACT - WASTE & RECYCLING

A further challenge is reducing the amount of waste at the race, unsustainable materials that certain items are produced from and encouraging runners and spectators to reuse and recycle items.

Run 4 Wales have so far tackled this by:

- Considering environmental, social and corporate governance factors when choosing suppliers and service providers.
- Employing a dedicated team of 'environmental champions' to work at the start and finish lines to ensure waste is not contaminated, and therefore recyclable.
- Avoiding the use of damaging PVC materials for branding/signage and instead opting for recycled non-woven materials.
- Working with water sponsor Brecon Carreg to offer smaller, less wasteful plastic bottles that are 100% recyclable and on messaging to encourage recycling through the 'Run, Refuel, Recycle' campaign.
- Eliminating the use of plastic goodie bags, switching to 100% compostable and biodegradable corn starch bags, which can be disposed of in the green waste bin.
- Encouraging partners and samplers who distribute items to finishers to consider the materials their products and packaging are made of.
- Printing advertising materials on recycled paper.
- Switching to medals made from recycled zinc - reducing the CO2 produced in the refinement process.
- Adding drop zones to every mile of the route, so all on-course waste can be recycled and effects on the local environment are reduced.

"As a not-for-profit organisation, Run 4 Wales invests a large percentage of the money received through race fees back into the sport. As well as being able to support our grassroots and social aims, it's so rewarding through this research to see the positive impact Wales' largest mass-participation event is having on the nation's economy.

One of Run 4 Wales' main objectives is to minimise the environmental impact of our race catalogue, which we are far better equipped to achieve following the Cardiff University research and use of the UK Sport eventIMPACT toolkit.

Actions are already underway as part of our new Environmental Policy and Green Action Plan, and solutions such as those mentioned in this report can now be taken forward to address the travel impact, helping ensure the race becomes more sustainable.

The research has also focused our minds on the impact that spectators, as well as runners can have - highlighting an additional issue that needs to be addressed."

**MATT NEWMAN**  
**CHIEF EXECUTIVE OFFICER**  
**RUN 4 WALES**



# HOW CAN RUNNERS HELP REDUCE THEIR IMPACT?

- Where possible travel by public or group organised transport. Running clubs often arrange coaches or hire minibuses.
- Check the Cardiff Half Marathon website for public transport options to the race.
- Consider other low carbon travel options, such as walking or cycling especially if you live a short distance from the race start line. Nextbike UK are offering Cardiff Half runners free minutes on their bikes in Cardiff.
- If it is necessary to travel by car, car-share with other runners and spectators. Run 4 Wales have teamed up with GoCARShare to encourage runners to car share.
- Use the Park and Walk facility at Cardiff City Football Stadium, and pre-book before the race. Parking in the city centre is limited and can be expensive.

“Half marathons have become the fastest growing race in the UK, and attract tens of thousands of runners and spectators. They can have economic benefits for cities, but their environmental impact is becoming increasingly hard to ignore and organisers need to act now if they are to continue staging them in the future.

Solutions such as those taken by Run 4 Wales will enable organisers, runners and spectators to take responsibility to reduce the environmental impact of the Cardiff Half Marathon and leave a positive legacy for future generations.”

Dr Andrea Collins, Lecturer, School of Geography and Planning, Cardiff University

# NEXT STEPS



# WHAT HAPPENS NOW - NEXT STEPS

The Run 4 Wales commitment to sustainability is a permanent one.

The company's green strategy will be ever evolving and proactive to new research and industry developments that can improve the environmental footprint of the event. Future sustainability objectives will focus around:

**MONITORING:** An increased emphasis on analysing and scrutinising data year on year, using UK Sport's eventIMPACTS toolkit, to help establish a clear understanding of the environmental landscape of the race and monitor the effectiveness of the green agenda. Where necessary implementing and investing in new data capture systems and measurement mechanics.

**LEADING THE WAY:** To be seen as a leader in the "race to sustainability." Making decisions that are proactive rather than reactive. Developing confidence in going against what is expected, in favour of making changes for the greater environmental good.

**SPECTATORS & SUPPLIERS:** Improve understanding of the impact of spectators and suppliers, and developing a strategy to influence their contribution towards the events environmental footprint.

**PARTNERS:** Establish a Run 4 Wales sustainability strategic group, made up of key external partners, who are experts in areas such as - waste, travel, research. Therefore improving knowledge and assisting in developing suitable solutions and suggesting changes to the green agenda.

# AUTHORS

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**Professor Max Munday**

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is Director of the Welsh Economy Research Unit at Cardiff University's Business School. He has interests in the economic effects of tourism activity and major events. He has undertaken a series of studies which have examined the economic and environmental impacts of tourism and events.

**Run 4 Wales**

is a not for profit social enterprise and charitable trust that delivers a series of high profile elite and mass participation events in Wales, including the Cardiff Half Marathon, Newport Wales Marathon, Cardiff Bay Run, Porthcawl 10K, Barry Island 10K and the Brecon Beacons Dell Management Challenge.







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