IAAF WORLD CROSS COUNTRY CHAMPIONSHIPS AARHUS 2019
ECONOMIC IMPACT STUDY

presented by The Sports Consultancy
<table>
<thead>
<tr>
<th>CONTENTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>3</td>
</tr>
<tr>
<td>DIRECT ECONOMIC IMPACT</td>
<td>7</td>
</tr>
<tr>
<td>TOTAL ECONOMIC IMPACT</td>
<td>25</td>
</tr>
<tr>
<td>SOCIAL IMPACT</td>
<td>28</td>
</tr>
<tr>
<td>SOCIAL IMPACT CASE STUDIES</td>
<td>31</td>
</tr>
<tr>
<td>TERMS OF REFERENCE</td>
<td>39</td>
</tr>
</tbody>
</table>
This report analyses the economic impact of the 2019 IAAF World Cross Country Championships on the city of Aarhus, Denmark. This was the 43rd edition of the event and the first time that it was hosted by Denmark. Denmark was one of the 17 founding members of the IAAF in 1912 and has produced seven Olympic medal winners in track and field events.

The course for the 2019 IAAF World Cross Country Championships was situated in the grounds of the Moesgaard Museum, a striking piece of modern architecture built in 2014, which houses collections dedicated to local archaeology and ethnography. Combining culture, nature and architecture with sport, a part of the course even saw athletes running up and down its steep grass roof. The 10% gradient of the roof added an additional challenge to the course, in addition to the mud, sand and water obstacles which all contributed to the excitement of the race.

The organisers wanted to showcase the potential future of cross country and that running is not only about roads and track. They also wanted to demonstrate to spectators that running can be enjoyable for all. Therefore, for the first time ever at this event, amateur athletes who had recorded a good enough qualifying time were given the opportunity to compete against the elite athletes.

The weekend was rounded off with a mass-participation event on the same course across a number of distances, giving participants – including Frederick, the Crown Prince of Denmark – the chance to appreciate just how impressively fast the elite runners truly are.

The 2019 World Cross Country Championships in Aarhus brought together over 498 elite athletes from 63 nations across five events, in addition to the 2,128 amateur athletes who also competed in other categories on the day.
DATA SOURCES

This economic and social impact study has been informed by data from a number of sources.

SPECTATOR SURVEY

This was undertaken on the day of the event on Saturday 30th March 2019. A total of 489 spectator responses were secured. Spectators were asked questions on their place of residence, reason for being in Aarhus, length of stay, typical daily spend and wider questions on social impact and event satisfaction. This survey was used as the primary source of data on the spectator economic impact.

AMATEUR PARTICIPANTS SURVEY

A survey was sent out to those participants who took part in the mass participation race to understand their place of residence, length of stay in Aarhus, typical daily spend and how many friends and family accompanied them to the event. 78 responses were received in total.

ATTENDEE ACCREDITATION DATABASE

The IAAF provided an attendee accreditation list, which included information on the total number of official event attendees and their place of residence, and some information on their length of stay.

ATTENDEE INTERVIEWS

A number of interviews were conducted with the different attendee groups, such as the event sponsors, media and athlete teams. These groups were asked questions on their accommodation and non-accommodation spend.

OTHER ATTENDEES SURVEYS

Surveys were sent out to sponsors and athlete teams after the event which included a short set of questions on their length of stay and daily spend. 35 responses were collected in total.

EVENT BUDGET

The Aarhus LOC provided a breakdown of the event budget, including the income and expenditure categories and the suppliers used for the event.
This study outlines the economic and social impact of the 2019 World Cross Country Championships on the city of Aarhus. The diagram below provides an overview of the total value created by the event, including new money generated in the Aarhus economy and the wider social benefits the event had for the city. These impacts are then described in detail in the remainder of this study.

**ECONOMIC IMPACT**

- **Direct Economic Impact**: €2.53m
- **Total Economic Impact**: €4.30m

**SOCIAL IMPACT**

- **Local Residents who felt proud that Aarhus was hosting the event**: 94%
- **Spectators inspired to do more exercise**: 43%
- **Out-of-town spectators likely to recommend Aarhus as a holiday destination**: 80%
ECONOMIC IMPACT

METHODOLOGY AND OVERVIEW

Economic impact is defined as the total amount of additional expenditure – together with other intangible economic benefits – generated by the hosting of the World Cross Country Championships.

Our economic impact analysis was carried out using the eventIMPACTS methodology – a recognised tool that enables organisers to understand the overall impact of their events. It takes into account a number of components, which are outlined fully in this report, to estimate an overall economic impact.

The 2019 World Cross Country Championships generated a direct economic impact of €2.53m and a potential total economic impact of €4.30m in Aarhus. This impact was generated by various groups, including spectators, runners, sponsors and the organisers themselves.
In simple terms, the economic impact of an event is the total amount of additional expenditure generated within a defined area (the host economy) as a direct result of staging an event. An economic impact analysis seeks to estimate the net inflow of new money into the economy as the result of an event by calculating the spending of out-of-town visitors and organisations.

**DIRECT ECONOMIC IMPACT**

The direct economic impact is the additional money spent in the host economy by event visitors and organisers. With the exception of events that require significant infrastructure investment, spending by visitors in the host economy is typically the biggest factor in generating economic impact. Spend by event organisers in the delivery of the event is also considered. The following areas contributed to the total direct economic impact of the event:

- **AMATEUR PARTICIPANTS**
  - Spend by out-of-town amateur participants (accommodation and daily subsistence)

- **SPECTATORS**
  - Spend by out-of-town spectators (accommodation and daily subsistence)

- **OFFICIAL EVENT ATTENDEES** (e.g. athletes, media and sponsors)
  - Spend by out-of-town official event attendees (accommodation, daily subsistence and other spend)

- **LEAKAGES**
  - Accommodation and non-accommodation spend by visitors with non-local vendors which reduces the impact on the host economy

- **ORGANISER**
  - Spend by the event organiser in the host economy
DIRECT ECONOMIC IMPACT

AMATEUR PARTICIPANTS

TOTAL AMATEUR PARTICIPANTS

IDENTIFY OUT-OF-TOWN

ACCOMMODATION SPEND

NON-ACCOMMODATION SPEND

TOTAL AMATEUR PARTICIPANT IMPACT
The IAAF Aarhus World Cross Country Championships attracted a significant number of amateur runners, with 2,128 participants taking part alongside the IAAF’s elite runners.

In order for these amateur runners to be included in the calculation of the direct economic impact of the event, they were required to meet the following criteria:

- **Out-of-town** – Runners had to come from outside of Aarhus (and therefore generating additional spend in the economy)
- **Event specific** - These participants had to be in Aarhus specifically for the World Cross Country Championships

### Out-of-town

Information on the amateur runners was provided by the Aarhus LOC which included a breakdown of key information such as their place of residence on all of the 2,128 runners. A summary of the origin of the event participants can be found in Table 1. This data shows that the event was able to attract support from residents of Denmark, who accounted for 90.1% of the total entrants. The international amateur runners came from over 12 different nations to take part in the event. Based on the analysis of this data, the total number of out-of-town participants is estimated to be 1,580.

### Event specific

Economic impact studies are also required to account for so called ‘casual’ visitors who attended the event, but whose primary reason for being in the host economy was unconnected to the event itself. For the purpose of this study, all out-of-town amateur runners were assumed to be visiting Aarhus specifically to participate in the event.

On this basis, the total number of eligible amateur runners for the economic impact study was estimated at 1,580.

### Table 1: Entry Database on the Origin of Amateur Runners

<table>
<thead>
<tr>
<th>ORIGIN OF RUNNERS</th>
<th>NUMBER</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aarhus</td>
<td>548</td>
<td>25.7%</td>
</tr>
<tr>
<td>Elsewhere in Denmark</td>
<td>1,369</td>
<td>64.3%</td>
</tr>
<tr>
<td>International</td>
<td>211</td>
<td>9.9%</td>
</tr>
<tr>
<td><strong>TOTAL OUT-OF-TOWN</strong></td>
<td>1,580</td>
<td>74.3%</td>
</tr>
</tbody>
</table>

---

**Figure 1: International Amateur Participants Place of Residence**

- **KEY**
  - Orange: At least one participant
  - Black: No participants

---
Out-of-town amateur participants
Accommodation and non-accommodation spend

Spend on accommodation by out-of-town visitors can be one of the biggest drivers of an event’s economic impact. Data on type of accommodation and accommodation spend by amateur runners at the Aarhus World Cross Country Championships was gathered through a post-event survey which received responses from 78 amateur runners.

Type of stay
Out-of-town runners were split into the following stay groups:

1. Those who stayed in hotels or similar (commercial stayers);
2. Those who stayed with friends or in a second home (non-commercial stayers); and
3. Those who were visiting for the day (day visitors).

The event survey results showed that an average of 32% of all out-of-town amateur runners stayed in commercial accommodation, creating a total of 509 participants whose accommodation spend contributed directly to the economic impact of the event.

Accommodation spend
Accommodation spend from the event is based on the number of commercial stayers and the number of nights on average they stayed in the host economy. Based on the survey responses, out-of-town amateur runners stayed for an average of 1.7 days in Aarhus as a result of the event and spent an average room rate per person per night of €45.80.

Based on the bed nights generated and average room rate in Aarhus, it is estimated that a total revenue of €39,640 was generated for the accommodation sector by amateur runners.

Non-accommodation spend
Other spend by amateur runners outside of accommodation is also accounted for, such as on meals and drinks, travel and retail shopping whilst in the host economy. This information was also captured through the post-event survey, where out-of-town amateur runners were asked to estimate their daily per person spend across the categories detailed in Table 3. From this data, an average daily spend of €92 was identified, generating a total non-accommodation spend of €248,306.
DIRECT ECONOMIC IMPACT

SPECTATORS

TOTAL SPECTATORS

TOTAL SPECTATOR IMPACT

IDENTIFY OUT-OF-TOWN

ACCOMMODATION SPEND

NON-ACCOMMODATION SPEND

DIRECT ECONOMIC IMPACT

TOTAL SPECTATOR IMPACT

AMATEUR PARTICIPANTS

SPECTATORS

OFFICIAL EVENT ATTENDEES

ORGANISER

LEAKAGES
OUT-OF-TOWN SPECTATORS
CALCULATION OF TOTAL SPECTATORS

Spend by spectators is often one of the biggest sources of economic impact for a major event but calculating the number of spectators at an event of this type, where it is open access, un-ticketed and spectators can come and go as much as they like, can be a difficult proposition. For the Aarhus World Cross Country Championships, as with many unticketed events, there was not a single reliable overall record of spectator attendance. The Aarhus LOC used data from the day to reach an estimate of 10,000 spectators. The Sports Consultancy also calculated an estimate through reviewing the race footage and sourcing information from amateur runners on how many friends and family accompanied them, it was possible to produce an approximate total number of spectators.

**Spectator count**
On the day, The Sports Consultancy noted the number of rows of spectators in the crowds at points along the course during different periods throughout the day. The playback footage and imagery from the event was also reviewed. Having analysed this data, industry standard measurements were used to estimate spectator numbers along the 2km course route. Figure 3 shows a key of how many spectators were recorded at the different points of the course. Using the industry standard assumption of two people per m² for races of this type, The Sports Consultancy estimated that 8,500 spectators lined the cross country course at the Moesgaard Museum.

**Number of friends and family**
To further inform the spectator count estimate, amateur runners were asked how many friends and family they brought with them to the event. The responses shown in Table 4 shows that runners brought an average of around 3.9 friends or family members with them to the event. Participants from Denmark (but outside of Aarhus) were accompanied by the highest number of friends and family.

**TABLE 4: TSC AMATEUR RUNNER SURVEY RESULTS ON THE AVERAGE NUMBER OF FRIENDS AND FAMILY**

<table>
<thead>
<tr>
<th>PLACE OF RESIDENCE</th>
<th>NO. OF RUNNERS</th>
<th>AVERAGE NO. OF FRIENDS &amp; FAMILY</th>
<th>NO. OF SPECTATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aarhus</td>
<td>548</td>
<td>3.22</td>
<td>1766</td>
</tr>
<tr>
<td>Elsewhere in Denmark</td>
<td>1,369</td>
<td>4.46</td>
<td>6,106</td>
</tr>
<tr>
<td>International</td>
<td>211</td>
<td>2.6</td>
<td>549</td>
</tr>
<tr>
<td><strong>TOTAL SPECTATORS</strong></td>
<td><strong>8,421</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For the purpose of this study, it was decided that the Local Organising Committee’s estimate of 10,000 spectators would be applied.
OUT-OF-TOWN SPECTATORS
SPECTATOR NUMBERS AND ELIGIBILITY

A review of the race footage, and amateur runner friends and family survey responses gave an approximation of 8,500 spectators and the Aarhus LOC provided an estimate of 10,000 spectators at the Aarhus World Cross Country Championships. For this study, the LOC’s estimate of 10,000 spectators was used.

Once the total number of spectators had been calculated, it was then determined how many of these spectators were from outside Aarhus and what percentage of these out-of-town spectators were in Aarhus for the primary reason of the World Cross Country Championships.

This data, along with further information on accommodation and non-accommodation spend, was gathered through a live spectator survey at the event from a sample size of 489 spectators.

Out-of-town

A summary of the spectator survey responses on place of residence can be found in Table 5. This data shows that just over half of the event spectators were from Aarhus, accounting for 52% of all survey respondents. There were also a large number of spectators who had travelled to Aarhus from within Denmark to see the event. These responses are typical of a road running event, where the majority of spectators will be local residents who have open access to come and view the event. Based on analysis of this spectator survey data, 48% of spectators were not from the city of Aarhus which gives an estimate of 4,812 for the total number of out-of-town spectators.

Event specific

For an event of this type, the number of out-of-town ‘casual spectators’ (i.e. those who were watching the event but not in the host city primarily for the reason of watching the event) is often higher than a ticketed spectator event. However, given the location of the Moesgaard Museum and the distance from Aarhus city centre it is expected that there were be a lower percentage of ‘casual spectators’ in comparison to a free event in and around the city centre itself.

When asked if the IAAF World Cross Country Championships was the main reason why there were in Aarhus, 6% of all respondents said no. This results in an estimate of 267 casual out-of-town spectators.

On this basis, when deducting the casual spectators from the total out-of-town spectators, the estimated total number of eligible spectators for the economic impact study is 4,545.

<table>
<thead>
<tr>
<th>ORIGIN OF SPECTATORS</th>
<th>NUMBER</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aarhus</td>
<td>5,188</td>
<td>52%</td>
</tr>
<tr>
<td>Elsewhere in Denmark</td>
<td>3,615</td>
<td>36%</td>
</tr>
<tr>
<td>International</td>
<td>1,197</td>
<td>12%</td>
</tr>
<tr>
<td><strong>TOTAL OUT-OF-TOWN</strong></td>
<td><strong>4,812</strong></td>
<td><strong>48%</strong></td>
</tr>
</tbody>
</table>
Data on type of accommodation and accommodation spend by spectators at the Aarhus World Cross Country Championships was also gathered through the live spectator survey.

**Type of stay**

The event survey results showed that an average of 32.3% of the 4,545 eligible out-of-town spectators stayed in commercial accommodation. This results in an estimate of 1,464 spectators whose accommodation spend contributed directly to the economic impact of the event.

**Accommodation spend**

The spectator survey responses identified that out-of-town spectators stayed for an average of 2.53 days in Aarhus as a result of the event and spent an average room rate per person per night of €68.

Based on the bed nights generated and average room rate in Aarhus, it is estimated that a total revenue of €250,659 was generated for the accommodation sector by spectators.

**Non-accommodation spend**

Spectators were asked to estimate how much they spent per day across the typical subsistence categories such as meals and drinks, travel in Aarhus and retail shopping.

An average daily spend of €89 was identified across these expenditure categories, generating a total non-accommodation spend of €645,209.
DIRECT ECONOMIC IMPACT

OFFICIAL EVENT ATTENDEES

TOTAL EVENT ATTENDEES

IDENTIFY OUT-OF-TOWN

AMATEUR PARTICIPANTS

SPECTATORS

OFFICIAL EVENT ATTENDEES

ORGANISER

DIRECT ECONOMIC IMPACT

ACCOMMODATION SPEND

NON-ACCOMMODATION SPEND

TOTAL EVENT ATTENDEE IMPACT
Outside of the event spectators, the 2019 World Cross Country Championships also attracted other out-of-town visitors to Aarhus who took an active role in organising and supporting the delivery of the event. The total numbers across these different attendee groups were provided from the IAAF accreditation database and from consultation with the attendee groups in coordination with the IAAF and Aarhus LOC. These attendee groups are listed below along with their place of residence in Table 4. The number of international event attendees is estimated to be 887.

<table>
<thead>
<tr>
<th>ATTENDEE GROUP</th>
<th>TOTAL</th>
<th>DENMARK</th>
<th>INTERNATIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletes</td>
<td>498</td>
<td>6%</td>
<td>94%</td>
</tr>
<tr>
<td>Athlete team members</td>
<td>217</td>
<td>4%</td>
<td>96%</td>
</tr>
<tr>
<td>Event officials</td>
<td>10</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>IAAF staff and delegates</td>
<td>49</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>LOC staff</td>
<td>40</td>
<td>88%</td>
<td>12%</td>
</tr>
<tr>
<td>Sponsors</td>
<td>28</td>
<td>32%</td>
<td>68%</td>
</tr>
<tr>
<td>Media – broadcast</td>
<td>96</td>
<td>31%</td>
<td>69%</td>
</tr>
<tr>
<td>(including host</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>broadcaster)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media – Other</td>
<td>40</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>Suppliers</td>
<td>16</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>Technical suppliers</td>
<td>35</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>Volunteers</td>
<td>332</td>
<td>98%</td>
<td>2%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,361</td>
<td>474</td>
<td>887</td>
</tr>
</tbody>
</table>

Table 8: Official event attendee place of residence
OUT-OF-TOWN EVENT ATTENDEES

BUDGET COVERAGE AND TYPE OF STAY

As part of the requirements of hosting an IAAF World Athletics Series event, the event hosts are required to cover the accommodation costs of a number of the official event attendees. These costs are included in the organiser budget analysis on page 24 of this report. In order to ensure there was no double-counting of accommodation expenditure, the spend for some attendee groups was removed directly from the total accommodation attendee analysis in this part of the economic impact study. Based on information provided by the LOC and the IAAF, the following percentage assumptions were applied for LOC budget coverage of accommodation spend across the attendee groups.

It was calculated that the accommodation spend of 767 individuals out of the 1,361 total official attendees was covered by the LOC budget, leaving 594 self-paying or IAAF paid attendees. Using the event attendee data gathered in the IAAF accreditation database and from consultation with the attendee groups in coordination with the IAAF and the Aarhus LOC, around 3.5% of the self-paying or IAAF paid attendees were from Aarhus. The remaining 96.5% represented the out-of-town total attendees whose accommodation spend was not covered by the event budget, which was a total of 573 individuals.

<table>
<thead>
<tr>
<th>ATTENDEE GROUP</th>
<th>COVERED BY LOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletes</td>
<td>60%</td>
</tr>
<tr>
<td>Athlete team members</td>
<td>0%</td>
</tr>
<tr>
<td>Event officials</td>
<td>100%</td>
</tr>
<tr>
<td>IAAF staff and delegates</td>
<td>60%</td>
</tr>
<tr>
<td>LOC staff</td>
<td>100%</td>
</tr>
<tr>
<td>Sponsors</td>
<td>0%</td>
</tr>
<tr>
<td>Media – broadcast (including host broadcaster)</td>
<td>10%</td>
</tr>
<tr>
<td>Media – Other</td>
<td>0%</td>
</tr>
<tr>
<td>Suppliers</td>
<td>100%</td>
</tr>
<tr>
<td>Technical suppliers</td>
<td>90%</td>
</tr>
<tr>
<td>Volunteers</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACCOMMODATION TYPE</th>
<th>%</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial stayer</td>
<td>100%</td>
<td>573</td>
</tr>
<tr>
<td>Non-commercial stayer</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Day visitor</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

TYPE OF STAY

From the 573 out-of-town event attendees who were not covered in the event budget, data from post-event surveys and interviews with the various groups was used to estimate the total number of commercial stayers. The data gathered showed around 100% of all out-of-town attendees stayed in commercial accommodation.

This means that all out-of-town attendees whose accommodation spend was not covered by the event budget contributed directly to the economic impact of the event in this analysis.

<table>
<thead>
<tr>
<th>TYPE OF STAY</th>
<th>%</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>100%</td>
<td>573</td>
</tr>
<tr>
<td>Non-commercial</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Day visitor</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

TABLE 9: OFFICIAL EVENT ATTENDEE DATA ON THE % OF EACH GROUP’S ACCOMMODATION THAT WAS COVERED BY THE LOC

TABLE 10: OFFICIAL EVENT ATTENDEE DATA ON TYPE OF STAY
OUT-OF-TOWN EVENT ATTENDEES
ACCOMMODATION SPEND AND NON-ACCOMMODATION SPEND

The Sports Consultancy conducted interviews at the event with official event attendee groups to gather information on event spend and their length of stay in Aarhus. This data was further supported by the IAAF accreditation database, LOC information on hotel rates and length of stay as well as post-event surveys that were sent to targeted attendee groups.

Accommodation spend

The event attendee data gathered through surveys and interviews and LOC official hotel rates data identified that out-of-town attendees whose accommodation was not covered by the LOC stayed an average of 3.3 days in Aarhus and spent an average room rate per person per night of €95.

Based on the bed nights generated and average room rate in Aarhus, it is estimated that a total revenue of €182,047 was generated for the accommodation sector by the official event attendees.

Non-accommodation spend

As with the other visitor groups, official event attendees were asked to estimate how much they spent per day across the typical subsistence categories such as meals and drinks, travel in Aarhus and retail shopping.

An average daily non-accommodation spend of €132.88 was identified across these expenditure categories for the 1,031 total out-of-town event attendees and they stayed for an average of 2.9 days. This generated a total non-accommodation spend of €402,993.

Other spend by attendees

Through the various interviews conducted with the event attendee groups and information requests gathered, data on other relevant spend by event attendee groups has also been considered. As part of the event there was an IAAF Heritage Exhibition in the city centre of Aarhus which then moved to the Moesgaard Museum for attendees of the event to see. The IAAF budget for this was €23,000.

This accounted for a total of €23,000 in other event attendee spend that was included in the total event attendee impact.
As well as accounting for the total spend of visitor groups within Aarhus, it is also important to estimate the spend of these groups with non-Aarhus vendors (e.g. people staying or eating outside Aarhus, and travelling into the city for the event). This spend is deducted from the overall direct economic impact as it represents out-of-town spend from eligible event visitors.

All of the hotels named by spectator survey respondents were reviewed and 4.55% of respondents who stayed in commercial accommodation, stayed in accommodation out of Aarhus. This means that 4.55% of the total revenue for the accommodation sector from spectators should be considered as a leakage. Therefore €11,394 of leakages were estimated for spectator accommodation spend and it was assumed that all non-accommodation spend would be in Aarhus, given that visitors would be spending money while in the city and attending the event.

Analysis of the participant and other attendee data showed that none of the hotels that they stayed in were outside of Aarhus city, therefore there was no leakage from the participant other attendee accommodation spend.

As a result, €11,394 of deductions are required for leakages from the total direct economic impact of the event.
DIRECT ECONOMIC IMPACT

ORGANISER

EXPENDITURE TO AARHUS BASED SUPPLIERS
INCOME FROM AARHUS BASED SOURCES

DIRECT ECONOMIC IMPACT

ORGANISER

OFFICIAL EVENT ATTENDEES
SPECTATORS
AMATEUR PARTICIPANTS
LEAKAGES
The final consideration for the direct economic impact of the 2019 World Cross Country Championships is the net level of spending by the Local Organising Committee. The purpose of this analysis is to estimate the proportion of the event budget that was spent and retained within the host economy. This analysis was based on the event budget provided by the Aarhus LOC, giving the headline categories of income and expenditure for the event.

Overall, €1,154,850 out of a total expenditure of €1,911,600 was directed at local suppliers.

However, the analysis also took into account the income the event generated that was from the host economy. As this income originates from Aarhus, it is effectively subsidising the expenditure made in the host economy.

€978,000 in income was generated through the event and of this, €96,100 originated from Aarhus. In addition to this income, there was also a contribution made by the Danish public sector towards the event which amounted to €693,000. Of this public sector income, €311,850 was from Aarhus, which effectively subsidised expenditure made in the host economy.

Therefore in overall terms, the net expenditure for the organiser in the host economy was €746,900.
TOTAL DIRECT ECONOMIC IMPACT

Following consideration of all of these areas, an estimate of the direct economic impact of the event is summarised below. In total, it shows a direct economic impact associated with the 2019 IAAF World Cross Country Championships of €2,527,360 for the city of Aarhus.

TABLE 12: TOTAL DIRECT ECONOMIC IMPACT

<table>
<thead>
<tr>
<th>DIRECT ECONOMIC IMPACT</th>
<th>TOTAL (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECTATOR SPEND</td>
<td>€895,868</td>
</tr>
<tr>
<td>PARTICIPANT SPEND</td>
<td>€287,946</td>
</tr>
<tr>
<td>OFFICIAL EVENT ATTENDEE SPEND</td>
<td>€608,040</td>
</tr>
<tr>
<td>DIRECT LEAKAGES</td>
<td>-€11,394</td>
</tr>
<tr>
<td>EVENT ORGANISER SPEND</td>
<td>€746,900</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>€2,527,360</strong></td>
</tr>
</tbody>
</table>
As discussed in the introduction, this study has focused on the direct economic impact of the 2019 World Cross Country Championships. However, an assessment of economic impact can also give consideration to secondary effects, such as indirect or "ripple" through the re-circulation of the initial spectator spend and induced, which relates to increases in employment and household income through the economic activity generated by the event. The primary components of these impacts are:

- Business-to-business impacts achieved largely by businesses investing in suppliers to deliver their requirements related to the event; and
- Consumer impacts as recipients of income associated with the event reinvesting this money in the economy.

Estimating multipliers is complex and dependent on the size and nature of the economy being considered. In simple terms, the larger the host economy, the lower the chance of leakage and the higher the value of the multiplier.

Denmark’s official event agency, Sport Event Denmark, often conduct impact analyses on events hosted in Denmark and apply a multiplier based on the Danish LINE-model, which implicitly generates the multiplier factor for each of the events. The multiplier across the 9 event reports was 1.7 and therefore for the purpose of this study we used this average created by Sport Event Denmark.

When the multiplier estimate of 1.7 is applied, it gives an indirect economic impact of €2,527,360 and a total economic impact of €4,296,512.
SOCIAL IMPACT – CONCEPT & OVERVIEW

The 2019 IAAF World Cross Country Championships were able to provide additional impacts to Aarhus beyond new money generated in the economy. As part of this study, high level information was gathered from local and non-local spectators to understand the benefits they gained from the event and their perceptions of the city.

This information showed that the event created a number of immediate social benefits for the city of Aarhus by:

**ENGAGING A BROAD DEMOGRAPHIC**
- Attracting thousands of spectators of all ages to watch and get involved in the event

**GENERATING CIVIC PRIDE**
- Creating a positive experience for local residents and an improved sense of community

**INCREASING LONG-TERM TOURISM**
- Attracting visitors from around the world and creating exposure to encourage new and return visitation

**ENCOURAGING AN ACTIVE LIFESTYLE**
- Providing inspiration for spectators to become more active

**INCREASING AWARENESS OF ATHLETICS**
- Showcasing world class athletics events to a new audience and gathering data on interest and viewing consumption patterns
Information on spectator demographics was collected through the live spectator survey to understand the type of spectators that attended the IAAF World Cross Country Championships.

**ATTRACTION AN AFFLUENT, MIDDLE AGED DEMOGRAPHIC**

The spectators that this event attracted generally were from an older and affluent demographic

**FIGURE 7: RESPONDENT DEMOGRAPHICS: MALE / FEMALE SPLIT**

- Male: 51%
- Female: 49%

**FIGURE 8: RESPONDENT DEMOGRAPHICS: AGE BREAKDOWN**

- 16-24: 25%
- 25-34: 15%
- 35-44: 20%
- 45-54: 25%
- 55-64: 10%
- 65 and over: 5%

**FIGURE 9: RESPONDENT DEMOGRAPHICS: PROFESSION**

- Higher managerial, administrative or professional: 26%
- Intermediate managerial, administrative or professional: 24%
- Supervisory or clerical and junior managerial administrative or professional: 8%
- Skilled manual worker: 18%
- Semi and unskilled manual worker: 3%
- Unemployed (e.g. students, retired, housewife / househusband etc.): 18%
- Prefer not to say: 3%

A very balanced gender spread and a quarter of the crowd were aged 45 and above

- There was an almost equal gender divide between the 426 respondents to the spectator survey at the event, 51% were male and 49% were female.
- Almost half of the spectators interviewed were between 45-64, with 25% of spectators in the 45 - 54 age group which was the most well represented age group.
- Half of the crowd came from higher socio-economic backgrounds: 26% came from higher or intermediate managerial positions.
- It is likely that the spending patterns of this middle aged and affluent demographic are likely to be reasonably high and therefore could have an effect on the overall economic impact of the event.
A strong sense of civic pride in the city of Aarhus as a result of hosting

- 94% of Aarhus residents agreed that they felt proud that Aarhus was hosting the World Cross Country Championships, with 74% of this group strongly agreeing with this statement.
- There was a strong feeling that hosting the IAAF World Cross Country showcased Aarhus as a vibrant city, with 94% of spectators also agreeing with this statement.
- Nearly three quarters (74%) of the Aarhus residents who were interviewed, agreed that hosting the IAAF World Cross Country Championships had had a positive impact on the city’s communities.
INCREASING LONG-TERM TOURISM
INCREASING AWARENESS OF AARHUS AS A TOURIST DESTINATION AND ENCOURAGING RETURN VISITATION

Out-of-town spectators were asked about their perception of Aarhus as a result of visiting the city for the event and how likely they are to return to the city in the future.

Overall, visitors enjoyed their time in Aarhus and would now be more likely to return to the city.

- As a result of attending the World Cross Country Championships, respondents were very positive about their time in Aarhus and consequently 80% of spectators agreed that they would recommend Aarhus as a holiday destination.
- 69% of non-local respondents confirmed that as a result of their visit to the IAAF World Cross Country Championships, their awareness of Aarhus as a tourist and/or business destination had increased.
- From the out-of-town spectators’ responses, it is clear that hosting the IAAF World Cross Country Championships will have an impact on the future return visitation to the city, with 63% agreeing that as a result of their visit to the IAAF World Cross Country Championships, they would be more likely to return to Aarhus in the near future.
ENCOURAGING AN ACTIVE AND SUSTAINABLE LIFESTYLE
INSPIRING SPECTATORS TO EXERCISE MORE AND CREATING AWARENESS
OF HOW TO GET INVOLVED

Members of the public had the unique opportunity to race alongside the elite athletes by taking part in one of the mass participation races which had been organised at the same venue on competition day. Mass participation races such as those at the IAAF World Cross Country Championships create an opportunity to inspire those involved to do more exercise.

In fact, half of respondents already ran regularly already but nonetheless having attended the event 43% of spectators were inspired to do sport or active recreation.

FIGURE 16: RESPONDENT DATA ON EXERCISE PATTERNS AND INSPIRATION TO DO MORE EXERCISE

Inspiration to exercise

- **50%**
  - Of respondents run regularly (once a week or more)
- **48%**
  - Of respondents were a member of a sports club or society
- **43%**
  - Of respondents said that attending the event inspired them to do sport or active recreation more than they would normally
ENCOURAGING AWARENESS OF ATHLETICS
UNDERSTANDING THE CURRENT INTEREST IN ATHLETICS AND SPECTATORS’ VIEWING PREFERENCES

The live event spectator survey included a series of questions to gather information on the spectators’ interest in athletics.

Attitude towards athletics

- Over a quarter of the spectators (27%) watch international events on television.
- The Diamond League is popular with spectators and many of the crowd stated that they watched international competitions online, with 14% agreeing with this statement.
- A small proportion (9%) of the crowd would travel abroad to watch athletics events and a slightly larger proportion (13%) would attend athletics events in Denmark.
- Respondents generally followed athletics quite closely, with 46% responding that they follow the Diamond League and 42% of respondents said they watch the international competitions online.
- For 7% of the respondents, this was the first athletics event that they had been to.
Aarhus Local Organising Committee's objectives for the event were to:

- Showcase the city’s and the region’s hosting capability, both sporting and other
- Attract tourists to the city and region
- Bring joy to residents and develop partnerships within the city

Aarhus Local Organising Committee's areas of focus during the World Cross Country Championships:

- **Sustainability** – demonstrated they were leaders in sustainable event hosting. Event initiatives included the reduction of plastic and single use water bottles and the reduction of other waste through borrowing equipment rather than creating everything from scratch, the medal podium was an example of this.

- **Heritage** – developed a partnership with DOK 1 (a city administrative centre) to host a heritage exhibition for 3 months before the event. The objective of the exhibition was to educate residents about the rich history of the World Cross Country event and the milestones in its journey.

- **Encouraging residents to be active** – the inclusion of a mass participation race attracted visitors from the city and the surrounding region. It also promoted inclusivity as everyone could be a part of the competition

- **Inspiring younger generations to take up cross country** – former athletes visited schools in the week of the event to speak to students and a schools competition took place on the day before the elite event

- **Volunteering and creating opportunities** – the World Cross Country Championships offered lots of volunteer opportunities for residents to be a part of the event, even if they were not competing

Case studies can be found on the following pages which explain further detail about how Aarhus used the event to inspire younger generations to take up cross country and to recruit volunteers to support the organisation of the event on the day.
One of their objectives for the World Cross Country Championships was to allow people of all ages to be involved in some way, whether it was through participating or spectating. Increasing the popularity of Cross Country in Denmark, particularly for youths, was another of the primary objectives and focus areas of the Aarhus Local Organising Committee.

**Cross Country legends inspire students**

In the week leading up to the Championships, cross country legends Lynn Jennings, John Treacy and Paul Tergat presented at a local school where they described the role that cross country had played in their life and the positive effect that it had on them. Following the presentation, 200 school children participated in a cross country workshop led by some of the former athletes, which included practicing uphill and downhill running, relay running and Fartlek training.

**Increasing participation**

The Schools Cross Country competition was held on the Friday, before the elite event the following day, which saw 700 school children taking part. The inspirational elite athletes were at the Moesgaard Museum completing their final preparations alongside the students, which added an additional exciting element to the day.

The National Youth Championships Cross Country event was also held on the Friday and the Danish Athletics Federation would like this event to be held annually as a legacy of the event. In addition to this, the Danish Federation signed a deal with the Denmark Schools Sports Federation who host an annual day of exercise in schools. Through this agreement, the Danish Athletics Federation and the Denmark Schools Sports Federation will work in collaboration to increase the uptake of participation in cross country on this annual day of exercise. 95% of all school children typically take part in this day.
Aarhus as a city has a very good volunteering structure already in place, with a programme called ReThinkers, which helped Aarhus to be awarded the volunteer capital in 2017. Members of the network volunteered at the World Cross Country Championships in Aarhus and further developed their skills.

To recruit further volunteers, the Danish Athletics Federation worked with local athletics clubs to contact former or current athletes who they thought might have been interested in working at the world class event. There were additional volunteers who also came from the athletics network who had volunteered at the Veterans European Championships 2018 which Aarhus had hosted.

The World Cross Country Championships in Aarhus provided opportunities for further skills development and leadership opportunities for those who had past experience of volunteering, and was also a good introduction for those who had not volunteered before. The event saw 332 individuals volunteer on the day.

In the lead up to the event there was a good training programme which supported all volunteers, irrespective of their past experience. Each functional area had a leader who was responsible for the training of all the volunteers in their team. 12 days before the event there was a briefing for all volunteers which allowed leaders to brief everyone in one place before the event.

The volunteering opportunity at the World Cross Country Championships allowed all local residents to play a part in the running of the event if they wanted to, in line with the Local Organising Committee’s objective of getting everyone moving and participating in their own way. With volunteers coming from a variety of networks across the city, ReThinkers, the Danish Athletics Federation, the Veterans European Championships, new partnerships and friendships were created through their involvement in the event, encouraging a greater sense of community cohesion.
TERMS OF REFERENCE
This project has been undertaken under the terms of our engagement letter, which sets out details of the scope and limitations of our work and other important terms of business agreed between us. Our work, which is summarised in this report, has been limited to matters which we have identified that appear to us to be of significance within the context of our scope.

This report is confidential to the IAAF and prepared solely for the purpose set out in our engagement letter. In preparing this report our only responsibility and duty of care is to the IAAF.

Some of the matters covered in this report are by their nature technical. The intended recipient of the report, the IAAF, is familiar with the issues, facts and other matters addressed and the report was written with that in mind.

If the IAAF wishes to make this report available to other parties, it does so on the condition that we do not assume or accept or owe any responsibility or duty of care to any person other than the IAAF.

Accordingly, any person other than the IAAF who, contrary to the above, chooses to rely on this report, does so at their own risk and The Sports Consultancy will not be responsible for any losses of any such persons caused by their reliance on this report.

The report has been prepared principally from information supplied by and obtained from discussions with the IAAF management, documents and data provided by the IAAF, from a survey of event spectators, consultations with event sponsors and stakeholders or from publicly available sources.

As agreed with the IAAF in our engagement letter, unless otherwise stated in our report, we have not sought to verify the information provided to us or contained herein nor to perform the procedures necessary to enable us to express an audit opinion on any of the financial or non-financial information contained in this report. Indeed, as you will appreciate, much of the additional, non-financial information contained in this report cannot be subjected to audit or otherwise independently verified.

We have assumed that the IAAF has drawn to our attention all matters of which you are aware concerning the project and which may have an impact on our work and the report. Accordingly, we accept no liability howsoever arising, directly or indirectly, from any error or incompleteness of fact or opinion in this report to the extent caused by inaccuracies or incompleteness in the information on which we have relied.
CONTACT

CHARLOTTE BIRKS
ANALYST, CONSULTING

E: charlotte.birks@thesportsconsultancy.com
M: +44(0)7771 993834